

Abdelrahman (Abdel) Y. Fouda, BPharm, PhD

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University of Arkansas for Medical Sciences
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Current Position

Associate Professor with tenure, Department of Pharmacology and Toxicology
University of Arkansas for Medical Sciences
Little Rock, AR

Education

Doctor of Philosophy (PhD), University of Georgia, Augusta, Georgia, USA 2015

Bachelor of Pharmacy (BPharm) Cairo University, Cairo, Egypt 2007

Academic Appointments

Associate Professor with Tenure 2025-Present

Assistant Professor (Tenure Track) 2021-2025
Department of Pharmacology and Toxicology
University of Arkansas for Medical Sciences
Little Rock, AR

Instructor/Senior Fellow 2019-2021
Vascular Biology Center
Medical College of Georgia
Augusta, GA

Professional Positions and Experience

Pharmacology and Toxicology (PTET) PhD track director 2026-Present
Graduate School
University of Arkansas for Medical Sciences
Little Rock, AR

Graduate Faculty 2021-Present
Graduate School
University of Arkansas for Medical Sciences
Little Rock, AR

Pharmacology and Toxicology (PTET) PhD track co-director 2024-2026
Graduate School
University of Arkansas for Medical Sciences
Little Rock, AR

Program Faculty Training in Systems Pharmacology and Toxicology (T-SPaT) T32 Training Program University of Arkansas for Medical Sciences Little Rock, AR	2021-Present
Research Biologist Veterans Affairs (VA) Medical Center, Augusta, GA	2011-2021
Postdoctoral Fellow Vascular Biology Center Medical College of Georgia Augusta, GA	2016-2019
Postdoctoral Fellow Center for Pharmacology and Experimental Therapeutics University of Georgia Augusta, GA	2015-2016
Graduate Teaching Assistant Center for Pharmacology and Experimental Therapeutics University of Georgia Augusta, GA	2011-2015
Research and Teaching Assistant Clinical Pharmacy Department Cairo University Cairo, Egypt	2007-2011

Other Positions and Employment

Research Biologist, Veteran Affairs (VA) Medical Center Augusta, GA	2011-2021
Community Pharmacist in a retail pharmacy Cairo, Egypt.	2007

Certification and Licensure

Registered Pharmacist in Egypt	2007-Present
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Professional Development

"AI-Powered Leadership: Transforming Impact in the Digital Age." Course by Mo Lei Fong and Anita Yuen, Stanford University	2026
Executive Healthcare Leadership Institute, a year-long leadership program at UAMS in collaboration with UALR College of Business	2024-2025
"The Science of Being Memorable and Influencing Decisions." Course by Carmen Simon, Stanford University	2025
AAMC Virtual Workshop – Leveraging the Power of Self-Awareness, Zoom	2024
Grant Writing Workshop, University of Arkansas for Medical Sciences, AR	2023
ARVO Global Mentorship Program (assigned mentee of Dr. Andras Komaromy)	2021
Grant Writing Workshop, Augusta University, GA	2019
Augusta University Workshop – Effective Teaching Strategies, GA	2019

Cairo University Workshops – Exams and Student Evaluation, Creative Thinking, Strategic Planning, Fundamentals of Clinical Trials, Crisis Management, Egypt	2008-2011
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Professional Memberships and Activities

Association for Research in Vision and Ophthalmology (ARVO) Social Media Ambassador	2026
Member, Retinal ganglion cell Repopulation, Stem cell Transplantation, and Optic nerve Regeneration (RReSTORE) consortium, Wilmer Eye Institute	2021-Present
Program faculty member, UAMS SPaT T32 training program	2022-Present
Member, Association for Research in Vision and Ophthalmology (ARVO)	2015-Present
Member, Association for Ocular Pharmacology and Therapeutics (AOPT)	2019-2021
Member, American Society for Pharmacology and Exp. Therapeutics (ASPET)	2017-2021
Member, American Heart Association (AHA)	2017-2018
Member, Graduate Education and Curriculum Committee, UGA	2012-2015
Member, MACH clinical trial team - clinicaltrials.gov ID: NCT01805895	2012-2014
Member, I-SPOT clinical trial team - clinicaltrials.gov ID: NCT01811550	2012-2013
Member, American College of Clinical Pharmacy (ACCP)	2011-2014
Member, COAG clinical trial team in MCG - clinicaltrials.gov ID: NCT00839657	2011-2014
Member, 'ProNGF/NGF Biomarker of Diabetic Retinopathy' clinical trial team	2008-2011
Member, Centre of Applied Research & Advanced Studies (CARAS), CU, Egypt	2007-2011
Member, Performance Appraisal & Quality Assurance Unit (PAQU), CU, Egypt	2006
Summer training, QC Department - Alkan Pharmaceutical Company, Egypt	2006
Summer training, Drug manufacturing - CID Pharmaceutical Company, Egypt	2005
Summer training in a retail community pharmacy, Egypt	2003-2006

Editorial Board Appointments

Editorial Board

Circulation Research journal	2025-Present
Associate Editor, Frontiers in Neuroscience (Translational Medicine)	2022-Present

Topic Editor

Frontiers in Cardiovascular Medicine, topic: "Endothelial Dysfunction in Cardiovascular Diseases"	2023
Frontiers in Human Neuroscience "Multidisciplinary Approaches for Managing Neuro-Ophthalmic Complications of Diabetes"	2021

Guest Editor

Stroke Research and Treatment Journal, International Journal of Hypertension	2017, 2019
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Ad hoc Journal Reviewer

Journal of Clinical Investigation-Insights, Diabetes, Diabetologia, Translational Research, Translational Medicine, Neuropharmacology, Neuroinflammation, Hypertension, Endocrinology, Molecular Neurobiology, Neuroscience, iScience, Oncogenesis, Frontiers in Neuroscience, European Journal of Pharmacology, Cellular Physiology and Biochemistry, Therapeutic Advances in Cardiovascular Disease, Plos One and Scientific Reports, F1000Research, Metabolic Brain Disease	2014-Present
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Scientific Meeting Abstract Reviewer

American Heart Association (AHA) scientific sessions	2016
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Committee Assignments and Administrative Services

Pharmacology and Toxicology (PTET) PhD track co-director	2026-present
Invited committee member for Jenna Caswell, a graduate student at UAMS	2026-present
Patent and Copyright Committee, BioVentures, UAMS	2025-present
Member, UAMS Graduate Council committee on curriculum responsibilities	2024-Present
Pharmacology and Toxicology (PTET) PhD track co-director	2024-2026
Invited committee member for Debasree Bhadra, a graduate student at UAMS	2024-Present
Invited committee member for Pritam Saha, a graduate student at UAMS	2024-Present
Invited committee member for Olivia LeBlanc, a graduate student at UAMS	2024-Present
Organizer, 'Creating and maintaining a healthy life as you build and grow your career', ARVO Webinar	2024
Organizer, 'Funding mechanisms for eye research' ARVO Webinar	2023
Invited external committee member for Harry Henry-Ojo, a graduate student at the University of Georgia	2023-Present
Session moderator, participated as one of the leads in the 'breakfast with the experts' session, and in the Members in Training Committee at ARVO	2023
Participated in UAMS College of Medicine LCME accreditation visit	2023
Member, admission committee of the Graduate Program in Interdisciplinary Biomedical Sciences (GPIBS), UAMS	2022-Present
Member, Jones Eye Institute search committee for director of research, UAMS	2022-Present
Member, Paul Dunn ALS chair search committee, UAMS	2022-2023
Interviewer, Medical student admission interviews, UAMS	2021-2022
Member, NIH National Eye Institute Office of Regenerative Medicine (ORM) Trainee Committee (OTC)	2021-2023
Association for Research in Vision and Ophthalmology (ARVO) members in training committee (MIT)	2016-2024
Coordinator, Vascular Biology Center (VBC) journal club	2017-2021
Member, Vision Discovery Institute (VDI) retreat organizing committee	2017-2021
Member, Veterans Affairs (VA) research week organizing committee	2012-2021
Leader, Vision Discovery Institute (VDI) retreat organizing committee	2013-2015

