

CURRICULUM VITAE

Fan Fan

Associate Professor
Department of Pharmacology & Toxicology
University of Mississippi Medical Center
2500 North State Street
Jackson, MS 39216-4505

EDUCATION:

1989	M.D.	Clinical Medicine, Qingdao Medical College, Qingdao, China
2001	Postdoctoral Fellow	Immunology/Molecular Biology, Medical University of South Carolina (MUSC), Charleston, South Carolina
2013	M.S.	Biomedical Science/Pharmacology, University of Mississippi Medical Center (UMMC), Jackson, Mississippi
2015	Senior Scientist/Postdoctoral Fellow	Pharmacology, UMMC, Jackson, Mississippi

ADDITIONAL TRAINING:

2009	Introduction of Flow Cytometry Operation of BD LSRII Flow Cytometry BD e-training & Blood Center of Wisconsin Core Lab Medical College of Wisconsin Milwaukee, Wisconsin
2012	Teachers in Medical Education (Certificated) University of Mississippi Medical Center Jackson, Mississippi
2014	4 th Rodent Kidney Physiology/injury Workshop (Certificated) UAB-UCSD O'Brien Center San Diego, California
2019	Qualitative and Quantitative Microscopy for Biomedical Research - A Training Course in Confocal Microscopy and Stereology (Certificated) NeuroRenew, Inc. & MBF Bioscience, Inc. Chicago, Illinois

POSITIONS

09/1999–01/2000	Research Assistant, Department of Medicine, Medical University of South Carolina, Charleston, South Carolina.
01/2000–07/2001	Postdoctoral Fellow, Department of Microbiology and Immunology, Medical University of South Carolina, Charleston, South Carolina.
07/2001–05/2005	Research Specialist II, Department of Neurology and Pharmacology, Medical University of South Carolina, Charleston, South Carolina.
10/2005–06/2010	Research Associate I, Research Scientist I, Department of Physiology, Medical College of Wisconsin, Milwaukee, Wisconsin.
07/2010–04/2013	Senior Scientist, Department of Pharmacology & Toxicology, University of Mississippi Medical Center, Jackson, MS.
05/2013–02/2015	Senior Scientist/2 nd Postdoctoral Fellow, Department of Pharmacology & Toxicology, University of Mississippi Medical Center, Jackson, MS.

03/2015–12/2015 Instructor, Department of Pharmacology & Toxicology, University of Mississippi Medical Center, Jackson, MS.

01/2016–Present Assistant Professor, Department of Pharmacology & Toxicology, University of Mississippi Medical Center, Jackson, MS.

07/2016–06/2021 Assistant Professor (tenure-track), Department of Pharmacology & Toxicology, University of Mississippi Medical Center, Jackson, MS.

07/2021–Present Associate Professor (tenure-track), Department of Pharmacology & Toxicology, University of Mississippi Medical Center, Jackson, MS.

GRANTS

Active:

R01NIH/AG057842 (Fan, PI) 04/01/2019-01/31/2024

Title: Adducin, actin cytoskeleton, and cognitive impairments.

Role: Principal Investigator.

\$1,250,000 direct, \$1,937,500 total.

1 R01 NIH/HL138685 (Roman, PI) 03/01/2018-02/28/2023

Title: Genetic determinants of hypertension-induced cerebral vascular dysfunction.

Role: Co-Investigator.

\$1,255,284 direct, \$1,945,692 total.

MOST/2019YFE0117100 (Liu, PI) 12/01/2020-11/30/2023

Title: Study on the mechanism of paeoniflorin combined with neural stem cell transplantation in the treatment of Parkinson's disease

Role: Co-Investigator.

\$361,765 total.

AHA/20PRE35210043 Predoctoral fellowship (Wang, PI) 01/01/2020-12/31/2021

Title: Oral antihyperglycemic therapy with an SGLT2 inhibitor reverses cognitive impairments in elderly diabetics

Role: Mentor

\$62,032 total.

1 F30 NIH/AG066245 (Gonzalez-fernandez, PI) 05/01/2020-04/30/2022

Title: The Role of 20-HETE in the Pathogenesis of Dementia

Role: Consultant

\$126,588 total.

