

Feriel Presswalla

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Education

Case Western Reserve University

PH.D. CLINICAL TRANSLATIONAL SCIENCE, PRE-CANDIDATE

2024 - 2029

University of Michigan – Ann Arbor

B.S. NEUROSCIENCE, WITH DISTINCTION; GPA: 3.8/4.0

2012 - 2015

Awards

University of Michigan Alumnae Council (UMAC) National Service Award

2023

Alpha Kappa Alpha Educational Advancement Foundation (AKA-EAF) Undergraduate Merit Award

2015

University of Michigan James B. Angell Scholar Award

2015

University of Michigan Honors (every semester)

2012 - 2015

Research Experience

Frankel Cardiovascular Center, University of Michigan – Ann Arbor

RESEARCH LAB SPECIALIST IN THE LABORATORY OF DR. SALIM HAYEK

2022 - 2024

- Investigating suPAR as a stable biomarker of inflammation, using in vivo and in vitro models to predict a patient's risk for CKD, CVD and COVID.

Kellogg Eye Center, University of Michigan – Ann Arbor

RESEARCH LAB SPECIALIST IN THE LABORATORY OF DR. JASON M.L. MILLER

2015 - 2021

- Investigating the effect of autophagy induction on dry Age-related Macular Degeneration (AMD) using an in vitro retinal pigment epithelium (RPE) model. Examining the differences in transcriptome and secretome of human fetal and adult RPE cultures.

Dept. of Neuroscience, University of Michigan – Ann Arbor

UNDERGRADUATE RESEARCH ASSISTANT IN THE LABORATORY OF DR. MARTIN SARTER

2015

- Investigated the function of fast cholinergic release transients in the neural substrates and circuitry of cue detection in the basal forebrain, using lesions and optogenetics in a rat model.

Cardiovascular Regeneration Core, University of Michigan – Ann Arbor

CARDIOVASCULAR CENTER UNDERGRADUATE FELLOW IN THE LABORATORY OF DR. TODD HERRON

2014

- Human Induced Pluripotent Stem Cell (hiPSC) Cardiac Research; hiPSC-cardiomyocyte (hiPSC-CM) maturation; 2D microtissue engineering.

Craniofacial Lab, University of Michigan – Ann Arbor

UNDERGRADUATE RESEARCH ASSISTANT IN THE LABORATORY OF DR. STEVEN R. BUCHMAN

2013 - 2015

- Rounded and radiated lab animals, performed Microfil perfusions and X-rays, processed microCT scans, calculated vascular metrics, maintained mc3T3, ADSC cell lines, stained cells for microscopy. Joined as an Undergraduate Research Opportunity Program student, continued as a Research Assistant.

Publications and Posters

Nosocomial infections, inflammation and outcomes in hospitalized COVID-19 patients: a prospective cohort study

ANDERSON E,..., PRESSWALLA F,..., HAYEK S

2024

Open Forum Infectious Diseases, Under review

Pregnant Hospitalized COVID-19 Patients: Disease, Delivery, and Fetal Outcomes

BARDWELL A,..., PRESSWALLA F,..., HAYEK S

2024

BMC Pregnancy and Childbirth, Under review

Obesity, Inflammation, and Clinical Outcomes in COVID-19

HUTTEN C,..., PRESSWALLA F,..., HAYEK S

2024

The Journal of Clinical Endocrinology & Metabolism, 109(11): 2745–2753

Intubation Decision Based on Illness Severity and Mortality in COVID-19: An International Study

CHALKIAS A,..., PRESSWALLA F,..., HAYEK S

2024

Critical Care Medicine, 2024; 52 (6)

SuPAR, Biomarkers of Inflammation, and Severe Outcomes in Patients Hospitalized for COVID-19: The International Study of Inflammation in COVID-19

VASBINDER A,..., PRESSWALLA F,..., HAYEK S

2023

Journal of Medical Virology 2024; 96 (1)

SuPAR mediates viral response proteinuria by rapidly changing podocyte function

WEI C,..., PRESSWALLA F,..., HAYEK S, REISER J

2023

Nature Communications 2023; 14(1):4414

20-LB: Impact of Optimal Medical Therapy, Insulin Sensitization, and Revascularization Strategies on Soluble Urokinase Plasminogen Activator Receptor and Its Association with Cardiovascular Outcomes—A BARI-2D Ancillary Study

AMADI K,..., PRESSWALLA F,..., HAYEK S

2023

Diabetes 2023; 72

Soluble urokinase plasminogen activator receptor induces a proatherogenic profile in myeloid cells