Grant Review Panels

International

<i>Ad hoc</i> Reviewer, Diabetes UK project grants, the United Kingdom	2023-Present
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National

Member, NIH F01A fellowships study section: Brain disorders and related neurosciences	2025-Present
Peer Reviewer for the American Heart Association pre/post-doc fellowships Brain Stroke - Basic Science Committee	2019-Present
<i>Ad hoc</i> Reviewer, NIH/NEI Pathophysiology of Eye Disease 2 (PED2) study section, R21/R01 Applications	2022-Present

Regional

<i>Ad hoc</i> Reviewer (Out-of-State), Ohio State University Center for Clinical and Translational Sciences	2023
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Local

<i>Ad hoc</i> Reviewer, UAMS pilot grants program	2023
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Educational Activities

Teaching

Course director, Scientific Communication and Ethics I (PHAR 51171)	8/2026-Present
Course director, Scientific Communication and Ethics II (PHAR 51191)	8/2026-Present
Principles and Methods of Pharmacology and Toxicology (PHAR 51053) (1 class per semester)	1/2026-Present
Graduate Pharmacology and Therapeutics course (Phar 51073) at UAMS (3 classes per semester)	8/2023-Present
Delivering a workshop titled 'Leadership in Action: Communicate, Empower, & Lead Effectively' at the Children's Cancer Hospital (57357), Egypt	7/2025
Delivering a workshop on 'Navigating Mentorship, Self-Awareness and Personal Branding' at the Children's Cancer Hospital (57357), Egypt	7/2024
Medical students' Brain and Behavior module (Vascular pathology/stroke)	5/2024-Present
Systems Therapeutics course (PCOL 6101) at UAMS (Stroke lecture, 1 class per semester)	1/2022-Present
Pathology course (5101) at UAMS (Alzheimer's Disease lecture, 2 classes per semester)	8/2022-Present
Invited graduate lectures (Stroke and Alzheimer's disease at CU, Egypt)	5/2022-7/2022
Graduate courses at the University of Georgia (UGA): Advanced Therapeutics I (8700), Advanced Therapeutics II (PHRM 8710) and Methods in Experimental Therapeutics (PHRM 8750)	8/2018-6/2021
Graduate course at Augusta University (AU): Cardiovascular Physiology and Pharmacology (COGS 8120 / CRN18149), Methodology in Cardiovascular Research (VBIO 8010)	8/2017-6/2021
Undergraduate/graduate therapeutics courses at UGA. Graduate classes: Methods in Experimental Therapeutics (PHRM 8750), and Advanced Therapeutics I (PHRM 8700). PharmD class: Disease state management.	8/2015-3/2016
Undergraduate and graduate therapeutics courses (12 h / week) at Cairo University: Clinical Pharmacy and Therapeutics (901), Community Pharmacy & Pharmacy Practice (903), Hospital Pharmacy (902), Clinical Pharmacokinetics (908), and Drug Information (904)	9/2007-7/2011

Mentoring

Mentor, American Heart Association Mentoring for Professionals program	2019-Present
Participant, "Partnering for success" at EB 2019 – involved in mentoring a graduate student during the conference.	4/2019
Mentor, graduate students journal club at the VDI retreat	3/2019
Mentor, undergraduate, graduate, and postdoctoral fellows in the lab	2014-Present
Amod Sharma (Postdoc fellow, April 2026 - present) – Major Advisor	
Mohamed Abdelhamed (Grad student, January 2025 - present) – Major Advisor	
Abdelrahman Elhusseiny, resident (May 2024 - present) – Mentor	
Pooja Modi (Medical student, May - July 2024) – Mentor	
Seif Abdelnaem (SURP student, May - July 2024) – Mentor	
Christian Mitchell (Grad student, Jan 2024 - present) – Major Advisor	
Bushra Zaman (Grad student, Nov 2023 - present) – Major Advisor	
Melissa Wild (Research technician, July 2023 - present) – Mentor	
Aya Ahmed (Visiting scholar, Feb 2023 - May 2023) – Mentor	
Rami Shahror (Postdoc fellow, Jan 2022 - present) – Major Advisor	
Carol Morris (Grad student, Jan 2022 – Aug 2025, then Postdoc to present) – Major Advisor	
Esraa Shosha (Postdoc/assistant professor, March 2022 - present) – Mentor	
Luke Qin (First-year medical student, 2020-2021)	

Adeel Syed (Junior postdoc fellow, 2020-2021)
Fadi Ismail (Medical student, 2020-2021)
Sana Aslam (Fourth-year medical student, 2019-2020)
Wael Eldahshan (Junior postdoc fellow, 2019-2020)
Reem Atawia (Graduate student, 2018-2019)
Mohamed Sayed (Graduate student, 2014-2015)

Honors and Awards

Excellence in Mentoring Award, UAMS Graduate School Winter Reception	4/2026
Mentor Award, UAMS Graduate School Winter Reception	12/2025
Excellence in Mentoring Award, UAMS Graduate School Winter Reception	12/2024
Selected for the Veterans Affairs Merit submission, Fall 2024	7/2024
Selected to represent UAMS in the Pew Scholars Biomedical Sciences Program	6/2024
Excellence in Mentoring Award, UAMS Graduate School Spring Reception	5/2024
Travel grant to attend the RReSTORE consortium, Wilmer Eye Institute	5/2024
Knights Templar Eye Foundation travel grant to attend ARVO	5/2024
Travel grant to attend the RReSTORE consortium, Wilmer Eye Institute	5/2022
Travel grant to cover registration for the virtual ARVO annual meeting	5/2021
Vascular Biology Center's best senior postdoc award for the year	9/2020
Best postdoctoral presentation, Vascular Biology Center (VBC) journal club	8/2019
Second place, best poster award, Veterans Affairs (VA) research week	5/2019
Division for Neuropharmacology Postdoctoral Scientist Award Finalist – Experimental Biology (EB) meeting	4/2019
American Heart Association (AHA) postdoctoral fellowship for two years	7/2018
ASPET Travel award to attend the EB meeting	4/2018
Division for Neuropharmacology Postdoctoral Scientist Award Finalist - EB meeting	4/2018
Best poster award, Veterans Affairs (VA) research week	5/2017
Selected oral presentation, Veterans Affairs (VA) research week	5/2017
Communicator ribbon, ARVO meeting	5/2017
Selected oral presentation, Vision Discovery Institute (VDI) retreat at Augusta University (AU)	3/2017
Selected oral presentation, Graduate Research Day (GRD) at AU	3/2017
Research Snapshot Presentation, Society of Critical Care Medicine (SCCM) meeting	1/2017
ISC abstract selected for re-presentation in the AHA Scientific Sessions in the 'best of AHA specialty conferences' category	11/2015
Travel award, Southern Translational Education & Research (STaR) conference	9/2015
Best poster – People Choice Award, Veteran Affairs (VA) Research Week	5/2015
International Stroke Conference (ISC) 2015 Junior Investigator Travel Award	2/2015
Selected oral presentation, International Stroke Conference (ISC)	2/2015
UGA travel award to attend the High Blood Pressure Research (HBPR) meeting	9/2014
Best poster award, Southeast Neuroscience Conference	4/2014
A schematic diagram from the review article published in the Journal of Cerebral Blood Flow and Metabolism was selected as the journal cover page	4/2014
Award of Excellence in Research, Graduate Research Day (GRD) at AU	3/2014
Selected oral presentation, International Stroke Conference (ISC)	2/2014
Travel Award, STaR Conference	9/2013
Selected oral presentation, STaR Conference	9/2013
Two-year Graduate Assistantship, UGA Pharmacy school	8/2013
Two-year University-Wide Graduate School Assistantship, UGA (awarded by the graduate school to highly qualified students in a university-wide competition)	8/2011
Best TA Award, Clinical Pharmacy Department, Cairo University School of Pharmacy	5/2010
Summa Cum Laude - Honor graduate, B.Pharm (ranked FIRST in class of ~1500 students), Pharmacy School, Cairo University, Egypt	5/2007