Completed:

National Natural Science Foundation of China/81871246 (Chen, PI) 01/01/2019-12/31/2020

Title: The mechanism of CPT2 F352C mutation aggravating brain stem damage in EV71 encephalitis by MAVS/STING pathway.

Role: Co-Investigator.

\$36,765 total.

2 P20 NIH/ GM104357 Project II (Fan, PI) 07/16/2018-07/15/2020

Title: Cardiorenal and Metabolic Diseases Research Center.

Role: Project II leader.

Project II Title: Diabetes, Cerebral Vascular Dysfunction, and Cognitive Impairments.

\$876,670 direct, \$1,358,840 total.

1 R01 NIH/DK104184 (Roman, PI) 09/01/2014-08/31/2019

Title: Renal microcirculation and hypertension induced renal injury.

Role: Co-Investigator.

\$1,154,036 direct, \$1,759,904 total.

AHA/16GRNT3120003_Grant-in-Aid (Fan, PI) 07/01/2016-08/30/2019

Title: Role of 20-HETE on aging and hypertension related cerebral vascular disease.

Role: Principal Investigator.

\$237,000 total.

Research Grant/Taisho Pharmaceutical Co.

(Fan, PI) 08/01/2017-07/31/2019

Title: Role of SGLT2 inhibitor on aging and diabetes related cognitive impairments.

Role: Principal Investigator.

\$10,000 total, plus \$400,000 in compounds.

1R21 NIH/AG050049

(Fan, PI) 01/01/2016-11/30/2018

Title: Animal model of impaired autoregulation for study of age related vascular cognitive impairment

Role: Principal Investigator.

\$275,000 direct, \$419,375 total.

PhD Co-Training Scholarship_CSC/201606100208

(Zhang, PI) 09/15/2016-09/14/2018

Title: Role of 20-HETE on acute kidney injury and kidney transplantation.

Role: Mentor.

\$76,000 total.

P20 NIH/GM104357_Pilot

(Fan, PI) 01/01/2016-04/01/2018

Title: Role of 20-HETE on aging and hypertension related cerebral vascular disease.

Role: Principal Investigator.

\$70,000 total.

5 R37 NIH/ HL36279

(Roman, PI) 07/01/1986-03/31/2017

Title: 20-HETE TGF- β in hypertension-induced renal injury.

Role: Co-Investigator.

\$1,515,000 direct, \$2,302,800 total.

PATENTS AND DISCLOSURES

1. **Fan F**, Roman RJ, Wang S. Method and composition for reversing cognitive impairments and loss using SGLT2 inhibitors. US Provisional Patent 62/893,690, 2019 (Invention report #: 5390304-18-0001)
2. **Fan F**, Roman RJ, Wang S. Method and composition for reversing cognitive impairments and loss using SGLT2 inhibitors. US Non-Provisional Patent 16/556,948, 2019
3. **Fan F**, Roman RJ, Hwang SH, Hammock BD. Inhibition of soluble epoxide hydrolase ameliorates cerebral vascular function and reverses cognitive impairments in elderly diabetic rats. UMMC Intellectual Property Disclosure 21-1008
4. **Fan F**, Roman RJ, Hwang SH, Hammock BD. Inhibition of soluble epoxide hydrolase ameliorates cerebral vascular function and reverses cognitive impairments in elderly diabetic rats. University of California (UC) Davis, Invention Assigned UC Case No. 2021-904

PROFESSIONAL SOCIETIES

2011-present American Society of Physiology

2013-present American Heart Association

2014-2015 American Society of Nephrology

2015-2016 American Society of Diabetes

2015-2016 Society for Neuroscience

2015-present Group on Women in Medicine and Science, UMMC

2017-2018 American Society for Pharmacology and Experimental Therapeutics

2017-present Microcirculation Society

2020-present North American Vascular Biology Organization

2020-present Alzheimer's Association International Society to Advance Alzheimer's Research and Treatment (ISTAART)

ACADEMIC ACTIVITIES

Editorial Boards:

2015-present MedCrave Online Journal of Toxicology
2017-present Gerontology & Geriatrics studies
2017-present Journal of Pharmacology and Clinical Trials
2018-present Archives of Diabetes and Endocrine System
2018-present Journal of Pharmaceutical Sciences and Experimental Pharmacology
2019-present Journal of Cardiovascular Pharmacology
2020-present Microcirculation
2020-present Frontiers in Physiology-Renal and Epithelial Physiology

