NITHILA ARUNKUMAR

na582@scarletmail.rutgers.edu | nithilaarunkumar@gmail.com

EDUCATION

RUTGERS UNIVERSITY New Brunswick, NJ 09/2020 - 05/2023

Double Major in Molecular Biology & Biochemistry and Sociology

GPA: 3.87 | SAS Honors Program | Douglass Residential College

Awards: Dean's List x5, Aresty Summer Science Scholar, Aresty Library Research Award

Extracurriculars: Rutgers Girl Up Founder, Douglass Dean's Leadership Council, Youth Empowerment Club Outreach Chair, MBB Society

Secretary, Rutgers Chemistry Society Outreach Chair, Physics Learning Assistant

NEW JERSEY MEDICAL SCHOOL

Newark, NJ

7 Year BA/MD Candidate

Expected May 2027

Only applicant accepted into the Joint Bachelor/Medical Degree Program between Rutgers University and New Jersey Medical School

CLINICAL EXPERIENCE

SOUTH PLAINFIELD EMERGENCY MEDICAL SERVICES

South Plainfield, NJ

EMT (12 hr/week)

09/2020 - Present

Responding to emergency calls as primary caregiver on an overnight shift with an average of 7 calls/shift and authoring patient care reports with 99% accuracy

Serving on the membership committee to recruit younger EMTs to join the squad and participating in community-building events to build rapport with town members

PHYSICIAN SHADOWING

Edison, NJ

Student Observer (50 hours)

09/2021 - 06/2022

Observed the diagnosis of new and recurring patients in an internal medicine care setting and applied different medical assessment techniques to address patient concerns

Conducted clerical work; noted medical history; performed vitals and EKGs under supervision of Dr. Hao Zhang, MD at Edison Wellness Group

Shadowing Dr. Phil Lahey, MD and Dr. Christopher Vinton in orthopedic surgery for 20 hours at Worcester County Orthopedics

Observing patient consultations such as ACL reconstructions, direct anterior hip replacements, and TruMatch knee replacements

RESEARCH EXPERIENCE

NAKAMURA LAB GROUP

New Brunswick, NJ

10/2020 - Present

Research Assistant (20 hr/week)

- Utilizing Linux, R, and Python to perform RNA, ATAC, and ChIP-sequencing on Hox13 -/- knockout zebrafish in order to identify loci responsible for the fin-to-limb transition
- Participating in 3 semesters of research, culminating in two research report and the 10-week, 40 hour/week Aresty Summer Scholars Program which culminated in a poster presentation
- Performing molecular imaging techniques such as fluorescent ISH and live imaging of zebrafish pectoral fins to identify gene markers and their role in fin development; preparing zebrafish tail DNA samples for genotyping biweekly to create knockout zebrafish lineages; utilizing animal handling techniques

THE FORENSIC PANEL

New York, NY

Casework Research Assistant (10 hr/week)

03/2022 - Present

- Reviewing medical/forensic records of cases and scientific research of case-related topics and authoring a summary of findings for presentation to primary consult
- Editing and proofreading manuscripts, data-mining specific questions, and performing other litigation-support investigative research such as internet searching and testimony review

LEADERSHIP EXPERIENCE

RUTGERS STUDENT HEALTH - HEALTH PROMOTION AND PEER EDUCATION OFFICE

New Brunswick, NJ

Peer Mental Health Educator (3 hr/monthly)

01/2021 - Present

Educating the Rutgers community on mental health wellness through monthly outreach and workshops; creating and facilitating workshops surrounding mental health, sleep, technology health, test anxiety, and other relevant issues

NEW YORK ACADEMY OF SCIENCE

New York, NY

Afterschool Mentoring Program STEM Mentor (2 hr/week)

09/2021 - Present

Mentoring elementary school students in New York City public schools to develop a passion for STEM and working with site staff partners to implement weekly sessions for 9 students

GENERATION TEACH

Worcester, MA

STEAM Academy Teaching Fellow (350 hours)

06/2022 - 07/2022

- Taught two sections of reading and two sections of art to 40+ students over the course of 5 weeks and completed one term of service with AmeriCorps VISTAs; received daily coaching, feedback, and guided practice from professional teachers; planned and led engaging community building initiatives to foster strong student relationships and investment following school closures
- Responsible for a 150% increase in student knowledge retention and growth assessed via improvement in standardized testing across both classrooms

INHALE-EXHALE Executive Director (6 hr/week)

Philadelphia, PA

- 06/2020 03/2022 Creating and distributing mental health resources to communities that do not have access to holistic health care or mental health
 - Implementing a semester-long internship program which has produced 35 new interns for 4 semesters
 - Working with the founder to create a strategic plan and handling day-to-day operations in the non-profit overseeing 21 people