Mentees' Awards

Carol Morris (graduate student, then postdoc):

Health Sciences Innovation and Entrepreneurship Postdoctoral Fellowship	2025
Travel award to attend the CES conference	2024
ARVO Science Communication fellowship	2024
PhRMA foundation predoctoral fellowship (\$62,000)	2024
First place at Healthcare Innovation Sprint (\$2,500)	2023
First place 3-Minute Thesis Competition, UAMS	2023
Third place in the South-Central Chapter for the Society of Toxicology conference	2022
Third place poster presentation at the ArkanSono conference	2022

Christian Mitchell (graduate student):

Student UAMS Research Day Bhuvan Award	2026
Second place, 3-Minute Thesis Competition, UAMS	2026
ARVO Conference 2025 Poster competition finalist	2025
The Training in Systems Pharmacology and Toxicology (T-SPaT) T32 Program fellowship	2024

Bushra Zaman (graduate student):

PhRMA foundation predoctoral fellowship (\$62,000)	2026
People choice award, 3-Minute Thesis Competition, UAMS	2026
Travel award to attend ARVO Conference 2025 and present an oral talk	2025

Mohamed Abdelhameed (graduate student):

Second place, best poster award UAMS research day	2026
Second place, best poster award T-SPAT symposium	2025

Rami Shahrer (postdoctoral fellow):

AHA postdoctoral fellowship	2025
Second place for best poster presentation, Graduate Research Day, UAMS	2024
Invited oral talk at the ARVO Annual Meeting	2023
First place in the South-Central Chapter for the Society of Toxicology conference	2022

Esraa Shosha (research assistant professor):

AHA Career Development Awards	2025
Knights Templar Eye Foundation career starter grant (\$90,000)	2024
UAMS Sturgis award (\$25,000)	2024
Travel award to attend ASPET meeting	2025

Abdelrahman Elhusseiny (resident):

ARVO EyeFind Research grant (\$5,000)	2024
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Aya Ahmed (visiting scholar):

USAID grant (\$25,000)	2023
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Grants and Contract Awards

Research Portfolio Summary (includes collaborative grants and fellowships)

Type of competitive grant	Amount (Direct and Indirect)
Extramural (PI) at UAMS	\$3,577,907
Intramural (PI) at UAMS	\$94,000
Extramural (before joining UAMS)	\$343,844
Total	\$4,015,751 (\$3,666,907 at UAMS)

Current Extramural Research Grants

R01 EY035658 award from the National Eye Institute (NEI/NIH) Title: Retinal Neurovascular Protection by Boosting Efferocytosis Award total \$2,195,685 with 52% indirect cost to UAMS <u>Role:</u> Principal Investigator	8/2024-5/2029
T32 Health Sciences Innovation & Entrepreneurship fellowship to postdoc, Brandon Hogland Award total \$163,000 with 52% indirect cost to UAMS <u>Role:</u> Mentor	8/2026-7/2028
PhRMA Foundation Predoctoral fellowship to graduate student, Bushra Zaman Title: The role of clusterin in ischemic retinopathy Award total \$62,000 <u>Role:</u> Mentor	4/2026-4/2028
T32 Health Sciences Innovation & Entrepreneurship fellowship to postdoc, Carol Morris Award total \$163,000 with 52% indirect cost to UAMS <u>Role:</u> Mentor	8/2025-7/2027
R00 EY029373 award from the National Eye Institute (NEI/NIH) Title: Role of Arginase 1 in Retinal Ischemia-Reperfusion Injury Award total \$747,000 with 52% indirect cost to UAMS <u>Role:</u> Principal Investigator	2/2022-1/2025
AHA Postdoctoral fellowship to postdoc, Rami Shahror Title: Role of myeloid HDAC3 in retinal neurovascular injury Award total \$176,000 <u>Role:</u> Mentor	1/2025-12/2026
Career Development Award to Dr. Esraa Shosha Title: Endothelial HDAC3 Mediates Pathological Angiogenesis in Retinopathy of Prematurity Award total \$231,000 with 10% indirect cost to UAMS <u>Role:</u> Mentor	4/2025-5/2028
Knights Templar Eye Foundation Research grant to Dr. Esraa Shosha Title: Endothelial HDAC3 Mediates Pathological Angiogenesis in Retinopathy of Prematurity Award total \$90,000 <u>Role:</u> Preceptor	7/2024-7/2025
PhRMA Foundation Predoctoral fellowship to graduate student, Carol Morris Title: Protection Against Ischemic Stroke by Disrupting CD47/SIRPa Axis	8/2024-8/2026

Award total **\$62,000**

Role: Mentor

T-SPaT T32 Program fellowship to graduate student, Christian Mitchell

8/2024-8/2026

Title: Role of HDAC3 in Diabetic Retinopathy

Award total **\$80,000**

Role: Mentor

ARVO EyeFind Research grant to resident, Dr. Abdelrahman Elhusseiny
8/2024

2024-2025

Title: Expression and Cellular Localization of IGFBP6 in Diabetic Retinas

Award total **\$5,000**

Role: Mentor

R00 EY029373-05S1 Diversity supplement (NEI/NIH)

7/2023-1/2025

Minority supplement to parent R00 grant to support graduate student, Carol Morris

Award total **\$107,222** with 52% indirect cost to UAMS

Role: Mentor

NASA TRISH postdoctoral fellowship to Dr. Ashley Nemec-Bakk

8/2022-7/2024

Title: The Use of Two New Ground-based Models of Deep Space Travel to Study the Role of Mitochondria and Oxidative Stress in Cardiovascular Effects

Award total **\$170,000**

Role: Collaborating investigator

Pending Extramural Research Grants

1R21EY039809-01 - the National Eye Institute (NEI/NIH)

12/2026-11/2028

Title: Novel translational targets for ischemic retinopathy

Under Scientific Review

Award total \$275,000 with 52% indirect cost to UAMS

Role: PI

R01 EY035658 - the National Eye Institute (NEI/NIH)

8/2026-5/2031

Title: Mechanisms and Therapeutic Targets of Proliferative Retinopathy

Received 29 % score – pending council review

Award total \$3,629,738 with 52% indirect cost to UAMS

Role: Co-Investigator (PI Esraa Shosha)

F31 Fellowship - graduate student, Christian Mitchell

8/2026-7/2028

Received 22 % score – pending council review

Award total \$50,000 with 52% indirect cost to UAMS

Role: Mentor

Completed Extramural Research Grants

United States Agency for International Development (USAID) award
Visiting Scholar award to cover stipend and bench fees for Aya Ahmed

2/2023-6/2023

Award total **\$25,000**

K99 EY029373 award from the National Eye Institute (NEI/NIH)

8/2019-7/2021

Title: Role of Arginase 1 in Retinal Ischemia-Reperfusion Injury

Award total **\$233,388**

18POST34060036 Postdoctoral fellowship, American Heart Association (AHA)

7/2018-7/2019

Title: Arginase 1 in Retinal Ischemic Injury
Award total **\$110,456**

Completed Intramural Research Grants

IDeA proteomics Voucher to analyze retinal samples 7/2025-11/2025
Award total **\$3,640**
Role: Principal Investigator

UAMS Hornick Award 6/2024-5/2025
University of Arkansas for Medical Sciences
Title: The role of clusterin in ischemic stroke
Award total **\$50,000**
Role: Principal Investigator

IDeA proteomics Voucher to analyze retinal endothelial cells samples 7/2024-11/2024
Award total **\$5,000**
Role: Principal Investigator

Sturgis Pilot Award to Dr. Esraa Shosha 1/2024-12/2024
University of Arkansas for Medical Sciences
Title: Role of Endothelial HDAC3 in Pathological Retinal Angiogenesis of Diabetic Retinopathy (DR)
Award total **\$25,000**
Role: Co-PI

UAMS Hornick Award 1/2023-12/2023
University of Arkansas for Medical Sciences
Title: The role of SIRP α in ischemic stroke
Award total **\$44,000**
Role: Principal Investigator