Peer Reviewer:

American Journal of Physiology - Renal Physiology
American Journal of Physiology-Heart and Circulatory Physiology
American Journal of Physiology-Regulatory, Integrative and Comparative Physiology
Biochimie
Biomedicine & Pharmacotherapy
BMC Biotechnology
Brain Research
Brain Science
Cancer Investigation
Cell Biochemistry and Biophysics
Circulation Research
Clinical Interventions in Aging
Experimental Cell Research
European journal of clinical investigation
European journal of Pharmacology
Hypertension
Hypertension research
The Journal of Spinal Cord Medicine
Journal of Neurochemistry
Kidney International
Metabolic Brain Disease
Physiological Reports
PLOS one
Prostaglandins & Other Lipid Mediators
Pharmaceutics
Scientific Report
Theranostics

Grant Review Committees:

06/2016 Alzheimer's Association (AARF, Research Fellowship)
11/2016 Alzheimer's Association (AARF)
06/2017 Alzheimer's Association (AARF)

01/2018 Alzheimer's Association (AARF)

06/2018 National Institutes of Health, Hemostasis and Thrombosis Study Section

09/2018 American Heart Association (Fellowships Vascular Endothelial Biology)

10/2018 Alzheimer's Association (LOI AARF)

01/2019 Alzheimer's Association (AARF)

02/2019 National Institutes of Health, ZRG1 BDCN-J (55)R (Brain Disorders and Clinical Neuroscience Study Section)

03/2019 Alzheimer's Association (LOI AARF)

06/2019 Alzheimer's Association (AARF)

06/2019 National Institutes of Health, ZRG1 BDCN-J (55)R (Brain Disorders and Clinical Neuroscience Study Section)

09/2019 American Heart Association (Fellowships Vascular Endothelial Biology)

09/2019 Alzheimer's Association (International Research Grant Program)

10/2019 Alzheimer's Association (LOI AARF)

01/2020 Alzheimer's Association (NTF)

02/2020 National Institutes of Health, ZRG1 MDCN M51 (Cellular and Molecular Biology of Glia Study Section)

07/2020 National Institutes of Health, ZNS1 SRB-H (14)R (Review of RFA NS-20-013 White Matter Lesion Etiology of Dementia in the U.S. Including in Health Disparity Populations (U19))

07/2020 National Institutes of Health, ZNS1 SRB-O (10) (Review of RFA NS-20-012 Clinical Trials Planning for Symptomatic Vascular Contributions to Cognitive Impairment and Dementia (VCID) (R34))

01/2021 Alzheimer's Association (Rapid Program in Dementia (RAPID) Funding Grant Program)

02/2021 American Heart Association (Fellowships Vascular Endothelial Biology)

02/2021 Alzheimer's Association (LOI NTF-AARF)

05/2021 French Ministry for Solidarity and Health (MoH), French national programme for clinical research (PHRC) 2020 (Programme hospitalier de recherche clinique 2020)

06/2021 Alzheimer's Association (AARF)

06/2021 Alzheimer's Association (NTF)

Professional Scientific Service:

