

Om Chauhan

Phone: 412-852-8252 | Email: omc13@pitt.edu
Pittsburgh, PA 15213

EDUCATION

University of Pittsburgh, Pittsburgh, PA

Graduated: April 2024

Bachelor of Arts in the Dietrich School of Arts and Sciences

Major: Computational Biology.

Minor & Certificates: Chemistry and Certificate of Conceptual Foundations of Medicine.

Relevant Coursework: Computational Biology 1, Computational Biology Research Seminar, Computational Biology Writing Seminar, Data Structures, Discrete Mathematics, Intermediate Java Programming, Python for the Scientist, Organic Chemistry 1 and 2, Genetics, Biochemistry, Data Science.

WORK EXPERIENCE

Pittsburgh Supercomputing Center (PSC), Carnegie Mellon University (PI: Rozita Laghaei, PhD)

Pittsburgh, PA

Student Researcher

August 2023 – December 2023

- Advanced my knowledge in the field of computer simulation and modeling.
- Operated further with UNIX, VMD, PyMol, CGenFF, and Avogadro.
- Studied Voltage-Gated Calcium Channel 2 (Cav2 subfamily) mutations.

TECBio REU | University of Pittsburgh (PI: Rozita Laghaei, PhD)

Pittsburgh, PA

Research Intern

May 2023- July 2023

- Gained knowledge of multiple computational biology programs and skills.
- Understood the workings of Molecular Dynamic Simulations.
- Created simulations in order to research new drugs.
- Utilized programs: PyMol, VMD, Avogadro, CGenFF.
- Studied Voltage-Gated Calcium Channel 2 (Cav2 subfamily).
- Explored solutions to the reduction of calcium ions within these channels.

UPMC Passavant Hospital

North Hills, PA

Nursing Assistant

January 2023 – April 2023

- Assisted both pre- and post-operative orthopedic patients with basic needs.
- Charted patient data to keep an updated log for the clinician.
- Assisted nurses with any necessary tasks, i.e., transport, easing or relaxing patients.

Neurology lab (PI: Udai Pandey, PhD), University of Pittsburgh

Pittsburgh, PA

Research Assistant

June 2021-August 2023

- Conducted experimental techniques such as PCR, Western blots, plasmid DNA isolation, vector cloning, in addition to investigating mouse and Drosophila mutants to study the effects of the RNA-binding protein GEMIN 5 on motor neuron function.
- Collected expression data from multiple experiments, analyzed, and interpreted the results.
- Used Python to organize genes into functional sets that were displayed in MS Excel.

Hepatology and Nutrition Lab

Pittsburgh, PA

Research Volunteer

May 2021- June 2021

- Cultured hepatocytes and used established biomarkers to evaluate cellular degradation from alcohol exposure.
- Performed lab manager duties.

ACTIVITIES/LEADERSHIP

Healthy Hearts

Pittsburgh, PA

Business Manager

October 2022 - Current

- Organize events aiming to encourage and support heart-healthy lifestyle choices for the public and provide opportunities for club members to get involved in public healthcare in the community.
- Keep track of club's finances.
- Interact with the University's Student Organization Resource Center to coordinate events in raising money for the club and the American Heart Association.

Ice Cream Sundays Club

Pittsburgh, PA

Club Secretary

September 2020-Current

- Raising funds for UPMC Children's Hospital.
- Volunteering at the Ronald McDonald House.
- Handing out ice cream to kids in the hospital.
- Sending out reminders for meetings and keeping track of attendance.

UPMC Volunteering

Pittsburgh, PA

Summer Program

May 2022

- Helped out-patients with passing time as they were visiting the hospital.
- Took part in activities such as coloring or playing chess with in-patients.

ACCOMPLISHMENTS

- Paper Published in Springer Journal: *SMN regulates GEMIN5 expression and acts as a modifier of GEMIN5-mediated neurodegeneration.*
- Participated in the Randall Family Big Idea Competition 2023 with noVrel, placed 3rd.

SKILLS

Core: Computer Analytics, Cell Biology, Human Physiology, Bioinformatics, Computational Biology, Wet-lab and dry-lab Research

Computer: Java, Python, C, R, Unix, Microsoft Programs, PyMol, VMD, Avogadro

Language: English (native), Hindi