IDeA National Resource for Quantitative Proteomics Voucher 3/2023
University of Arkansas for Medical Sciences
Retinotoxicity of cancer chemotherapeutic agents
Award total **\$5,000**
Role: Co-PI (PI Ricky Leung)

UAMS Hornick Award 1/2022-12/2022
University of Arkansas for Medical Sciences
Title: CD47 neutralization as a treatment for ischemic stroke
Award total **\$25,000**
Role: Principal Investigator

Publications

Link to my bibliography on Pubmed: [fouda, abdelrahman - Search Results - PubMed \(nih.gov\)](#)

Google Scholar Citation: 56 publications

Citations	2,170
h-index	28
i10-index	39

i. Research Manuscripts

1. Elhusseiny AM, ElSheikh RH, Serhan HA, Abboud I, Hassan AK, Ayoubi MH, Subhi J. Al'Aref SJ, **Fouda AY**, Uwaydat S, Adelpour M, Lee RK, Association between primary open-angle glaucoma and retinal artery occlusions, *AJO International*, 2026
2. Shahrer RA, Zaman B, Chuesiang P, Wild M, Shosha E, Leung YK, Mu S, Rusch NJ, **Fouda AY***. CD5L promotes efferocytosis and resolution of retinal ischemic injury. *Cell Death and Disease*. 2026 Apr 20 (***corresponding authors**)
3. Shahrer RA, Morris CA, Cunningham A, Chuesiang P, **Fouda AY***. Myeloid HDAC3 deletion protects against traumatic optic injury. *Cell Death and Discovery*. 2026 Mar 18. (***corresponding authors**) (IF=7)
4. Shosha E, Chauhan MZ, Muayad J, Sallam AB, **Fouda AY***. Systemic Lactate Dehydrogenase Levels as a Predictor of Progression from Non-Proliferative to Proliferative Diabetic Retinopathy. **Journal of Clinical Medicine**. 2025 Dec 8;14(24). (***corresponding authors**) (IF=2.9)
5. Mitchell CD, Morris C, Wild M, Cunningham A, Chuesiang P, Mohammed AA, Nagalo BM, Rusch NJ, **Fouda AY*** and Shosha E*. HDAC3 mediates retinal endothelial cell metabolic reprogramming and angiogenesis. **Acta Pharmacologica Sinica**. In press. (***corresponding authors**) (IF=8.4)
6. Shahrer RA, Shosha E, Morris CA, Wild M, Mu S, Csanyi G, Rusch NJ, **Fouda AY***, Deletion of myeloid of HDAC3 promotes efferocytosis to ameliorate retinal ischemic injury. **Journal of Neuroinflammation**. 2024; 21: 170. (***corresponding author**) (IF=9.3)
7. Shahrer RA, Shosha E, Ji M, Morris C, Wild M, Zaman B, Tetelbom P, Leung R, Phillips PH, Sallam AA, **Fouda AY***, Proteomic analysis of aqueous humor in central retinal artery occlusion: Unveiling novel insights into disease pathophysiology. **Translational Vision Science & Technology**. 2024 Aug 1;13(8):30. (***corresponding author**) (IF=3.28)
8. Shosha E, Shahrer RA, Morris CA, Xu Z, Lucas R, McGee-Lawrence ME, Rusch NJ, Caldwell RB, **Fouda AY***, The arginase 1/ornithine decarboxylase pathway suppresses HDAC3 to ameliorate the myeloid cell inflammatory response: implications for retinal ischemic injury. **Cell Death and Disease**. 2023 14(9):621. (***corresponding author**) (IF=9.6)
9. Zaidi SAH, Xu Z, Lemtalsi T, Sandow P, Athota S, Liu F, Haigh S, Huo Y, Narayanan SP, Fulton DJR, Rojas MA, **Fouda AY**, Caldwell RW, Caldwell RB, Calbindin 2-specific deletion of arginase 2 preserves visual function after optic nerve crush. **Cell Death and Disease**. 2023 Oct 10;14(10):661. (IF=9.6)
10. Retinal ganglion cell repopulation for vision restoration in optic neuropathy: A roadmap from the RReSTORe consortium (white paper), **Molecular Neurodegeneration** (IF=18.8), 2023 Sep 21;18(1):64. (Abdel Fouda is part of a consortium that drafted the paper)
11. Xiao W, Shahrer RA, Morris CA, Caldwell RB#, and **Fouda AY#**, Multi-color flow cytometry protocol to characterize myeloid cells in mouse retina research. **Bio-protocol**. 2023 Aug 20; 13(16): e4745. (**#shared correspondence**)
12. **Fouda AY**, Xu Z, Suwanpradid J, Rojas M, Shosha S, Lemtalsi T, Patel C, Xing J, Zaidi SA, Zhi W, Stansfield BK, Cheng PNM, Narayanan SP, Caldwell RW & Caldwell RB, Targeting proliferative retinopathy: Arginase 1 limits vitreoretinal neovascularization and promotes angiogenic repair, **Cell Death and Disease**. 2022 Aug 29;13(8):745. (IF=9.6)

13. Shosha E, Qin L, Lemtalsi T, Zaidi SAH, Rojas MA, Xu Z, Caldwell RW, Caldwell RB[#] and **Fouda AY[#]**, Investigation of retinal metabolic function in type 1 diabetic Akita mice, **Frontiers in Cardiovascular Medicine**, 2022 Jun 2;9:900640. (**#shared correspondence**) (IF=5.8)
14. **Fouda AY[#]**, Ahmed HA, Pillai B, Kozak A, Hardigan T, Ergul A, Fagan SC, Ishrat T[#], Contralesional angiotensin type 2 receptor activation contributes to recovery in experimental stroke, **Neurochemistry International**. 2022 Jun 7;158:105375. (**#shared correspondence**) (IF=4.2)
15. Das A, Ash D, **Fouda AY**, Sudhahar S, Kim Y, Hou Y, Hudson FZ, Stansfield BK, Caldwell RB, McMenamin M, Littlejohn R, Su H, Regan MR, Merrill BJ, Poole LB, Kaplan JH, Fukai T, Ushio-Fukai M, Cysteine oxidation of copper transporter CTR1 drives VEGFR2 signalling and angiogenesis, **Nature Cell Biology**, 2022 Jan;24(1):35-50. (IF=28.2)
16. **Fouda AY[#]**, Eldahshan W, Xu Z, Lemtalsi T, Shosha E, Zaidi SA, Abdelrahman AA, Cheng PN, Narayanan SP, Caldwell RW, Caldwell RB, Preclinical investigation of pegylated arginase 1 as a treatment for retina and brain injury, **Experimental Neurology** 2021 Nov 12;113923. (**#shared correspondence**). (IF=5.6)
17. Shosha E, **Fouda AY**, Lemtalsi T, Haigh S, Fulton D, Ibrahim A, Al-Shabrawey M, Caldwell RW, Caldwell RB. Endothelial arginase 2 mediates retinal ischemia/reperfusion injury by inducing mitochondrial dysfunction. **Molecular Metabolism**. 2021 Nov 15;53:101273. (IF=8.5)
18. Candadai AA, Liu F, **Fouda AY**, Alfarhan M, Palani CD, Xu Z, Caldwell RB, Narayanan SP. Deletion of arginase 2 attenuates neuroinflammation in an experimental model of optic neuritis. **PLoS One**. 2021 Mar 18;16(3):e0247901. (IF=3.7)
19. **Fouda AY[#]**, Xu Z, Narayanan SP, Caldwell RW, Caldwell RB[#], Utility of LysM-cre and Cdh5-cre driver mice in retinal and brain research: An imaging study using tdTomato reporter mouse. **Investigative Ophthalmology & Visual Science** 2020 Mar 9;61(3):51. (**#shared correspondence**). (IF=4.9)
20. Atawia RT*, Bunch KL*, **Fouda AY***, Lemtalsi T, Eldahshan W, Xu Z, Saul A, Elmasry K, Al-Shabrawey M, Caldwell RB, Caldwell RW, Role of Arginase 2 in murine retinopathy associated with western diet-induced obesity. **Journal of Clinical Medicine** 9 (2), 2020 Jan 22 (***equal contribution**). (IF=4.9)
21. Palani CD*, **Fouda AY***, Liu F*, Xu Z, Mohamed E, Giri S, Smith SB, Caldwell RB, Narayanan SP. Deletion of Arginase 2 ameliorates retinal neurodegeneration in a mouse model of multiple sclerosis. **Molecular Neurobiology** 2019 Jul 6. (***equal contribution**). (IF=5.6)
22. Eldahshan W, Ishrat T, Pillai B, Sayed M, Alwhaibi A, **Fouda AY**, Ergul A, and Fagan SC. Angiotensin type 2 receptor stimulation with compound 21 improves neurological function after stroke in female rats: A pilot study. **American Journal of Physiology-Heart Circulation Physiology** 2019 Mar 1. (IF=5.1)
23. Pichavaram P, Palani CD, Patel C, Xu Z, Shosha E, **Fouda AY**, Caldwell RB, Narayanan SP. Targeting Polyamine Oxidase to Prevent Excitotoxicity-Induced Retinal Neurodegeneration. **Frontiers in Neuroscience** 2019, Jan 10;12:956. (IF=5.1)
24. Xu Z*, **Fouda AY***, Lemtalsi T, Shosha E, Patel C, Caldwell RW, Narayanan SP, and Caldwell RB. Retinal neuroprotection from optic nerve trauma by deletion of arginase 2. **Frontiers in Neuroscience** 2018, Dec 20;12:970. (***equal contribution**). (IF=5.1)
25. **Fouda AY**, Xu Z, Shosha E, Lemtalsi T, Chen J, Toque H, Tritz R, Cui X, Stansfield B, Huo Y, Rodriguez PC, Smith SB, Caldwell RW, Narayanan SP, and Caldwell RB. Arginase 1 promotes retinal neurovascular protection from ischemia by suppressing macrophage inflammatory responses. **Cell Death & Disease** 2018 Sep 25;9(10):1001. (IF=9.6)
26. Pichavaram P, Palani C, Patel C, Xu Z, Shosha E, **Fouda AY**, Caldwell RB, Narayanan SP. Targeting polyamine oxidase to prevent excitotoxicity-induced retinal neurodegeneration. **Frontiers in Neuroscience** 2018;12:956. (IF=5.1)
27. Shosha E, Xu Z, Narayanan SP, Lemtalsi T, **Fouda AY**, Rojas M, Xing J, Fulton D, Caldwell RW, Caldwell RB. Mechanisms of diabetes-induced endothelial cell senescence: Role of arginase 1. **International Journal of Molecular Sciences** 2018 Apr 17;19(4). 1. (IF=6.2)

