

CURRICULUM VITAE
AMMAR E. MAHMOOD, PHD
DATE: 6/13/2025

ADDRESS, EMAIL, AND TELEPHONE NUMBERS:

Program in Physical Therapy
WashU Medicine
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PRESENT POSITION:

2024 – Present Assistant Professor of Physical Therapy and Cell Biology & Physiology
Program in Physical Therapy
WashU Medicine
Saint Louis, MO

EDUCATION:

2009 – 2012 Associate of Science
Major: Biology
Metropolitan Community College – Kansas City
Kansas City, MO

2013 – 2015 Bachelor of Science
Major: Biology
University of Missouri – Kansas City
Kansas City, MO

2017 – 2023 Doctor of Philosophy
Major: Pharmacological and Physiological Science
Department of Pharmacology and Physiology
Saint Louis University School of Medicine
Saint Louis, MO
Thesis Title: Neuronostatin Induces Gluconeogenic Gene Expression and Glucose
Release in Hepatocytes
Mentor: Gina Yosten, PhD

2021 – 2024 Principles Certificate in University Teaching Skills
Saint Louis University
Saint Louis, MO

2023 – 2024 Post-Doctoral Fellow
Department of Pharmacology and Physiology
Saint Louis University School of Medicine

Saint Louis, MO

Postdoctoral areas of study:

- 1) endocrinology and metabolism: Neuronostatin and hepatic physiology
- 2) Orphan GPCR-ligand matching identification

Mentor: Gina Yosten, PhD

EMPLOYMENT:

2010 – 2017

Home Care Attendant

Blue Skies Home Care LLC

Kansas City, MO

Roles: Personal and health care of a disabled person at home. Responsibilities included taking vital signs, giving medication, and assisting the person with their personal needs.

2011

Tutor

Course: General Chemistry I and II

Metropolitan Community College

Kansas City, MO

Roles: Explaining general chemistry subjects to students and Assisting students in solving chemistry problems.

TEACHING TITLES AND RESPONSIBILITIES:

2011

Tutor

Course: General Chemistry I and II

Metropolitan Community College

Kansas City, MO

Roles: Explaining general chemistry subjects to students and Assisting students in solving chemistry problems.

2015

Tutor – Peer Tutoring Program

Course: Histology Lecture and Lab

University of Missouri – Kansas City

Kansas City, MO

Roles: Volunteered in tutoring histology lecture and lab. Duties included explaining the materials covered in histology lecture and lab to students.

2015

Teaching Assistant

Course: Histology and Cell Ultrastructure Laboratory Course

University of Missouri – Kansas City

Kansas City, MO

Roles: Assisting students in tutorial instructions in Histology and Cell Ultrastructure lab course with the instructor Dr. David Garris. Duties included preparing examples of slide sections under the microscopes and helping students how to identify certain cell/tissue/organ structures under the microscope.

2019 – 2023

Lecturer and Section Director

Course: Drugs We Use and Abuse

Saint Louis University
Saint Louis, MO

Roles: teaching topics related to basic cell biology, physiology, and pharmacology of different drugs that are used and abused to non-biology-major students. Duties included preparing lectures, assignments, and exam questions.

2023 – 2024

Lecturer

Course: Special Topics in Basic Biomedical Sciences
Saint Louis University School of Medicine
Saint Louis, MO

Roles: Taught first-year graduate students how to critically evaluate selected scientific papers. Students were expected to explain scientific backgrounds, hypotheses, methods, results, conclusions, and strengths and weaknesses of the papers. Students were assessed with short-answer quizzes at the end of each session

2024 – Present

Core Faculty – Doctor of Physical Therapy (DPT) Education
Program in Physical Therapy
WashU Medicine

Roles:

- 1) Module Team Member – Modules M1, M2, M3, M4A, M4B – Teaching physiology sessions and their relevance to movement to first-year learners
- 2) Faculty Coordinator – Module M4B – Coordinating with clinical experts from different medical disciplines to provide pathophysiology and pharmacology sessions to first-year learners in the physical therapy program
- 3) Module Team Member – Module M5 – Teaching exercise physiology sessions to the second-year learners in physical therapy program
- 4) Thread Lead – Underpinning of Movement (UOM) and Pharmacology Threads – Organization of content and assessments within the thread; session mapping to UOM and Pharmacology threads
- 5) Assessment Review Team Member – Reviewing assessment questions and learner performance on the Written Assessment For Learning (WAFL) assessments
- 6) DPT Education Committee Member

2024 – Present

Adjunct Faculty
Course: Principles of Human Physiology (BIOL 328)
Department of Biology
WashU – Danforth Campus

Roles: This undergraduate course provides students with an understanding of the function and regulation of the human body and its application to exercise. Roles include creating course syllabus, teaching, and course assessment.