2016 Poster Judge Student Award, Council for High Blood Pressure, Orlando, FL

2016 Poster Judge Student and Postdoc Award, Research Day, UMMC

2017 Committee Graduate Program (Admissions, Welfare, Curriculum), Pharmacology & Toxicology, UMMC

2017 Poster Judge Undergraduate Research Awards, Experimental Biology, Chicago, IL

2017 Poster Judge Student Award, Council for High Blood Pressure, San Francisco, CA.

2017 Poster Judge Student and Postdoc Award, Research day, UMMC

2018 Committee Graduate Program (Admissions, Welfare, Curriculum), Pharmacology & Toxicology, UMMC

2018 Committee Faculty Recruit, Pharmacology & Toxicology, UMMC

2018 Chair 10th International Conference on Vascular Dementia, Paris, France

2018 Chair "Cerebrovascular Disease and Stroke" Oral Session, Joint Hypertension 2018 Scientific Sessions, Chicago, IL

2018 Poster Judge Undergraduate Research Awards, Experimental Biology, San Diego, CA

2018 Poster Judge Student Award, Joint Hypertension 2018 Scientific Sessions, Chicago, IL

2018	Poster Judge	11th World Congress for Microcirculation, Vancouver, BC, Canada
2018	Poster Judge	Student and Postdoc Award, Research day, UMMC
2019	Co-Chair	Ad Hoc Committee, Excellence in Medical Pharmacology Graduate Student Award, UMMC
2019	Committee	Faculty Recruit, Pharmacology & Toxicology, UMMC
2019	Poster Judge	Hypertension Scientific Sessions, New Orleans, LA
2019	Chair	“Cerebrovascular Disease and Stroke” Oral Session, Hypertension Scientific Sessions, New Orleans, LA
2019	Poster Judge	Student and Postdoc Award, Research day, UMMC
2020	Chair	“Stroke” section, 18th International Winter Eicosanoid Virtual Conference
2020	Poster Judge	Vascular Biology 2020, Virtual conference
2020	Advisor	ATCC Customer Advisory Panel
2020	Council	Alzheimer's Association International Research Grant Program (IRGP)
2021	Committee	Alzheimer's Association (Rapid Program in Dementia (RAPID) Funding Grant Program
2021	Committee	Program in Neuroscience Admissions, UMMC
2021	Chair	“News in Sex Differences in Brain Function” section, 2021 APS New Trends in Sex and Gender Medicine

Graduate Faculty:

2015-present		Program in Experimental Therapeutics and Pharmacology, School of Graduate Studies in the Health Sciences, UMMC
2019-present		Program in Neuroscience, School of Graduate Studies in the Health Sciences, UMMC

Teaching Responsibilities:

2017-2019	Course Director	Recent Advances in Pharmacology and Toxicology (Pharm 702), Experimental Therapeutics and Pharmacology, UMMC
2017-2020	Course Co-Director	Experimental Therapeutics and Pharmacology Seminar Program, UMMC
2021-present	Instructor	Special Topics in Neuroscience (NSCI 708), Program in Neuroscience, UMMC
2019-present	Instructor	Mechanisms Of Drug Action (Pharm 723), Experimental Therapeutics and Pharmacology, UMMC
2016-present	Instructor	Experimental Design & Methods to Study Cell Signaling (Pharm 724), Experimental Therapeutics and Pharmacology, UMMC
2014-present	Instructor	(PH620)-Small-Group Teaching, Experimental Therapeutics, and Pharmacology, UMMC
2020-present	Mentor	Yedan Liu, MD, MS, postdoctoral fellow, Department of Pharmacology and Toxicology, UMMC
2017-2019	Mentor	Xiaochen He, Ph.D., postdoctoral fellow, Department of Pharmacology and Toxicology, UMMC
2017	Mentor	Xiang Gao, Ph.D., postdoctoral fellow, Department of Pharmacology and Toxicology, UMMC
2019-2024 (expected)	Advisor	Xing Fang (Ph.D. candidate), Department of Pharmacology and Toxicology, UMMC

