

Harsh Hiwase

harshhiwase6@gmail.com | +1 (412) 636 8246 | +65 9276 4979

EDUCATION

University of California, Los Angeles | Los Angeles, CA
Doctor of Medicine, Global Health Pathway

Class of 2029

University of Pittsburgh | Pittsburgh, PA
Fredrick Honors College, Bachelor of Philosophy Recipient
Double Degree in Molecular Biology and History and Philosophy of Science
Certificates in Bioethics and Conceptual Foundations of Medicine

Class of 2025

GPA 3.946

Dean's List

RESEARCH EXPERIENCE

Surreality Lab at Department of Neurosurgery UPMC | Pittsburgh, PA

Nov 2024- Feb 2025

Undergraduate Researcher in Bioethics

- Working under Dr Edward Andrews and Dr Jacob Biehl on the bioethical considerations of incorporating AI and mixed reality into clinical care with a focus on bias reduction and provider trust.
- Supporting projects in seizure prediction AI, mixed reality in endovascular surgery and education on augmented reality.

Centre for Biomedical Ethics National University of Singapore | Singapore

May 2024- Aug 2024

Bioethics Summer Internship

- Collaborated with Dr Michael Dunn and Dr Kathryn Muyskens on the ethics of invisible disabilities in Singapore.
- Published a commentary article in Channel News Asia critiquing the status quo of inclusion in Singapore.

University of Pittsburgh School of Public Health | Pittsburgh, PA

May 2024- Aug 2024

Undergraduate Researcher in Bioethics

- Worked with Dr Cindy McCarthy on the ethical use of AI in healthcare and creating an operational guideline for its use.
- Supported by the David C. Fredrick Award for undergraduate students.

University of Pittsburgh Medical Centre | Pittsburgh, PA

Aug 2021- Dec 2023

Undergraduate Researcher at Vascular Medicine Institute

- Conducted functional genomics analysis on SNPs to define novel pathogenic mechanisms in stroke under Dr. Stephen Chan lab in collaboration with University of Cincinnati's Prof Hyacinth.
- Executed wet lab procedures such as PCR, RT-PCR, EMSA, proteomics mass spectrometry analysis, primer designing, DNA extraction and HPAEC, HUVEC, VSMC, Fibroblasts, iPSC cell cultures.
- Successfully identified a biochemical pathway linking HNF1A gene to increased risk of stroke in African Americans.

PUBLICATIONS

Hiwase, H. (2025). *Post-GWAS Functional Genomics Analysis of HNF1A Locus to Define Novel Pathogenic Mechanisms for Ischemic Stroke*. Bachelor of Philosophy (BPhil) in Molecular Biology thesis, University of Pittsburgh. Forthcoming Publication.

Hiwase, H., Muyskens, K., Dunn, M. (2024). *Singapore needs radical inclusion to empower persons with disabilities*. Channel News Asia.

Malhotra, R., Singh, K., Johnson, A., **Hiwase, H.**, Yue, Y., Chan, I., Chan, S.Y., & Sun, W. (2023). *Pulmonary artery pulsatility measured by cardiac magnetic resonance imaging in over 42,000 participants reveals novel genetic risk loci*. Under Review.

Hiwase, H., Yue, Y., Hoffman, E. K., Wu, H., Barndt, R. J., Chan, S. Y., ... & Sun, W. (2023). *Multiancestry GWAS And Functional Genomics Analysis Of HNF1A Locus To Define Novel Pathogenic Mechanism For Ischemic Stroke*. Arteriosclerosis, Thrombosis, and Vascular Biology, 43(Suppl_1), A162-A162.

Yue, Y., **Hiwase, H.**, El Khoury, W., Kelly, N., Chan, S. Y., & Sun, W. (2023). *Post-gwas Functional Genomics Analysis Of Abo Locus To Identify Novel Pathogenic Mechanisms For Chronic Thromboembolic Pulmonary Hypertension*. Arteriosclerosis, Thrombosis, and Vascular Biology, 43(Suppl_1), A220-A220.

PRESENTATIONS AND CONFERENCES

Pitt School of Medicine Medical Education Day- "Teaching Biochemistry at 3 levels" | Pittsburgh, PA

Oct 2024

Fredrick Honors College Research Symposium- "Teaching Biochemistry at 3 levels" | Pittsburgh, PA

April 2024

American Heart Association Vascular Discovery: From Genes to Medicine Scientific Sessions | Boston, MA

May 2023

University of Pittsburgh Department of Medicine Research Day | Pittsburgh, PA

April 2023

Fredrick Honors College Research Symposium | Pittsburgh, PA

April 2023

Spring Undergraduate Research Fair, University of Pittsburgh Office of the Provost | Pittsburgh, PA

April 2023

AWARDS AND FELLOWSHIPS

Fredrick Honors College

David C. Fredrick Award	Summer 2024
Chancellor's Undergraduate Teaching Fellowship	Spring 2024
Travel Award to present at conference	Summer 2023
Brackenridge Fellowship for summer research	Summer 2023
Spring Undergraduate Research Fellowship	Spring 2023
Research Scholarship	Fall 2023

CLINICAL EXPERIENCE

The Vaccine Hub at Pitt | Pittsburgh, PA

Vaccination Volunteer Sept 2024- Apr 2025

- Educated students and community members to receive seasonal and travel vaccinations with a patient load of 20 per day.
- Devised an educational packet to support international students at Pitt getting updated vaccines and navigating insurance.