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29. Ishrat T, **Fouda AY**, Pillai B, Eldahshan W, Ahmed H, Waller JL, Ergul A, and Fagan SC. Dose-response and therapeutic time- window of compound 21: a randomized preclinical trial in a rat model of thromboembolic stroke. **Journal of Cerebral Blood Flow and Metabolism** 2018 Jan 1:271678X18764773. (IF=6.5)
30. Bhatta A, Yao L, Xu Z, Toque HA, Chen J, Atawia RT, **Fouda AY**, Bagi Z, Lucas R, Caldwell RB and Caldwell RW. Obesity-induced vascular dysfunction and arterial stiffening requires endothelial cell arginase 1. **Cardiovascular Research** 2017 Nov 1;113(13):1664-1676. (IF=13)
31. **Fouda AY***, Newsome AS*, Switzer J, Ergul A, Edwards DJ, Hess DC, Wenbo Zhi, Waller J, Spellicy S, and Fagan SC. Minocycline in acute cerebral hemorrhage: An early phase randomized trial. **Stroke** 2017 Oct;48(10):2885-2887. (**Clinical trial**) (IF=8.6)
32. **Fouda AY**, Pillai B, Dhandapani K, Ergul A, Fagan SC. Role of interleukin-10 in the neuroprotective effect of the angiotensin type 2 receptor agonist, compound 21, after ischemia/reperfusion injury. **European Journal of Pharmacology** 2017 Mar 15;799:128-134. (IF=5.2)
33. **Fouda AY***, Alhusban A* (***equal contribution**), Ishrat T, Pillai B, Eldahshan W, Waller JL, Ergul A, Fagan SC. Brain-derived neurotrophic factor knockdown blocks the angiogenic and protective effects of angiotensin modulation after experimental stroke. **Molecular Neurobiology** 2017 Jan;54(1):661-670. (IF=5.6)
34. Alhusban A, **Fouda AY**, and Fagan SC. ARBs improve stroke outcome through an AT2-dependent, BDNF-induced proangiogenic and pro-recovery response. **Neural Regeneration Research** 2016 Jun;11(6):912-3. (IF=6)
35. Mysona BA, Matragoon S, Stephens M, Mohamed IN, Farooq A, Bartasis ML, **Fouda AY**, Shanab AY, Espinosa-Heidmann DG, and El-Remessy AB. Imbalance of the nerve growth factor and its precursor as a potential biomarker for diabetic retinopathy. **BioMed Research International**, 2015;2015:571456. (IF=3.4)
36. Alhusban A*, **Fouda AY*** (***equal contribution**), Pillai B, Ishrat T, Soliman S, and Fagan SC. Compound 21 is proangiogenic in the brain and results in sustained recovery after ischemic stroke. **Journal of Hypertension** 2015 Jan;33(1):170-80. (IF=4.7)
37. Ishrat T, Pillai B, Soliman S, **Fouda AY**, Ergul A, Johnson MH, Fagan SC. Low-dose candesartan enhances molecular mediators of neuroplasticity and subsequent functional recovery after ischemic stroke in rats. **Molecular Neurobiology** 2015 Jun;51(3):1542-53. (IF=5.6)
38. Ishrat T, Mohamed IN, Pillai B, Soliman S, **Fouda AY**, Ergul A, El-Remessy AB, Fagan SC. Thioredoxin-interacting protein: A novel target for neuroprotection in experimental thromboembolic stroke in mice. **Molecular Neurobiology** 2015 Apr;51(2):766-78. (IF=5.6)
39. **Fouda AY**, Kozak A, Alhusban A, Switzer J, Fagan S. Anti-inflammatory IL-10 is upregulated in both hemispheres after experimental ischemic stroke: Hypertension blunts the response. **Experimental and Translational Stroke Medicine** 2013 Nov 13;5(1):12.

ii. Review Articles

40. Shosha E, **Fouda AY***. A metabolic switch in retinal angiogenesis: Histone deacetylase 3. *Neural Regen Res.* 2026 Mar 14. (***corresponding author**) (IF=6.7)
41. Shahrar RA, **Fouda AY***. Recent advances and future challenges in nanosystems for ocular drug delivery. *J Pharmacol Exp Ther.* 2025 Dec;392(12):103738. (***corresponding author**) (IF=3.8)
42. **Fouda AY***, Shosha E, Efferocytosis and Retinal Clean-Up: The Role of HDAC3 in Ischemic Retinopathy. *Neural Regeneration Research-* In press. (***corresponding author**) (IF=5.9)