2017-2020	Advisor	Shaoxun Wang (Ph.D. candidate), Department of Pharmacology and Toxicology, UMMC
2017-2021	Committee Member	Letao Fan (Ph.D. candidate), Department of Pharmacology and Toxicology, UMMC
2017-2022 (expected)	Committee Member	Ezekiel Gonzalez-Fernandez (MD/Ph.D. candidate), Department of Pharmacology and Toxicology, UMMC
2015-2017	Co-Advisor	Longyang Li (MS candidate), Department of orthopedics, The Affiliated Hospital of Qingdao University, Shandong, China
2016-2018	Co-Advisor	Chao Zhang (Ph.D. candidate), Department of Urology, Zhongshan Hospital, Fudan University, Shanghai, China
2018-2020	Co-Advisor	Ya Guo (Ph.D. candidate), Department of Pediatrics, The Affiliated Hospital of Qingdao University, Shandong, China
2018-2021	Co-Advisor	Wenjun Gao (Ph.D. candidate), Department of Urology, Zhongshan Hospital, Fudan University, Shanghai, China
2018-2020	Co-Advisor	Huawei Zhang (MS candidate), Department of Neurosurgery, The Affiliated Hospital of Qingdao University, Shandong, China
2019-2021	Co-Advisor	Yedan Liu (Ph.D. candidate), Department of Pediatrics, The Affiliated Hospital of Qingdao University, Shandong, China
2017-2020	External Reader	Mengyao Jia (MS candidate), Autonomic Research Laboratory, International Collaboration on Repair Discoveries, University of British Columbia, Vancouver, BC, Canada
2015-2016	Mentor	Wenshan Lv, MD, Ph.D., Department of Endocrinology, The Affiliated Hospital of Qingdao University, Shandong, China
2015-2016	Mentor	Jerrell Sims, (MD candidate), Department of Pharmacology and Toxicology, UMMC
2015-2016	Mentor	Mettew Elliott, (MD candidate), Department of Pharmacology and Toxicology, UMMC
2016	Mentor	Olivia K. Travis, SURE summer student, Department of Pharmacology and Toxicology, UMMC
2016-2018	Mentor	Shashank Shekhar, MD, MS, clinical fellow, Department of Neurology, UMMC
2017	Mentor	Nga Do, SURE summer student, Department of Pharmacology and Toxicology, UMMC
2017	Mentor	Owen T. Herrock, SURE summer student, Department of Pharmacology and Toxicology, UMMC
2017	Mentor	Brittney Snell, R25 summer student, Department of Pharmacology and Toxicology, UMMC
2017	Mentor	Olivia K. Travis, R25 summer student, Department of Pharmacology and Toxicology, UMMC
2017	Mentor	Olivia K. Travis, Rotating graduate student, Department of Pharmacology and Toxicology, UMMC
2017	Mentor	Shaoxun Wang, Rotating graduate student, Department of Pharmacology and Toxicology, UMMC
2017	Mentor	Kenji J. Maeda, Rotating graduate student, Department of Pharmacology and Toxicology, UMMC
2018	Mentor	Feng Jiao, MD, Ph.D., Department of Neurosurgery, Peking University People's Hospital, Beijing, China
2018	Mentor	Letao Fan, Rotating graduate student, Department of Pharmacology and Toxicology, UMMC

2018	Mentor	Bibek Poudel, Rotating graduate student, Department of Pharmacology and Toxicology, UMMC
2018	Mentor	Sarah J. Fitzgerald, Rotating graduate student, Department of Pharmacology and Toxicology, UMMC
2018	Mentor	Sumit P. Sontakke, Rotating graduate student, Department of Pharmacology and Toxicology, UMMC
2018	Mentor	Ezekiel Gonzalez-Fernandez, Rotating MD, Ph.D. student, UMMC
2020	Mentor	Xi Wang, Rotating M.S. student, UMMC
2020	Mentor	Xi Wang, Rotating graduate student, Department of Pharmacology and Toxicology, UMMC
2020	Mentor	Aubrey Daniel, Rotating graduate student, Department of Pharmacology and Toxicology, UMMC
2021	Mentor	Austin H. Urvina, (MD candidate), MSRP, UMMC
2021	Mentor	Kirby N. Thomas, (MD candidate), MSRP, UMMC
2021	Mentor	Reece F. Crumpler, (MD candidate), MSRP, UMMC

HONORS

04/2015	APSselected – selected by the American Journal of Physiology-Regulatory, Integrative and Comparative Physiology.
09/2015	New Investigator Travel Award – selected by the American Heart Association Council of Hypertension 2015 Scientific Sessions.
03/2016	NIH/NIEHS Travel Award – selected by the 16 th International Winter Eicosanoid Conference.
11/2016	PLOS Early Career Travel Award – selected by PLOS.
08/2017	Excellence in Research Awards (Bronze level). University of Mississippi Medical Center.
12/2017	NIH Center for Scientific Review Early Career Reviewer - selected by the National Institutes of Health.
02/2018	NIH/NIEHS Travel Award – selected by the 17 th International Winter Eicosanoid Conference.
02/2018	Keynote Speaker at the 10th International Vascular Dementia Conference, Paris, France.
03/2018	Elsevier Reviewer Recognition - selected by the editors of Prostaglandins and Other Lipid Mediators for outstanding contribution in reviewing.
08/2018	Excellence in Research Awards (Silver level). University of Mississippi Medical Center.
12/2018	Keynote Speaker at the First Neurosurgery International Summit Forum of the Peking University People's Hospital, Beijing, China.
03/2019	Elected Fellow of the American Heart Association (FAHA) conferred by the Council on Hypertension (HTN).
09/2019	Kidney Council New Investigator Travel Award – selected by the American Heart Association Hypertension 2019 Scientific Sessions.
09/2019	Excellence in Research Awards (Gold level). University of Mississippi Medical Center.
11/2019	Inventor, UMMC First Intellectual Property Recognition Ceremony.
08/2021	2021 John F. Perkins, Jr. Research Career Enhancement Award (RCEA). American Physiological Society.

