Stanford

Mulate Zerihun Workeneh

Postdoctoral Scholar, Critical Care

Bio

BIO

Dr. Mulate Zerihun Workeneh is a Postdoctoral Scholar in Dr. Bereketeab Haileselassie's laboratory in the Department of Pediatrics at Stanford University School of Medicine. He earned a Ph.D. in Medical Sciences from the Azrieli Faculty of Medicine at Bar-Ilan University, Israel, where he developed peptide therapeutics that target mitochondrial protein-protein interactions involved in cardiovascular disease. Dr. Workeneh's research uses medicinal chemistry, chemical biology, peptide engineering, computational modeling and mitochondrial biology to understand how the disease occurs and to develop new ways to treat it. During his doctoral training, he designed and evaluated novel linear and macrocyclic peptide inhibitors that alter mitochondrial dynamics to mitigate mitochondrial dysfunction and cardiovascular injury. His work at Stanford is focused on defining the role of mitochondrial dynamics in endothelial dysfunction in sepsis and multiple organ dysfunction syndrome (MODS). He is working to develop peptide-based therapeutics that maintain mitochondrial function, improve vascular health and prevent organ failure in critically ill patients by integrating approaches in chemical biology, molecular and cellular biology, and translational drug discovery. Dr. Workeneh has publications in leading medicinal chemistry, pharmacology, and mitochondrial biology journals and is an inventor on patents related to mitochondrial protein-protein interaction inhibitors. His goal is to translate advances in mitochondrial biology into first-in-class therapeutics for cardiovascular disease, sepsis, and other disorders linked to mitochondrial dysfunction. He is excited to work across disciplines at Stanford to help push biomedical research forward.

HONORS AND AWARDS

- Ph.D. Scholarship, Bar-Ilan University (2021-2025)
- Best Presenter Award, Azrieli Faculty of Medicine Research Day, Bar-Ilan University (2022)
- Short-Term Scientific Mission (STSM) Grant, European Cooperation in Science and Technology (COST) (2025)
- Young Researcher and Innovator Conference Grant, European Cooperation in Science and Technology (COST) (2025)
- National Bio-Innovation Fellowship, Teva Pharmaceutical Industries Ltd (2025)

PROFESSIONAL EDUCATION

- Doctor of Philosophy, Bar-Ilan University (2026)
- Doctor of Philosophy (Ph.D.), Azrieli Faculty of Medicine, Bar-Ilan University, Israel , Medical Sciences (2026)
- Master of Science (M.Sc.), Addis Ababa University, Ethiopia , Organic Chemistry (2017)
- Bachelor of Science (B.Sc.), Bahir Dar University, Ethiopia , Chemistry (2012)

STANFORD ADVISORS

- Bereketeab Haileselassie, Postdoctoral Faculty Sponsor