PRESSWALLA F,..., HAYEK S

2023

Journal of the American College of Cardiology 2023; 81 (8):1203

Measuring the levels of the cardiac biomarker suPAR (soluble urokinase plasminogen activator receptor) to predict the risk of aortic aneurysms

TRIPATHI M,..., PRESSWALLA F,..., HAYEK S

2023

Journal of the American College of Cardiology 2023; 81 (8):1844

Levels of soluble urokinase plasminogen activator receptor and heart failure outcomes in patients with type-2 diabetes and worsening heart failure treated with sotagliflozin, a dual inhibitor of sodium glucose cotransporters 1 and 2

ERNE G,..., PRESSWALLA F,..., HAYEK S

2023

Journal of the American College of Cardiology 2023; 81 (8):664

Evolution of Care and Outcomes Across Surges In Hospitalized Patients with Coronavirus Disease 2019

O'HAYER P,..., PRESSWALLA F,..., HAYEK S

2023

The American Journal of Medicine 2023; 136(1):63-71

Increased soluble urokinase plasminogen activator levels modulate monocyte function to promote atherosclerosis

HINDY G,..., PRESSWALLA F,..., HAYEK S

2022

Journal of Clinical Investigation 2022; 132(24)

Pharmacologic activation of autophagy without direct mTOR inhibition as a therapeutic strategy for treating dry macular degeneration

ZHANG Q, PRESSWALLA F, ALI RR, ZACKS DN, THOMPSON DA, MILLER JML.

2021

Aging 2021; 13(8):10866-10890

Development of a gene-therapy vector for RDH12-associated retinal dystrophy

FEATHERS KL, JIA L, PERERA ND, CHEN A, PRESSWALLA F, KHAN NW, FAHIM AT, SMITH AJ, ALI RR, THOMPSON DA.

2019

Human Gene Therapy 2019; 30(11):1325-1335

Highly differentiated human fetal RPE cultures are resistant to the accumulation and toxicity of lipofuscin-like material

ZHANG Q, PRESSWALLA F, CALTON M, CHARNIGA C, STERN J, TEMPLE S, VOLLRATH D, ZACKS DN, ALI RR, THOMPSON DA, MILLER JML.

2019

Investigative Ophthalmology & Visual Science. 2019; 60 (10): 3468-3479

A platform for assessing outer segment fate in primary human fetal RPE cultures

ZHANG Q, PRESSWALLA F, FEATHERS K, CAO X, HUGHES BA, ZACKS DN, THOMPSON DA, MILLER JML.

2019

Experimental Eye Research 2019; 178: 212-22

A primary retinal pigment epithelial culture model for evaluating therapeutic targets in dry macular degeneration

ZHANG Q, PRESSWALLA F, CALTON M, CHARNIGA C, STERN J, TEMPLE S, VOLLRATH D, ZACKS DN, ALI RR, THOMPSON DA, MILLER JML.

2019

Investigative Ophthalmology & Visual Science 2019. 60 (9), 1718-1718

Measuring and Modulating Lipid Handling Pathways in the RPE: Implications for Age-Related Macular Degeneration

PRESSWALLA F, ZHANG Q, ZACKS DN, THOMPSON DA, MILLER JML.

2018

Investigative Ophthalmology & Visual Science 2018. 59, 4032

Automated Quantification of Subcellular Structures in the RPE: Lipid Droplets, Autophagic Vacuoles, and Lipofuscin

PRESSWALLA F, ZHANG Q, ZACKS DN, THOMPSON DA, MILLER JML.

2017

Investigative Ophthalmology & Visual Science 2017. 58, 1041

Lipid Handling by RPE Predicts Certain Features of Age-Related Macular Degeneration

ZHANG Q, PRESSWALLA F, ZACKS DN, THOMPSON DA, MILLER JML.

2017

Investigative Ophthalmology & Visual Science 2017. 58, 2293

Localized deferoxamine injection improves vascularity and bony union in pathologic fracture healing after radiotherapy.

PRESSWALLA F, DESAI R, DESHPANDE SS, NELSON NS, BUCHMAN S

2014

UROG 25th Anniversary Research Symposium, University of Michigan

Other Work Experience

AIDS: Fear and Hope' course, Dept. of American Culture, University of Michigan

TEACHING ASSISTANT FOR TWO SESSIONS OF THIS MOOC (MASSIVE OPEN ONLINE COURSE)

2015

- Moderated discussion forums and provided hundreds of students with academic assistance and technical support.