43. Morris CA, Sadek MA, Modi P, Abdelnaem S, Rusch NJ, Shosha E, **Fouda AY***. The role of efferocytosis in ischemic stroke and insights from retinopathy. *Trends in Neuroscience*. 2025 Jul 15. (***corresponding author**) (IF=15.1)
44. Gonzalez MDC, Watson J, Leal L, Mocerri I, Plummer C, Mahato B, **Fouda AY**, Bhattacharya SK. Extracellular vesicle metabolomics holds promise for adult axon regeneration. *Metabolites*. 2025 Jul 4;15(7):454. (IF=3.7)
45. Shahrer RA, Morris CA, Mohammed AA, Wild M, Zaman B, Mitchell CD, Phillips PH, Rusch NJ, Shosha E, **Fouda AY***. Role of myeloid cells in ischemic retinopathies: recent advances and unanswered questions. *Journal of Neuroinflammation*. 2024 Mar 7;21(1):65. (***corresponding author**) (IF=9.3)
46. Ding Z, Stolarz A, Mu S, Zhang H, **Fouda AY**, Rusch N, Endothelial cells -macrophage-like gatekeepers?, *Frontiers in Immunology*, 2022 May 10;13:902945. (IF=8.7)
47. **Fouda AY**[#], Eldahshan W, Narayanan SP, Caldwell RW, Caldwell RB[#]. Arginase pathway in acute retina and brain injury: Therapeutic opportunities and unexplored avenues. *Frontiers in Pharmacology* 2020;11:277. (**#shared correspondence**). (IF=5.9)
48. Shosha E, **Fouda AY**, Narayanan SP, Caldwell RW, Caldwell RB. Is the arginase pathway a novel therapeutic avenue for diabetic retinopathy? *Journal of Clinical Medicine* 9 (2) 2020 Feb 5. (IF=4.9)
49. **Fouda AY**, Fagan SC, and Ergul A. Brain vasculature and cognition: Renin-angiotensin system, endothelin, and beyond. *Arteriosclerosis Thrombosis and Vascular Biology* 2019 Feb 28;ATVBAHA118311906. (IF=10.5)
50. **Fouda AY**, Switzer JA. Response by Fouda and Switzer to letter regarding article, Minocycline in acute cerebral hemorrhage: An early phase randomized trial. *Stroke* 2017 Nov 117.019625. (IF=8.6)
51. Ergul A, Hafez S, **Fouda AY**, Fagan SC. Impact of comorbidities on acute injury and recovery in preclinical stroke research: Focus on hypertension and diabetes. *Translational Stroke Research* 2016 Aug;7(4):248-60. (IF=6.8)
52. **Fouda AY**, Artham S, El-Remessy A and Fagan SC. Renin-angiotensin system as a potential therapeutic target in stroke and retinopathy: Experimental and clinical evidence. *Clinical Science* 2016 Feb;130(4):221-38. (IF=6.8)
53. Artham S, **Fouda AY**, El-Remessy A and Fagan SC. Vascular protective effects of angiotensin receptor blockers: Beyond blood pressure. *Receptors & Clinical Investigation* 2015; 2: e774.
54. Soliman S, Ishrat T, Patel A, **Fouda AY**, Pillai B, Ergul A and Fagan SC. Sequential treatment with minocycline and candesartan improves long-term recovery after stroke. *Translational Stroke Research* 2015 Aug;6(4):309-22 (IF=6.8)
55. Ergul A, Valenzuela JP, **Fouda AY** and Fagan SC, Cellular Connections, Microenvironment and brain angiogenesis in diabetes: Lost communication signals in the post-stroke period. *Brain Research* 2015 Mar 3. pii: S0006-8993(15)00165-1. (IF=3.6)
56. Ergul A, Abdelsaid M, **Fouda AY**, and Fagan SC. Cerebral neovascularization in diabetes: Implications for stroke recovery and beyond. *Journal of Cerebral Blood Flow and Metabolism* 2014 Apr;34(4):553-63. (IF=6.5)

iii. Book Chapter:

Handbook of Animal Models in Neurological Disorders, Academic Press 2023, Pages 391-402: Chapter 32 - The mouse model of experimental autoimmune encephalomyelitis: Methods to study neuroinflammation in optic neuritis. Authors: Narayanan SP, **Fouda AY**, Liu F, Shan S.

Scientific Presentations

Oral Presentations

1. **Fouda AY**, Reprogramming macrophages for ischemic retinal repair, Augusta, GA, USA, October 2026
2. **Fouda AY**, Reprogramming Myeloid Cells to Enhance Efferocytosis and Repair in Ischemic Retinopathy, International Society for Eye Research (ISER) meeting, Valencia, Spain, August 2026
3. **Fouda AY**, The Road Not Taken: Targeting Efferocytosis as a Novel Route to Retinal Repair Hamilton Eye Institute, University of Tennessee Health Sciences Center, April 2026.
4. **Fouda AY**, Novel Translational Targets for CNS Ischemic Injury. UAMS College of Pharmacy, April 2026.
5. **Fouda AY**, Efferocytosis as a Novel target for CNS repair, Physiology Department, UAMS, November 2025.
6. **Fouda AY**, Morris CA, UAMS Graduate Student Association (GSA) funding mechanisms workshop, October 2024.
7. **Fouda AY**, NASA TRISH postdocs webinar, the topic 'Navigating academic careers', April 2024.
8. **Fouda AY**, UAMS Postdoc Academy. Topic 'transitioning from post-doc to prof-doc' April 2024.
9. **Fouda AY**, The Association for Research in Vision and Ophthalmology Advance conference, topic 'tools for the transition from mentee to mentor' February 2024.
10. Shahrer, R.A., **Fouda, AY**, Myeloid HDAC3 deletion mitigates ischemic retinal neurovascular injury, Annual meeting of the Association for Research in Vision and Ophthalmology, New Orleans, LA, USA, May 2023.
11. **Fouda AY**, Protective role of myeloid cells in retina and brain injury, Dept of Microbiology, UAMS, December 2022.
12. **Fouda AY**, The injured retina and junk cleanup, Dept of Ophthalmology, UAMS, May 2022.
13. **Fouda AY**, CNS ischemic injury: a focus on the retina and the brain. Invited talk via Zoom, Society for Neurochemistry India 2021.
14. **Fouda AY**, Arginase 1 as a therapy for retinal ischemic injury: The road not taken. Invited talk in-person and online at multiple institutes, UMN, UWV, USF, UAMS, UTHSC, and AU, Spring-Fall 2020.
15. **Fouda AY**, Development of pegylated arginase 1 as a therapy for retinal ischemic injury. Annual meeting of the Association for Research in Vision and Ophthalmology, Baltimore, MD, May 2020. (Meeting was canceled because of COVID-19).
16. **Fouda AY**, Interactive ethics session for postdocs on responsible conduct of research (data acquisition and management). Augusta University postdoc seminar series, October 2020.
17. **Fouda AY**, Targeting neurovascular injury in retinopathy of prematurity: Role of arginase 1. Invited talk, November 2019. University of Georgia.
18. **Fouda AY**, Xu Z, Shosha E, Caldwell RW, Narayanan SP, and Caldwell RB. Activation of the arginase 1/ornithine pathway suppresses ischemia/reperfusion-induced neuronal injury by suppressing HDAC3. Experimental Biology, Orlando, FL, April 2019. AU GRD, Augusta, GA 2019.
19. **Fouda AY**, Xu Z, Shosha E, Chen J, Cui R, Smith SB, Huo Y, Rodriguez P, Caldwell RW, Narayanan SP, Caldwell RB. Myeloid Arginase 1 protects against retinal ischemia-reperfusion injury. Experimental Biology, San Diego, CA, April 2018.
20. **Fouda AY**, Xu Z, Shosha E, Narayanan P, Caldwell RW, Caldwell RB. Role of arginase 1 in retinal ischemia/reperfusion injury. Charlie Norwood Veterans Affairs Medical Center (CN-VAMC) Research Week, Augusta, GA. May 2017.
21. **Fouda AY**, Xu Z, Shosha E, Narayanan P, Caldwell RW, Caldwell RB. Arginase 1: A novel therapy for retinal ischemia-reperfusion injury. Vision Discovery Institute (VDI) retreat, Augusta University, Augusta, GA. March 2017.
22. **Fouda AY**, Xu Z, Shosha E, Narayanan P, Caldwell RW, Caldwell RB. Arginase 1: A novel therapy for retinal ischemia-reperfusion injury. Graduate Research Day (GRD), Augusta University, Augusta, GA. March 2017.
23. Newsome AS (presenting author), **Fouda AY**, Switzer JA, Hafez S, Ergul A, Edwards DJ, Hess DC, Nichols F, Bruno A, Zhi W, Fagan SC. Pharmacokinetics of minocycline in critically ill patients with intracerebral hemorrhage. Society of Critical Care Medicine (SCCM) meeting, January 2017.