FROM TRAINEES

09/2016	Recipient: Chao Zhang (Ph.D. co-training candidate) Scholarship (201606100208) from China Scholarship Council for “Role of 20-HETE on acute kidney injury and kidney transplantation”.
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- 08/2017 Recipient: Olivia K. Travis (summer research intern)
NIH grant R25 HL 121042
- 08/2017 Recipient: Brittneys Snell (summer research intern)
NIH grant R25 HL 121042
- 11/2017 Recipient: Shaoxun Wang (1st year lab rotation graduate student)
Kidney Star to Kidney Week 2017 at ASN Annual Meeting, New Orleans, LA.
- 11/2017 Recipient: Xiaochen He (postdoctoral fellow)
Kidney Star to Kidney Week 2017 at ASN Annual Meeting, New Orleans, LA.
- 11/2017 Recipient: Chao Zhang (Ph.D. co-training candidate)
Kidney Star to Kidney Week 2017 at ASN Annual Meeting, New Orleans, LA.
- 01/2018 Recipient: Olivia K. Travis (1st year lab rotation graduate student)
APS Minority Travel Fellowship Award to Experimental Biology 2018, San Diego, CA.
- 09/2018 Recipient: Chao Zhang (Ph.D. co-training candidate)
New Investigator Travel Award to Council on Kidney Cardiovascular Disease to Joint Hypertension 2018 Scientific Sessions, Chicago, IL.
- 10/2018 Recipient: Shaoxun Wang (2nd year lab rotation graduate student)
Honorable award of BioTek's first Imaging Perspectives competition. BioTek, Winooski, VT.
- 01/2020 Recipient: Shaoxun Wang (Ph.D. candidate)
Predoctoral fellowship (AHA/20PRE35210043): Oral antihyperglycemic therapy with an SGLT2 inhibitor reverses cognitive impairments in elderly diabetics
- 01/2020 Recipient: Ezekiel Gonzalez-fernandez (MD/Ph.D. candidate)
Predoctoral fellowship (AHA/20PRE35210392): The role of 20-HETE in the pathogenesis of dementia
- 03/2020 Recipient: Shaoxun Wang (Ph.D. candidate)
NIH/NIEHS Travel Award – selected by the 18th International Winter Eicosanoid Conference.
- 03/2020 Recipient: Huawei Zhang (MS co-training candidate)
NIH/NIEHS Travel Award – selected by the 18th International Winter Eicosanoid Conference.
- 05/2020 Recipient: Ezekiel Gonzalez-fernandez (MD/Ph.D. candidate)
Predoctoral fellowship (NIH/F30AG066245-01): The role of 20-HETE in the pathogenesis of dementia
- 09/2020 Recipient: Xing Fang (Ph.D. candidate)
HTN New Investigator Travel Awards at Hypertension 2020 Scientific Sessions.
- 04/2021 Recipient: Shaoxun Wang (Ph.D.)
Excellence in Pharmacology Research Award 2021. UMMC.
- 04/2021 Recipient: Shaoxun Wang (Ph.D.)
The Regions Outstanding Graduate Research Award 2021. UMMC.

INVITED TALKS AND ORAL PRESENTATIONS

- 09/2013 CYP4A1 transgenic rat generated using Sleeping Beauty transposon system restores the impaired myogenic response in the afferent arteriole of Dahl S rats. AHA High Blood Pressure Council, New Orleans, LA, USA.
- 10/2014 CYP4A, 20-HETE, autoregulation of cerebral blood flow and vascular cognitive impairment. Department of Pharmacology & Toxicology, University of Mississippi Medical Center, Jackson, MS, USA.

