

MAYANK GHOSH

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SUMMARY

Term 1 medical student at St. George's University with a background in biomedical science and U.S. military service. Dedicated to advancing patient care through research, clinical innovation, and exploring the diverse fields of medicine and surgery.

EDUCATION

St. George's University – School of Medicine

Doctor of Medicine (M.D.)

Grenada, West Indies

Class of 2029

- Member of the SGU Surgery Club

- Basic Life Support (BLS) Certified

Courses: Foundations to Medicine, MSK, and Cardiac/Pulmonary/Renal Systems

Rutgers University – School of Engineering

Bachelor of Science in Biomedical Engineering (B.S.)

New Brunswick, NJ

Class of 2022

- Major GPA: 3.6/4.0

- **Dean's List:** Fall 2019 - Spring 2022 (*Multiple Semesters*)

Rutgers University – School of Graduate Studies

Master of Science in Biomedical Sciences (M.S.)

New Brunswick, NJ

Class of 2024

- Cumulative GPA: 3.7/4.0

Courses: Pharmacotherapeutics, Microbiology and Immunology, Gross Anatomy, Neuroscience, Capstone Project

WORK EXPERIENCE

INA (Interventional Neurology Assoc.)

Chief Medical Scribe

Brooklyn, NY

Jun 2022 - Current

- Intimately facilitated efficient and streamlined patient workflow alongside Dr. Farkas, Dr. Arcot, & Dr. Tiwari

- Observed and scheduled several procedures to rectify dissections, aneurysms, AVMs, and various stenoses

Hunterdon Medical Center

Emergency Department Medical Scribe

Flemington, NJ

Nov 2021 – March 2022

- Documented more than 1,500 patients' pertinent medical history & shadowed providers' in their triage logic

- Aided in the execution of several medical procedures/interventions alongside the emergency provider

Genophyll Inc.

Clinical Laboratory Coordinator

South Brunswick, NJ

Nov 2020 - May 2021

- Advanced startup to obtain NJ CLIA License to certify our services for diagnosis, assessment of health, etc.

- Automated an *OpenTron* robot for RT-PCR to be used primarily for *COVID-19* via OT-Python Protocol API

Johnson and Johnson Inc.

Consumer R&D Co-Op

Skillman, NJ

Jan 2020 – June 2020

- Designed & formulated complex micellar prototypes for retinol bioefficacy, aesthetic, and product stability

- Led novel research on biomaterials acquired from NeoStrata, for improvement in consumer retinol products

Nutrivide Inc.

Engineering and Research Analyst

New Brunswick, NJ

June 2019 – Sept 2019

- Led a 5-person team for analysis of malnutrition studies in our local community within New Brunswick, NJ

- Co-developed the final constituents of our blister-pack vitamin formula, to combat infant malnutrition

RESEARCH/SHADOWING EXPERIENCE

RBHS Master's Capstone Program

Research Assistant

New Brunswick, NJ

January 2023 – May 2024

- Conducted research under supervision of Dr. Smita Thakker-Varia, RWJMS, Associate Professor in Department of Neuroscience & Cell Biology

- Explored the proposed dual effects of Buspirone on patients with Alzheimer's/Dementia or Parkinson's Disease

Virtual Pre-medical Shadowing**Remote/Dallas, TX***Shadow**January 2022 – Current*

- Shadowed various MD/DO physician subspecialties, including *Chronic Pain, Dermatology, Heme-Onc, Palliative Care, Neurosurgery, CT surgery, OB/GYN, Urologic Surgery, HPB Surgery, Orthopedics*

BME Senior Design Program**New Brunswick, NJ***Lead Technical Engineer**Sept 2021 – May 2022*

- Conducted research under supervision of Dr. Jay Sy, Rutgers School of Engineering, Associate Professor of Biomedical Engineering (*Device and Board presented at the Undergraduate Engineering Symposium*)
- Led a 4-person team for R&D, fabrication, and enhancements for the novel diagnostic device for *Ankyloglossia*

Walter Reed Military Medical Internship**Bethesda, MD***Research Assistant**Aug 2021 – Sept 2021*

- Conducted research under supervision of CPT Chaudhury PhD, Walter Reed Army Institute of Research, Associate Director of Statistics & Epidemiology Branch
- Compiled 1000s of datapoints from various biosensors, and patient self-questionnaires to observe any connection between sleep quality & quantity in night-shift workers and their increased rates of anxiety

Special Operations Command/MIT Ignite Hackathon**New Brunswick, NJ***Chief Design Officer**Oct 2020 – May 2021*

- Created an AI-powered thermal & motion camera module via Raspberry Pi to detect individualistic facial features in a wartime environment, later integrated as a UAV drone (*Submitted for Drone Advancement Track*)
- Coded & optimized artificial camera-to-drone interface via C++ and Python for fluid autonomous function

Aresty Research Program**New Brunswick, NJ***Undergraduate Research Assistant**Sept 2021 – May 2022*

- Conducted research under supervision of Dr. Monica Roth, RWJ Medical School, Professor of Pharmacology
- Integrated retrovirus nanoparticles to observe changes in solubility of *HPV* in an *aqueous* environment

LEADERSHIP**NJ Army National Guard****Woodbridge, NJ***Infantryman (MOS: 11B)**Dec 2019 – Current*

- Trained in combat lifesaving procedures, including treating for shock, hemorrhage, wound care, tourniquet use, IV placement, and other first responder care
- Orchestrated platoons of soldiers through offense, defense, and recon. missions in *Advanced Officer Training*

Rutgers University Veterans Association**New Brunswick, NJ***Secretary**Sept 2021 – May 2022*

- Served military veterans with the resources, support, and advocacy needed to succeed in higher education
- Coordinated E-Board events such as: *Rutgers Dance Marathon, SmileforKids, JDRF, Susan G. Komen Found.*

RUNADI/APSEA (North American Disease Intervention)**New Brunswick, NJ***Vice President of Internal Committee**Sept 2020 – May 2022*

- Guided recruitment and marketing teams to create new activities for pre-health majors to increase exposure to life as various clinicians, while acknowledging the financial boundaries of the organization
- Led committee discussion as well as student volunteering events in various health clinics and internal events

Delta Epsilon Psi (Service Fraternity)**New Brunswick, NJ***Vice President of Internal Affairs**Jan 2019 – Sept 2019*

- Coordinated charity, social, and professional events with various organizations, including *Rutgers & Google*
- Effectively managed a fraternity with 35+ active members, and robust alumni community all around the USA