24. **Fouda AY**, Ergul A, and Fagan SC. The Angiotensin type 2-receptor agonist, compound 21, provides neuroprotection after ischemia-reperfusion injury through interleukin 10 upregulation. International Stroke Conference (ISC), Nashville, TN, 2015 (among the top 10% of accepted abstracts – was represented in the Scientific Sessions 2015 under the 'best of AHA specialty conferences' category)
25. **Fouda AY**, Alhusban A, Pillai B, Ishrat T, Soliman S, and Fagan SC. C21 is proangiogenic in the brain and results in sustained recovery after ischemic stroke. Charlie Norwood Veterans Affairs Medical Center (CN-VAMC) Research Week, Augusta, GA. May 2014.
26. Alhusban A, **Fouda AY (presenting author)**, Pillai B, Ergul A, Fagan SC. BDNF Knockdown abrogates AT1 blockade-induced improvement in stroke outcome. International Stroke Conference (ISC) 2014, San Diego, CA. February 2014.
27. **Fouda AY**, Alhassan A, Pillai B, Ishrat T, and Fagan SC. AT2R stimulation after stroke ameliorates brain inflammation: Role of IL-10. Clinical and Experimental Therapeutics seminar series, Augusta, GA. February 2014.
28. **Fouda AY**, Alhusban A, Pillai B, Fagan SC. Compound 21 mitigates inflammation and improves long-term recovery after ischemic stroke. Southern Translational Education and Research (STaR) Conference, Augusta, GA. September 2013.

Poster Presentations

National/International Meetings

1. **Fouda, AY**, Comparative proteomic analysis of ocular fluids in ischemic retinopathies: Unveiling novel insights into disease pathophysiology, Annual meeting of the Association for Research in Vision and Ophthalmology, Seattle, WA, 2024
2. Shahrar RA, **Fouda AY**, Efferocytosis through myeloid HDAC3 deletion protects against retinal ischemic injury, Annual meeting of the Association for Research in Vision and Ophthalmology, Seattle, WA, 2024
3. Shosha E, **Fouda AY**, Endothelial HDAC3 mediates pathological retinal neovascularization via metabolic reprogramming, Annual meeting of the Association for Research in Vision and Ophthalmology, Seattle, WA, 2024
4. Morris C, **Fouda AY**, Protection against traumatic optic neuropathy by disrupting the CD47/SIRP α axis, Annual meeting of the Association for Research in Vision and Ophthalmology, Seattle, WA, 2024
5. C Morris, E Shosha, **A Fouda**, HDAC3 mediates retinal endothelial cell angiogenesis in vitro, Annual meeting of the Association for Research in Vision and Ophthalmology, New Orleans, LA, USA (2023)
6. **Fouda AY**, Caldwell RB. Investigation of the retinal metabolic function in type 1 diabetic Akita mice. Annual meeting of the Association for Research in Vision and Ophthalmology, May 2022.
7. **Fouda AY**, Caldwell RB. Pegylated arginase 1 as a treatment for acute central nervous system (CNS) injury. Annual meeting of the Association for Research in Vision and Ophthalmology, May 2021.
8. **Fouda AY**, Xu Z, Shosha E, Caldwell W, Narayanan SP, Caldwell RB. Protective role of arginase 1 in retinal ischemia-reperfusion injury. Association for Research in Vision and Ophthalmology meeting, Baltimore, MD, May 2017.
9. Shosha E, **Fouda AY**, Ibrahim A, Al-Shabrawey M, Xu Z, Lemtalsi T, Caldwell W, Narayanan SP, Caldwell RB. Retinal ischemia-reperfusion: Role of arginase 2. Association for Research in Vision and Ophthalmology meeting, Baltimore, MD, May 2017.
10. Newsome AS, **Fouda AY**, Switzer JA, Edwards DJ, Zhi W, and Fagan SC. Pharmacokinetics of minocycline in critically ill patients with intracerebral hemorrhage. Society of Critical Care Medicine (SCCM) meeting, Honolulu, HI, Jan 2017.
11. Ishrat T, Pillai B, **Fouda AY**, Eldahshan W, Ahmed H, Noguchi K, Fagan SC. DS-1040, a novel selective TAF1 α inhibitor does not increase hemorrhagic risk in a mechanical model of stroke in rats. Society for Neuroscience (SFN) meeting, San Diego, CA, Nov 2016
12. **Fouda AY**, Ishrat T, Ahmed H, Pillai B, Artham S, Ergul A, and Fagan SC. Involvement of the contralesional angiotensin type 2 receptor in compound 21 mediated functional recovery after stroke. International Stroke Conference (ISC), Los Angeles, CA, Feb 2016.
13. Ishrat T, **Fouda AY**, Pillai B, Eldahshan W, Ahmed H, Waller J, Ergul A, Fagan SC. Dose-response and therapeutic time-window of compound 21: a randomized preclinical trial in a rat model of thromboembolic stroke. International Stroke Conference (ISC), Los Angeles, CA, Feb 2016.

14. **Fouda AY**, Soliman S, Kozak A, Pillai B, Ergul A, Fagan SC. Impaired response to post-stroke candesartan treatment in a model of type 2 diabetes: Relationship to angiotensin receptors expression. International Stroke Conference (ISC), Nashville, TN, Feb 2015.
15. **Fouda AY**, Hardigan T, Soliman S, Pillai B, Ergul A, Fagan SC. Enhancement of cerebrovascular relaxation by angiotensin II type 2 receptor agonist, C21, is lost in type 2 diabetes. High blood pressure research (HBPR) meeting. San Francisco, CA. September 2014.
16. Soliman S, Ishrat T, Patel A, **Fouda AY**, Ergul A, Fagan SC. Sequential Treatment with Minocycline and Candesartan Improves Long-Term Recovery After Stroke. International Stroke Conference (ISC) 2014, San Diego, CA. Feb 2014.
17. El-Remessy AB, **Fouda AY**, Farooq A, Mohamed IN, Mysona BA, Matragoon S, Espinosa- Heidmann D. Imbalance in NGF/proNGF ratio as biomarker of diabetic retinopathy. American Diabetes Association (ADA) 73rd Scientific Sessions, Chicago, Illinois. June 2013.
18. **Fouda AY**, Kozak A, Alhusban A, Switzer J, Fagan SC. Utility of serum cytokines as biomarkers for ischemic stroke in translational research. Southern Translational Education and Research (STaR) Conference, Augusta, GA. September 2012. American College of Clinical Pharmacy (ACCP) annual meeting, Hollywood, FL. October 2012.