PROFESSIONAL APPOINTMENTS AND COMMITTEES:

2019 – 2020

Pharmacology and Physiology Department Representative
Graduate Student Association
Saint Louis University

Roles: Represented the Department of Pharmacology and Physiology in the Graduate Student Association. Responsibilities included attending meetings, addressing graduate students' needs, liaison with my department, and actively assisting in the Graduate Student Association's Research Symposium.

2021 – 2022
Member of the Education Committee
Department of Pharmacology and Physiology
Saint Louis University School of Medicine
Roles: Reviewed and updated curriculum for the graduate program in the Department of Pharmacology and Physiology

2023
Poster Presentation Judge
Institute for Translational Neuroscience Inaugural Research Symposium
Saint Louis University
Roles: judge scientific posters from graduate students

2024 – Present
Member of Doctor of Physical Therapy Education Committee (DPTEC)
Program in Physical Therapy
WashU Medicine
Roles: Participation in DPTEC meetings and annual faculty retreats for DPT curriculum optimizations; ; participation in annual faculty retreat for curriculum improvement.

OTHER ACTIVITIES:

2014
Student Organization Desk – UMKC Chapter of Phi Kappa Phi
University of Missouri – Kansas City
Kansas City, MO
Roles: Volunteered in Staffing Phi Kappa Phi student organization desk to represent phi kappa phi and maintain its visibility in campus.

2014 – 2017
Physician Shadowing
Mercy Health Free Clinic
Kansas City, MO
Roles: Shadowed physicians, observing their interactions with patients, and learned how they interpret lab results, diagnose diseases, and make decisions about treatments

2016 – 2017
Clinical Assistant
Mercy Health Free Clinic
Kansas City, MO
Roles: Volunteered in Mercy Health Free Clinic that provides free health care to uninsured and underinsured residents of the Greater Kansas City. Duties included taking vital signs, English-Arabic language interpretation between patients and physicians, drug inventory management, and administrative assistance.

HONORS AND AWARDS:

2009 – 2012
Dean's Honor Roll
Metropolitan Community College – Kansas City

- 2011 Degree Completion Scholarship
Metropolitan Community College – Kansas City
- 2012 Herschel M. Allen Scholarship
Metropolitan Community College – Kansas City
- 2012 Degree Honors: Awarded with High Honors
Metropolitan Community College – Kansas City
- 2012 Certificate for Highest Honors
Metropolitan Community College – Kansas City
- 2013 – 2015 Dean’s List
University of Missouri – Kansas City
- 2013 – 2015 Chancellor Transfer Scholarship
University of Missouri – Kansas City
- 2013 – 2015 Phi Theta Kappa Scholarship
University of Missouri – Kansas City
- 2014 – 2015 SBS Excellence Scholarship
University of Missouri – Kansas City
- 2015 Summa Cum Laude
University of Missouri – Kansas City
- 2018 – 2019 NIH Training Grant (Grant #: T32GM008306)
Department of Pharmacology and Physiology, Saint Louis University School of Medicine
- 2022 First Place in Poster Presentation – Faculty Retreat Event
Department of Pharmacology and Physiology, Saint Louis University School of Medicine
- 2023 Second Place in Poster Presentation
Graduate Student Association Symposium, Saint Louis University
- 2023 Henry Pickering Bowditch Abstract Recognition
American Physiology Summit Conference, Long Beach, CA
- 2023 Research Recognition Award – Endocrinology and Metabolism Section
American Physiology Summit Conference, Long Beach, CA
- 2023 First Place in Abstract Presentation Award
Missouri Physiological Society Meeting, Saint Louis, MO