OneDoctors Family Clinic, Holland Village | Singapore

May 2022- Aug 2022

Clinic Assistant

- Efficient triage of approximately 10 patients per hour and up to 100 patients per day, ensuring patient confidentiality.
- Dispensing of medications, ensuring no contraindications with current treatment or allergies.
- Performed Nasopharyngeal swabs for Antigen Rapid Testing for COVID-19 infection.
- Assisted physician in clinical procedures- suturing, electrocardiogram, obtaining patient vitals.

Parkway Shenton, Bukit Timah Vaccination Clinic | Singapore

Feb 2021- July 2021

Vaccination Assistant

- Enhanced patient experience for 1200 daily patients by ensuring a safe and sterile environment in clinic.
- Devised efficient workflow system to discharge patients within 30s instead of 90s to ensure smooth flow within clinic.
- Tended to patient requests and maintained utmost discretion with sensitive questions to ease pre-jab anxiety.

SHADOWING EXPERIENCE

▪ Palliative Care & Bioethics- UPMC General Internal Medicine, Dr Robert Arnold	Nov 2023
▪ Family Medicine- IHealth Clinic Urgent Care Direct Access Primary Care, Dr Timothy Wong	July 2023
▪ Anesthesiology- UPMC Shadyside Hospital Department of Anesthesiology, Dr David Wang	Feb 2023
▪ Cardiology- UPMC Heart and Vascular Institute, Dr Stephen Chan	Oct 2022- Dec 2022
▪ Neurology- Lehigh Valley Health Network Neurocritical Care Centre, Dr Preet Varade	Dec 2019

LEADERSHIP & VOLUNTEER EXPERIENCE

Movember at Pitt | Pittsburgh, PA

President and Founder Aug 2022- Apr 2025

- Partnered with Movember to advocate for men's mental health, prostate cancer and testicular cancer awareness at Pitt.
- Founded the first men's health club at Pitt and raised \$5000 for suicide prevention in 2023 and \$6000 in 2024.
- Gained support from Mayor of Pittsburgh, Ed Gainey for ongoing community projects.
- Secured partnerships with Pittsburgh Penguins NHL team and Gillette for fundraising.
- Coordinating with Wang and Wipf labs at UPMC Urology to and deliver a Movember grant for prostate cancer research.

Pitt Bioethics Bowl | Pittsburgh, PA

Competitor & Fundraising manager Jan 2024- Apr 2025

- Competed in a team of 8 at the National Bioethics Bowl at Baylor University placing in the top 10
- Collaborated with diverse backgrounds of teammates to tackle bioethics case studies and prepare arguments
- Consistently implemented feedback from experts in the field such as philosophers and bioethicists

Pittsburgh Undergraduate Review | Pittsburgh, PA

Assistant Editor March 2023 – May 2024

- Assistant editor for the Fredrick Honors College interdisciplinary peer-reviewed journal for research and creative work.
- Responsible for reviewing scientific research submissions and ensuring academic rigor in publications.
- Ensuring work published is interdisciplinary and representative of crucial social issues and ideologies.
- Works closely with Editor in Chief and Fredrick Honors advisors to ensure fair review of undergraduate research.

Fredrick Honors College | Pittsburgh, PA

Aug 2023- Dec 2023

Undergraduate Research Mentor

- Mentor to incoming first year students interested in starting STEM research at Pitt.
- Delivered personalized training to mentee about different research types, commitment level and application.
- Successfully assisted mentee in securing a research position in her first semester of college.

The Pitt News | Pittsburgh, PA

Senior Staff Opinions Columnist and DEI committee Dec 2021- Aug 2023

- Wrote for the University of Pittsburgh newspaper that publishes thrice weekly.
- Specializes in writing opinion pieces on the topics of healthcare and ethics.
- Active role in Diversity and Inclusion committee to ensure fair hiring, conflict resolution and representative publishing.

MILITARY EXPERIENCE

Singapore Armed Forces, Specialist & Warrant Officer Institute | Singapore

Jan 2019- Jan 2021

Finance Administrative Assistant, Corporal

- Mandatory national service in the military.
- Procured and maintained inventory for training related items while adhering to strict budgeting guidelines and up-keeping of documentation for audit purposes. Entrusted with quarterly budget of \$300,000.
- Implemented efficient workflow system to provide 6000 active soldiers with indented items within 3 days instead of 14 days. Trained a team of 5 colleagues to continue procurement process after end of my service.