Local/Regional Meetings

1. Morris C, **Fouda AY**, Protection against TON injury by disrupting the CD47/SIRP α axis. University of Arkansas for Medical Sciences (UAMS) Research Day Little Rock, AR, 2024.
2. Shahrar RA, **Fouda AY**, Myeloid HDAC3 deletion prevents retinal neurovascular degeneration in a mouse model of retinal ischemia-reperfusion. University of Arkansas for Medical Sciences (UAMS) Research Day Little Rock, AR, Feb 2024.
3. Wild M, **Fouda AY**, Endothelial HDAC3 mediates pathological retinal neovascularization via metabolic reprogramming. University of Arkansas for Medical Sciences (UAMS) Research Day Little Rock, AR, Feb 2024.
4. Shahrar, RA, **Fouda AY**, Myeloid HDAC3 deletion protects against ischemic retinal neurovascular injury. University of Arkansas for Medical Sciences (UAMS) Research Day Little Rock, AR, Feb 2023.
5. Morris C, **Fouda AY**, Poster presentation, Role of CD47/SIRP α axis in CNS injury. University of Arkansas for Medical Sciences (UAMS) Research Day Little Rock, AR, 2023.
6. Morris C, **Fouda AY**, Retina metabolism in type 1 diabetic Akita mice, Annual meeting of the South Central Chapter of the Society of Toxicology (SCC-SOT), Little Rock, AR, 2022.
7. Shahrar, RA, **Fouda AY**, Deleterious role of myeloid HDAC3 in retinal neurovascular injury, Annual meeting of the South Central Chapter of the Society of Toxicology (SCC-SOT), Little Rock, AR, 2022.
8. **Qin L**, Shosha E, Caldwell RB, and **Fouda AY**. Investigation of the retinal metabolic function in type 1 diabetic mice. Augusta University Graduate Research Day 2021.
9. **Fouda AY**, Xu Z, Shosha E, Caldwell RW, Narayanan SP, and Caldwell RB. Activation of the arginase 1/ornithine pathway suppresses ischemia/reperfusion-induced neuronal injury by suppressing HDAC3. Experimental Biology, Orlando, FL, April 2019. VA research day, Augusta, GA, May 2019; Vision Discovery Institute (VDI) retreat, Augusta University, Augusta. GA, March 2020.
10. **Fouda AY**, Xu Z, Shosha E, Chen J, Cui R, Smith SB, Huo Y, Rodriguez P, Caldwell RW, Narayanan SP, Caldwell RB. Myeloid Arginase 1 protects against retinal ischemia-reperfusion injury. Experimental Biology, San Diego, CA, April 2018. VA research day, Augusta, GA, May 2018; Vision Discovery Institute (VDI) retreat, Augusta University, Augusta. GA, March 2018.
11. Shosha E, **Fouda AY**, Lemtalsi T, Xu Z, Caldwell RW, Narayanan SP, Caldwell RB. Mechanisms of retinal ischemia/reperfusion injury: Arginase and the mitochondria. VA research day, Augusta, GA, May 2018; Experimental Biology annual meeting, San Diego, CA, April 2018; Vision Discovery Institute (VDI) retreat, Augusta University, Augusta. GA, March 2018.
12. **Fouda AY**, Ergul A, and Fagan SC. The Angiotensin type 2-receptor agonist, compound 21, provides neuroprotection after ischemia-reperfusion injury through interleukin 10 upregulation. STaR conference, Athens, GA, September 2015.
13. **Fouda AY**, Ishrat T, Ahmed H, Pillai B, Artham S, and Fagan SC. Involvement of the contralesional angiotensin type 2 receptor in compound 21 mediated functional recovery after stroke. Charlie Norwood Veteran Affairs Medical Centre (CNVAMC) research week, GA. May 2015. STaR conference, Athens, GA, September 2015.

14. **Fouda AY**, Alhusban A, Pillai B, Ishrat T, and Fagan SC. Compound 21 is proangiogenic in the brain and results in sustained recovery after ischemic stroke. Best Poster Presentation at the 2014 Southeast Neuroscience Conference. April 19, 2014. Southern Translational Education and Research (STaR) Conference, GA. Sep 2014.
15. **Fouda AY**, Soliman S, Pillai B, Ergul A, Fagan SC. Impaired response to post-stroke candesartan treatment in a model of type 2 diabetes: relationship to angiotensin receptor expression. Graduate research day, Georgia Regents University, Augusta, GA. March 2014
16. **Fouda AY**, Alhusban A, Pillai B, Fagan SC. Compound 21 mitigates inflammation and improves long-term recovery after ischemic stroke. Southern Translational Education and Research (STaR) Conference, GA. Sep 2013.
17. Soliman S, Ishrat T, **Fouda AY**, Pillai B, Patel A, Ergul A and Fagan SC. Combination of anti-inflammatory and angiogenic approaches: A novel therapeutic alternative for ischemic stroke. Southern Translational Education and Research (STaR) Conference, GA. Sep 2013.
18. Soliman S, Ishrat T, **Fouda AY**, Pillai B, El-Remessy AB, Ergul A and Fagan SC. A single candesartan dose induces a prolonged proangiogenic effect in the brain after stroke. Southern Translational Education and Research (STaR) Conference, GA. Sep 2013.
19. **Fouda AY**, Kozak A, Alhusban A, Switzer J, Fagan SC. Interleukin 10 is upregulated contralesionally after focal ischemic stroke in rats. Graduate Research Day, Georgia Regents University, Augusta, GA. March 2013. Charlie Norwood Veteran Affairs Medical Centre (CNVAMC) research week, GA. May 2013.
20. **Fouda AY**, Farooq A, Mohamed I, Mysona BA, Matragoon S, Espinosa D, and El-Remessy AB. Imbalance in NGF/proNGF ratio as a biomarker of diabetic retinopathy. Vision Discovery Institute (VDI) research day. March 2013.
21. Farooq A, Mysona B, **Fouda AY**, Matragoon S, IM L, Kim H, Espinosa D, and El-Remessy AB. Imbalance in NGF/ProNGF ratio as a biomarker of diabetic retinopathy. Southern Translational Education and Research (STaR) Conference, Augusta, GA. Sep 2012.
22. Pyla R, Poulouse N, **Fouda AY**, Osman IA, Segar L. PDGF vs insulin regulation of glucose transporter isoforms in vascular smooth muscle cells. Graduate Research Day, Georgia Health Sciences University, Augusta, GA. March 2012.

Weblinks

UAMS Web Profile: <https://pharmtox.uams.edu/faculty/primary-faculty/abdel-y-fouda/>

Lab website: <https://medicine.uams.edu/pharmtox/faculty/primary-faculty/abdel-y-fouda/fouda-lab-research-team/>

Lab news: <https://medicine.uams.edu/pharmtox/faculty/primary-faculty/abdel-y-fouda/fouda-lab-news/>

LinkedIn: <https://www.linkedin.com/in/abdelrahman-fouda-95359583/>

Google Scholar: <https://scholar.google.com/citations?user=zMiQgPwAAAAJ&hl=en>

Research gate: https://www.researchgate.net/profile/Abdelrahman_Fouda

Press Releases

<https://news.uams.edu/2026/05/13/uams-researchers-identify-new-ways-to-protect-vision-regrow-nerves-in-the-eye/>

<https://medicine.uams.edu/pharmtox/research-collaboration-pharmacology-toxicology-ophthalmology/>

<https://www.57357.org/en/blog/A%20special%20scientific%20day%20in%2057357%20for%20leadership%20development>

<https://www.57357.org/en/leadership-empowerment-workshop-for-57357-staff/>

<https://medicine.uams.edu/wp-content/uploads/2023/12/COMmunication-December-2023-web.pdf>

<https://medicine.uams.edu/blog/sweethearts-learn-about-heart-health-cardiovascular-research-at-uams/>

<https://jagwire.augusta.edu/new-target-could-help-protect-vision-following-optic-nerve-trauma/>

<https://jagwire.augusta.edu/new-treatment-target-emerging-for-retinal-damage/>

<https://jagwire.augusta.edu/novel-strategy-appears-to-protect-retina-when-disease-reduces-oxygen/>

<https://www.nature.com/articles/d41586-020-01618-9>

Vector Laboratories photo contest 2020 honorable mention: <https://vectorlabs.com/galleries/photo-contest-winners-2020>

Patents and Technology Transfer

Use of CD5L protein for treatment of ischemic eye injuries and disorders – UAMS BioVentures disclosure/provisional patent	2025
Use of CD47-SIRP neutralizing antibodies as neurovascular protectants – UAMS BioVentures disclosure/provisional patent/PCT	2024
Patent (PI R. Caldwell) – Use of arginase 1 as a treatment for retinopathy	2021

Professional Community Activities

Invited/Hosted External Seminar Speakers at UAMS	2021-present
Dr. Daniel R. Saban, Duke University	
Dr. Akrit Sodhi, Johns Hopkins	
Dr. Manuela Bartoli, Augusta University	
Dr. Elia Duh, Johns Hopkins	
Dr. Advije Ergul, the Medical University of South Carolina	
Dr. Tonia Rex, Vanderbilt University	
Dr. Robert Nickells, the University of Wisconsin-Madison	
Organizer and Science Presenter, annual 2-day fundraising event at UAMS in partnership with the American Heart Association (AHA sweethearts)	2022-present
Participated and manned a table for Egypt at the UAMS International Fest	2023