2024 Abstract of Distinction – Endocrinology and Metabolism Section
American Physiology Summit Conference, Long Beach, CA

HONOR SOCIETY MEMBERSHIP:

2011 – 2012 Phi Theta Kappa Honor Society

2014 – 2017 Phi Kappa Phi Honor Society

2014 – Present Golden Key International Honor Society

2023 – Present Sigma Xi Scientific Research Honor Society

PROFESSIONAL ORGANIZATIONS MEMBERSHIP:

2019 – Present American Physiological Society

2023 – Present Missouri Physiological Society

SCIENTIFIC CONFERENCES:

2019 Graduate Student Association Symposium – Saint Louis University
Saint Louis, MO
Abstract: Identification of Apolipoprotein A-IV Receptor: A Possibility of an Orphan GPCR?

2019 Experimental Biology Meeting
Orlando, FL
Abstract: Identification of Apolipoprotein A-IV Receptor: A Possibility of an Orphan GPCR?

2020 Experimental Biology Meeting
San Diego, CA
Cancelled due to COVID 19 Pandemic
Abstract 1: Neuronostatin Induces C-FOS Response and Gluconeogenic Enzymes in HEPG2 Cells: A potential Role of Neuronostatin in the Liver
Abstract 2: (second author): A New Player in Glucose Counterregulation: the Glycemic Effects of Neuronostatin through GPR107 and Enhanced Glucagon Secretion

2022 Foundation of Prader Willi Research Symposium
Chicago, IL
Abstract: Evaluation of GPR107 Expression and Metabolic Profiles in Liver Tissues of Magel2 Mutant Rats

2022 Faculty Retreat Event
Department of Pharmacology and Physiology – Saint Louis University School of Medicine
Saint Louis, MO
Abstract: Neuronostatin induces gluconeogenic enzyme expression and glucose release in hepatocytes

- 2023 American Physiology Summit
Long Beach, CA
Abstract: Neuronostatin induces gluconeogenic enzyme expression and glucose release in hepatocytes
- 2023 Graduate Student Association Symposium – Saint Louis University
Saint Louis, MO
Abstract: Neuronostatin induces gluconeogenic enzyme expression and glucose release in hepatocytes
- 2023 Missouri Physiological Society Meeting
Saint Louis, MO
Abstract: Neuronostatin induces gluconeogenic enzyme expression and glucose release in hepatocytes
- 2024 American Physiology Summit
Long Beach, CA
Abstract: Is the Serpin-Enzyme Complex Receptor an Orphan G-Protein Coupled Receptor?

BIBLIOGRAPHY:

Conference Abstracts:

1. **Mahmood, A.**, Stein, L., Tso, P., Samson, W. and Yosten, G. (2019), Identification of Apolipoprotein A-IV Receptor: a Possibility of an Orphan GPCR?. The FASEB Journal, 33: 752.7-752.7.
2. Grote, S., **Mahmood, A.**, Samson, W. and Yosten, G. (2020), A New Player in Glucose Counterregulation: the Glycemic Effects of Neuronostatin through GPR107 and Enhanced Glucagon Secretion. The FASEB Journal, 34: 1-1.
3. **Mahmood, A.**, Grote, S., Samson, W. and Yosten, G. (2020), Neuronostatin Induces CFOS Response and Gluconeogenic Enzymes in HEPG2 Cells: A Potential Role of Neuronostatin in the Liver. The FASEB Journal, 34: 1-1.
4. **Mahmood, A.**, Hagen, L., Bocke, C., Kolar, G., Samson, W. and Yosten, G. (2022), Evaluation of GPR107 Expression and Metabolic Profiles in Liver Tissues of Magel2 Mutant Rats. Foundation of Prader Willi Research Symposium, Chicago, IL.
5. **Mahmood, A.**, Grote, S., Kolar, G. Samson, W., and Yosten, G. (2023), Neuronostatin Induces Gluconeogenic Enzyme Expression and Glucose Release in Hepatocytes. Physiology, 38: S1.
6. **Mahmood, A.**, Cortner, L., Rahimi, N., Samson, W, and Yosten, G. (2024), Is the Serpin-Enzyme Complex Receptor an Orphan G-Protein Coupled Receptor?. Physiology, 39: S1.