- 01/2015 Impaired myogenic response of cerebral arteries, autoregulation of CBF and vascular cognitive impairments. Grant round, Center for Psychiatric Neuroscience Research, University of Mississippi Medical Center, Jackson, MS, USA.
- 04/2015 Role of Impaired Myogenic Response and Autoregulation of Cerebral Blood Flow in Vascular Cognitive Impairment. Postdoc and instructor association, University of Mississippi Medical Center, Jackson, MS, USA.
- 06/2015 Role of Add3 in the development of chronic renal disease. Department of Internal Medicine, Rush University, Chicago, IL, USA.
- 09/2015 Knockdown of Gamma-adducin Expression Impairs the Myogenic Response of the Cerebral and Renal Arterioles. AHA Council on Hypertension 2015 Washington, DC, USA.
- 09/2015 A K572Q Mutation in Gamma-adducin Is Responsible for the Impaired Myogenic Response and Autoregulation of Renal and Cerebral Blood Flow in FHH Rats. AHA Council on Hypertension 2015 Washington, DC, USA.
- 10/2015 Role of Gamma-Adducin in Cerebral Vascular Disease. Department of Pharmacology & Toxicology, University of Mississippi Medical Center, Jackson, MS, USA.
- 01/2016 Functional variants of CYP4A11 and CYP4F2 are associated with cognitive impairments in elderly hypertensive patients. Work-in-Progress, Cardiovascular-Renal Research Center, University of Mississippi Medical Center, Jackson, MS, USA.
- 03/2016 Functional Variants in CYP4A11 and CYP4F2 are Associated with Cognitive Impairment and Related Dementia Endophenotypes in the Elderly. The 16th International Winter Eicosanoid Conference, Baltimore, MD, USA.
- 04/2016 Impaired myogenic response of MCA elevates transmission of pressure to penetrating arterioles and contributes to cerebral vascular disease in aging hypertensive FHH rats. 2016 Experimental Biology (**feature topics**), San Diego, CA, USA.
- 05/2016 Role of 20-HETE on aging and hypertension related cerebral vascular disease. Centers of Biomedical Research Excellence (COBRE) in the Obesity, Cardiorenal, Metabolic Diseases Center (OCMDC), University of Mississippi Medical Center, Jackson, MS, USA.
- 12/2016 Cerebral autoregulation and dementia - from ARIC-NCS to animal studies. Organ Transplant/Ischemia-Reperfusion Research Group Meeting, University of Mississippi Medical Center, Jackson, MS, USA.
- 02/2017 Autoregulation of cerebral blood flow and age-, diabetes-related Alzheimer-like cerebral vascular disease. 6th International Conference on Vascular Dementia, Amsterdam, Netherlands.
- 04/2017 Knockout of matrix metalloproteinase-9 rescues the development of cognitive impairments in hypertensive Dahl salt sensitive rats. 2017 Experimental Biology (**feature topics**), Chicago, IL, USA.
- 06/2017 From human population study to animal models: role of cerebral autoregulation on dementia. International Collaboration on Repair Discoveries, University of British Columbia, Vancouver, BC, Canada.
- 07/2017 From human population study to animal models: role of cerebral autoregulation on dementia. Neurology and Neurosurgery Grant Round, University of Mississippi Medical Center, Jackson, MS, USA.
- 08/2017 Diabetes, cerebral vascular disease, and cognitive impairments. Centers of Biomedical Research Excellence (COBRE) in the Obesity, Cardiorenal, Metabolic Diseases Center (OCMDC), University of Mississippi Medical Center, Jackson, MS, USA.
- 09/2017 Gamma-Adducin effects on microvascular function-a common link of hypertension induced chronic kidney disease and cognitive impairments. AHA Council on Hypertension 2017, San Francisco, CA, USA.