DEI (Digital Education and Innovation), University of Michigan

ADVISORY BOARD MEMBER

2015

- Joined a diverse group of professionals and students to develop new ideas for university-wide learning platforms, as well as brainstorm solutions to ongoing issues and advise on their implementation by the DEI.

South Quad, University of Michigan

DINING HALL EMPLOYEE

2012

- Assisting in the preparation, plating and serving of food, maintained the presentation of the dining hall, sanitized kitchen equipment.

Volunteer Experience

Women In Science and Humanities Earning Doctorates (WISHED)

PRESIDENT

2024 - present

- Supported by the Flora Stone Mather Center for Women, we provide social and professional resources for personal and collective development for the community of female doctoral students and candidates across campus.

CWRU Biomedical Graduate Student Organization

PROGRAM REPRESENTATIVE

2024 - present

- CTS PhD Program Representative to the Biomedical Graduate Student Organization. Responsible for attending BGSO General Assembly meetings and for communicating information between the BGSO and my department.

Steiner Graduate Student Co-operative House

SECRETARY

2024 - present

- Steiner House, a 501(c)3 not-for-profit Private Foundation, is a cooperative living environment for graduate students in Cleveland, Ohio.

Advisory Committee to Advance LGBTQ+ Health at Michigan Medicine (ACALHM)

COMMITTEE MEMBER

2023 - 2024

- Gathering key information about the structures, policies, barriers and facilitators to promoting LGBTQ health at Michigan Medicine; and providing input and recommendations to guide institutional efforts at Michigan Medicine.

MHealthy - Michigan Medicine

WELLNESS CHAMPION

2022 - 2024

- Staff representative of the university community who helps to create a culture of health among their coworkers and in their work areas, and act as a liaison between their department and MHealthy. Provide staff feedback to make programs more useful for coworkers.

University of Michigan Alumnae Council (UMAC)

RECORDING SECRETARY AND ARCHIVIST

2020 - present

- Serving first 2-year term on the Executive Committee and Governing Board of the council for UM's women alumni. Responsible for minutes, archives, and information requests by membership and public.

Michigan Medicine

HELPING OUR PATIENTS EVERYDAY (HOPE) AMBASSADOR

2020

- First Michigan Medicine person our patients and families encounter. Serving as a resource for questions, a friendly ear, and as a guide/escort/wheelchair transport service through 7 hospital buildings.

Henderson House Board of Governors

SCHOLARSHIP COMMITTEE CHAIR2018 - present

BOARD SECRETARY2018 - 2024

- Serving second 3-year term on the Board of an all-women co-operative House. Responsible for minutes, archives, and scholarship application review.

Kidney Disease Screening and Awareness Program (KDSAP)

VOLUNTEER SCREENER2017 - 2021

- Promoting awareness of Kidney Disease and fostering relationships with medical professionals and community members. Regularly organize Free Screenings in Local Communities, e.g. YMCAs, community colleges. Perform hands-on skills such as measuring blood pressure, checking blood glucose, calculating BMI, urinalysis, etc. Shadowing rounds and surgical procedures in Michigan Medicine’s Interventional Nephrology Unit (INU).

Outpatient Eye Surgery, Michigan Medicine

PATIENT SERVICES VOLUNTEER2016

- Served as ambassador, greeter and guide. Directed and escorted surgical patients and visitors. Assisted with patient intake and discharge.

Women in Science and Engineering (WISE), University of Michigan

PEER MENTOR2016

- Mentored undergraduate students through difficulties with course loads, major and graduation requirements, resumes and applications to internships, and mental health. Answered questions by text and email, met mentees regularly and stayed a friendly contact on campus.

Planet Blue, University of Michigan

SUSTAINABILITY AMBASSADOR2013 - 2024

- Completed certifications to become a campus leader in sustainability, promoting waste reduction awareness of available resources, addressing challenges and increasing efficiency in common spaces.

Certifications

Collaborative Institutional Training Initiative (CITI Program)

- Group 1.Biomedical Research Faculty, Staff, and Students
 - Good Clinical Practice
 - Health Information Privacy and Security (HIPS) for Students and Instructors
 - Health Information Privacy and Security (HIPS) for Clinicians
 - Health Information Privacy and Security (HIPS) for Clinical Investigators
- 2024 - present

2022 - present

2022 - present

2022 - present

2022 - present