#### **CURRICULUM VITAE**

Jiliang Zhou, M.D.; Ph.D.

Professor

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#### PERSONAL INFORMATION

Nickname: Leo

Date of Birth/place: October 19, 1973; Gao-An, Jiangxi Province, China

Sex: Male

Marital Status: married; two children

Citizenship: United States

Mobile Phone Number: 518-526-8850 Personal email: jiliangzhou@hotmail.com

#### PROFESSIONAL APPOINTMENTS

Professor, Department of Pharmacology & Toxicology, Medical 07/2018 - present College of Georgia, Augusta University, Augusta, GA 11/2012 - 06/2018 Associate Professor (tenured in 2015), Department of Pharmacology & Toxicology, Medical College of Georgia, Augusta University

(formerly Georgia Regents University), Augusta, GA 09/2008 - 10/2012 Assistant Professor (tenure track), Center for Cardiovascular

Sciences, Albany Medical College, Albany, NY

01/2008 - 08/2008 Research Assistant Professor, Department of Cellular & Integrative Physiology, Indiana University School of Medicine, Indianapolis, IN

Research Associate, Department of Cellular & Integrative Physiology. 01/2006 - 12/2007

Indiana University School of Medicine, Indianapolis, IN

#### **EDUCATION AND TRAINING**

01/2003 - 12/2005 Post-doc, Department of Cellular & Integrative Physiology, Indiana

University School of Medicine, Indianapolis, IN

09/1999 - 07/2002 Ph.D., Public Health, Zhejiang University School of Medicine,

Hangzhou, China

09/1996 - 07/1999 M.S., Cellular Biology, Zhejiang University School of Medicine,

Hangzhou, China

09/1991 - 07/1996 M.D., Clinical Medicine, Jiangxi Medical College, Nanchang, China

# **HONORS AND AWARDS**

2022	AHA, Vascular Wall Biology Basic 1 study section, co-chair and grant reviewer
2022	Invited speaker at the 22nd International Vascular Biology Meeting. October 13-17, Oakland Marriott City Center, Oakland, CA, USA
2022	Distinguished faculty award at the Medical College of Georgia, Augusta University. May 26, 2022. Augusta, GA
2022	Session chair and invited session speaker (Molecular, Developmental and Cellular Biology of the Vessel Wall) at Vascular Discovery meeting, 2022. May 11-14, 2022. Seattle, WA
2020	Invited Speaker at the 31st Great Wall International Congress of Cardiology (GW-ICC). 2020. Virtual Conference. Beijing, China.
2020-2022	K99/R00 Pathway to Independence Award, NIH (Role: sponsor/mentor)
2019	Invited Speaker at the Scientific Session, American Heart Association (AHA). 2019, Philadelphia, PA
2019	Invited Speaker at the ISHR World Congress. International Society for Heart Research. 2019, Beijing, China.
2019 - 2022	Transformational Project Award, AHA
2018 - 2023	Postdoctoral Fellowship, AHA (Role: sponsor/mentor)
2017	Invited speaker at the Scientific Session, AHA. 2017, Anaheim, CA
2017	Established Investigator Award, AHA
2012	Wiggers Faculty Award, Albany Medical College, NY
2009	Council on ATVB Travel Award for Young Investigators, AHA, Scientific Sessions. 2009, Orlando, FL
2008 - 2011	Scientist Development Grant Award, AHA
2005 - 2006	Postdoctoral Research Award, AHA
1999	Prize for Excellent Student, Zhejiang University, Hangzhou, China
1995	Lei's Medical Educational Scholarship, Jiangxi Medical College, Nanchang, China
1994 - 1995	Outstanding Student Fellowship, Jiangxi Medical College, Nanchang, China

# **PROFESSIONAL AFFILIATIONS**

American Heart Association (AHA), Council on Basic Cardiovascular Sciences Sigma Xi

The American Society for Biochemistry and Molecular Biology (ASBMB) North American Vascular Biology Organization (NAVBO)

# **RESEARCH INTERESTS**

Epigenetic and transcriptional regulation of smooth muscle differentiation and dedifferentiation; cardiovascular development; Hippo-YAP-TEAD pathway; non-coding RNAs including microRNAs, long non-coding RNAs and circular RNAs; Novel gene/transcript discovery; Inflammation

#### SCHOLARSHIP/RESEARCH FUNDING

## **Ongoing Research Support**

1. NIH, R01; 11/23/2021 - 12/01/2025. HL157568. Total Cost: \$2,479,768

Title: PIK3C3, a master regulator for smooth muscle identity

Principal Investigator: Zhou, Jiliang

The goal of this project is to determine the critical role of PIK3C3 in smooth muscle homeostasis through a YAP1-dependent mechanism.