- 09/2017 Genetic complementation establishes that a K572Q mutation in gamma-Adducin plays a causal role in renal microvascular dysfunction in FHH and MNS rats. AHA Council on Hypertension 2017, San Francisco, CA, USA.
- 09/2017 Diabetes, cerebral vascular disease, and cognitive impairments. Pharmacology & Toxicology, University of Mississippi Medical Center, Jackson, MS, USA.
- 10/2017 Diabetes, cerebral vascular disease, and cognitive impairments. Beijing Geriatric Hospital. Beijing, China.
- 10/2017 Role of Cerebral Autoregulation on Neurodegenerative Disease. Department of Neurosurgery, People's Hospital, School of Medicine, Peking University. Beijing, China.
- 10/2017 Introduction of the Department of Medical Pharmacology at UMMC. Department of Neurosurgery, People's Hospital, School of Medicine, Peking University. Beijing, China.
- 10/2017 Role of Cerebral Autoregulation on Neurodegenerative Disease. Microcirculation center, School of Medicine, Peking University. Beijing, China.
- 10/2017 Introduction of the Department of Medical Pharmacology at UMMC. Microcirculation center, School of Medicine, Peking University. Beijing, China.
- 10/2017 Role of Cerebral Autoregulation on Neurodegenerative Disease. School of Medicine, Qingdao University. Qingdao, China.
- 10/2017 Introduction of Department of Medical Pharmacology at UMMC. School of Medicine, Qingdao University. Qingdao, China.
- 10/2017 Role of Add3 on Microvascular Function-A Common Link of Hypertension Induced CKD and Cognitive Impairments. Department of Nephrology, General Hospital, JiaoTong University. Shanghai, China.
- 10/2017 Role of Add3 on Microvascular Function-A Common Link of Hypertension Induced CKD and Cognitive Impairments. Division of Kidney Transplant, Department of Nephrology, ZhongShan Hospital, Fudan University. Shanghai, China.
- 10/2017 Introduction of the Department of Medical Pharmacology at UMMC. Division of Kidney Transplant, Department of Nephrology, ZhongShan Hospital, Fudan University. Shanghai, China.
- 12/2017 Role of Diabetes on Cerebral Autoregulation in Neurodegenerative Disease. Organ Transplant/Ischemia-Reperfusion Research Group Meeting, University of Mississippi Medical Center, Jackson, MS, USA.
- 02/2018 Disruption of Actin Cytoskeleton Contributes to Cerebral Vascular Dysfunction on Alzheimer-Like Cognitive Deficits in Diabetic T2DN rats. 10th International Conference on Vascular Dementia, Paris, France.
- 08/2018 Method and Composition for Reversing Cognitive Impairments Using SGLT2 Inhibitors. Intellectual Property Conference, University of Mississippi Medical Center, Jackson, MS, USA.
- 09/2018 Disruption of Actin Cytoskeleton Contributes to Impairment of Cerebral Autoregulation in Association with Diabetes-related Cognitive Deficits. 11th World Congress for Microcirculation, Vancouver, BC, Canada.
- 10/2018 Role of mural cells in impaired cerebral autoregulation and dementia in diabetes. Pharmacology & Toxicology, University of Mississippi Medical Center, Jackson, MS, USA.
- 10/2018 Role of hyperglycemia and oxidative stress in impaired cerebral autoregulation and dementia in diabetes. Centers of Biomedical Research Excellence (COBRE) in the Obesity, Cardiorenal, Metabolic Diseases Center (OCMDC), University of Mississippi Medical Center, Jackson, MS, USA.

- 12/2018 Mechanisms of 20-HETE in the onset, development, and prognosis of stroke. First Neurosurgery International Summit Forum of the Peking University People's Hospital, Beijing, China.
- 12/2018 Introduction of the Department of Medical Pharmacology at UMMC. Physiology and Pathophysiology, Capital Medical University School of Basic Medical Science, Beijing, China.
- 12/2018 Role of mural cells in impaired cerebral autoregulation and dementia in diabetes. Physiology and Pathophysiology, Capital Medical University School of Basic Medical Science, Beijing, China.
- 03/2019 A potential novel mechanism of pericyte in the regulation of cerebral blood flow autoregulation. Work-in-Progress, Cardiovascular-Renal Research Center, University of Mississippi Medical Center, Jackson, MS, USA.
- 07/2019 Role of 20-HETE in Stroke and Dementia. BIT's 17th Annual Congress of International Drug Discovery Science and Technology. Kyoto, Japan.
- 09/2019 Oral Antihyperglycemic Therapy with an SGLT2 Inhibitor Reverses Cognitive Impairments in Elderly Diabetics, Hypertension Scientific Sessions, New Orleans, LA, USA.
- 09/2019 Down-Regulation of Gamma-Adducin Diminishes Glomerular Function and Promotes Hypertension Related Chronic Kidney Disease, Hypertension Scientific Sessions, New Orleans, LA, USA.
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ABSTRACTS

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