2. NIH, R01; 01/20/2020 - 12/31/2023. HL149995. Total Cost: \$1,801,792

Title: The novel smooth muscle-specific IncRNA CARMN is a critical regulator of smooth muscle phenotype

Principal Investigator: Zhou, Jiliang

The funded project is to characterize and explore the underlying mechanism of the novel lncRNA CARMN in smooth muscle cells.

3. NIH, R01; 07/01/2017 - 06/30/2023. DK114328. Total Cost: \$1,710,000

Title: Mechanisms underlying the susceptibility and severity of acute kidney injury Principal Investigator: Jian-Kang Chen

The goal of this project is to define a pathogenic role and molecular mechanisms of compensatory nephron hypertrophy in determining the susceptibility and severity of acute kidney injury and in mediating accelerated development of interstitial fibrosis.

Role: Co-Investigator, 5% effort

4. NIH, R01; 01/01/2021 - 12/31/2024. DK126763. Total Cost: \$1,524,600

Title: The regulation and function of long noncoding RNA in ischemic AKI: Role of GSTM3P1

Principal Investigator: Qingqing Wei

To investigate the pathogenic function and regulation of long non-coding RNA (IncRNA) with GSTM3P1 as an example to study the related pathways in renal tubular cell death and to identify new strategies for AKI therapy.

Role: Co-Investigator, 3% effort

5. NIH, R01; 08/20/2021 - 05/31/2025. HL156646. Total Cost: \$2,741,200

Title: PBK: A novel mediator of VSMC proliferation and vascular remodeling in PAH Principal Investigators: Scott Barman & David Fulton

The long-term goal of this project is to define the key mechanisms by which PBK regulates PASMC proliferation to orchestrate changes in arterial remodeling, a hallmark of PAH.

Role: Co-Investigator, 10% effort

**6.** NIH, R01; 02/01/2022 - 01/30/2026. HL125926. Total Cost: \$3,503,500

Title: Galectin-3: a mediator of vascular remodeling in pulmonary arterial hypertension Principal Investigators: Scott Barman & David Fulton

The objectives of the proposed studies are to 1) determine the cell specific role of Gal-3 in mediating vascular remodeling and PAH; 2) investigate the role of DNA methylation and DNMT3A in regulating Gal-3 expression and synergy with HIF2 $\alpha$ , and 3) determine whether Gal-3 regulation of NEAT1 in PASMC contributes to PAH.

Role: Co-Investigator, 10% effort

**7. AHA, Postdoctoral Fellowship. 836341; 04/01/2021 - 03/31/2023.** Total Cost: \$134,236

Title: Role of the novel high mobility group protein HMGXB4 in vascular smooth muscle cell phenotypic switching

Principal Investigator: He, Xianggin

Sponsor: Zhou, Jiliang

## **Proposals Submitted**

**1. NIH, R01;** R01HL169568; Submitted in Oct. 2022. Scored at 18<sup>th</sup> percentile. Planning to re-submit by July 5<sup>th</sup>, 2023.

Title: Smooth muscle-specific enhancer, TEAD transcription factors and smooth muscle phenotype

Principal Investigator: Zhou, Jiliang

2. NIH, R01; R01HL111698; Submitted in 2019

Title: TEAD1, a novel regulator of smooth muscle phenotypic plasticity

Principal Investigator: Zhou, Jiliang

**3. NIH, R35;** HL140042. Reviewed in July 2017; Scored at 52%; Total Direct Cost: \$4,200,000; Total Cost: \$6,384,000. Plan to resubmit in Feb. 2023.

Title: Modulation of smooth muscle phenotype by Hippo/YAP/TEAD1 pathway and IncRNA

Principal Investigator: Zhou, Jiliang

**4. NIH, R01**; R01HL111716; Scored at 36% (AICS, NHLBI); Will be submitted once the conditional HMG2L1 mouse is ready

Title: Integrative role of HMG2L1 in smooth muscle phenotypic modulation

Principal Investigator: Zhou, Jiliang

**5. AHA**, **Grant-in-aid**; GRNT7950027; Scored at 25.66% (Founders Affiliate)

Title: An emerging role of HMG2L1 in the cardiovascular system

Principal Investigator: Zhou, Jiliang

# **Completed**

1. AHA, Transformational Project Award. 19TPA34910181; 07/01/2019 - 06/30/2022. Scored at 0.22 percentile. Total Cost: \$300,000

Title: Identification, regulation, and function of the smooth muscle-specific long non-coding RNA

Principal Investigator: Zhou, Jiliang

The grant is funded to study novel roles of smooth muscle-specific IncRNAs in smooth muscle differentiation and de-differentiation.

## 2. NIH, K99/R00; 08/05/2020 - 04/30/2022. K99HL153896. Total Cost: \$245,808

Title: YAP1, neointima formation and blood pressure regulation

Principal Investigator: Osman, Islam

Sponsor: Zhou, Jiliang

## 3. AHA, Established Investigator Award; 01/01/2017 - 12/31/2021. 17EIA33460468.

Total cost for 5 years: \$400,000

Title: Novel role of the IncRNA NEAT1 in smooth muscle phenotypic modulation

Principal Investigator: Zhou, Jiliang

The grant is funded to study the novel role of the IncRNA NEAT1 in atherosclerosis.

## 4. NIH, R01; HL132164. 04/01/2016 - 02/28/2021. Total Cost: \$1,520,000

Title: Novel role of the IncRNA NEAT1 in smooth muscle phenotypic modulation

Principal Investigator: Zhou, Jiliang

The goal of this project is to study a novel role of the IncRNA NEAT1 in phenotypic modulation of vascular smooth muscle cells in response to arterial injury.

# **5.** AHA, Postdoctoral Fellowship. 19POST34450071; 01/01/2019 - 12/31/2020. Scored at 0.17 percentile. Total Cost: \$112,456

Title: CARMN, a novel smooth muscle-specific lncRNA, is a critical regulator of smooth muscle phenotype

Principal Investigator: Dong, Kunzhe

Sponsor: Zhou, Jiliang

# **6.** AHA, Postdoctoral Fellowship. 18POST34030400; 07/01/2018 - 06/30/2020. Total Cost: \$106,532

Title: Novel role of Tea domain transcription factor 1 in vascular smooth muscle cell proliferation and neointima formation

Principal Investigator: Osman, Islam

Sponsor: Zhou, Jiliang

The goal of this funded project is to interrogate the Hippo signaling effector TEAD1 in neointimal formation in vivo and its underlying mechanism for smooth muscle cell proliferation.

#### 7. NIH, R01; HL109605. 01/01/2012 - 12/31/2017. Total Cost: \$1,844,375.

Title: Role of Hippo-YAP pathway in smooth muscle phenotypic modulation

Principal Investigator: Zhou, Jiliang

The goal of this project is to examine the novel role of Hippo-YAP signaling and its underlying mechanism in regulating smooth muscle development and phenotypic modulation.

## 8. AHA, Postdoctoral Fellowship; 12POST12180000. 07/01/2012 - 09/30/2012.

Relinquished due to the lab relocation.

Title: A novel role of YAP in arterial injury induced smooth muscle phenotypic modulation Principal Investigator: Wang, Xiaobo

Sponsor: Zhou. Jiliana

The focus of the proposed research is to determine the role of YAP in arterial injury induced smooth muscle phenotypic modulation by using mouse femoral artery wire injury model.

# 9. AHA, Scientist Development Grant; 0830274N. 01/01/2008 - 12/31/2011.

Title: Activation of myocardin function by a ubiquitin E3 ligase, UBR5

Principal Investigator: Zhou, Jiliang

The goal of this project is to examine the role of a ubiquitin E3 ligase UBR5 in regulating myocardin activity to control smooth muscle differentiation under physiological and pathological conditions.

10. AHA, Postdoctoral Fellowship; 0520135Z. 01/01/2005 - 12/31/2006.

Title: Regulation of smooth muscle-specific gene expression by myocardin

Principal Investigator: Zhou, Jiliang

The major goal of this project is to determine the mechanisms regulating smooth musclespecific gene expression by myocardin. Experiments are designed to determine why myocardin distinguishably activates telokin, but not c-fos gene expression, even though the promoters of both genes contain a single CArG box that binds SRF.

**PUBLICATIONS** (\*Corresponding author; Representative publications are highlighted in purple)

#### **Published Articles and Reviews**

- He X, Dong K, Shen J, Hu G, Mintz JD, Atawia RT, Zhao J, Chen X, Caldwell RW, Xiang M, Stepp DW, Fulton DJ, **Zhou J.\***. The Long Noncoding RNA Cardiac Mesoderm Enhancer-Associated Noncoding RNA (Carmn) Is a Critical Regulator of Gastrointestinal Smooth Muscle Contractile Function and Motility. <u>Gastroenterology</u>. 2023 Apr 6:S0016-5085(23)00583-8. doi: 10.1053/j.gastro.2023.03.229. Epub ahead of print. PMID: 37030336.
  - Highlighted with an **editorial** "Sometimes Gut Smooth Muscle Forget That They Are Supposed to Contract: CARMN and Visceral Myopathy".
- Zou J, Wang W, Lu Y, Ayala J, Dong K, Zhou H, Wang J, Chen W, Weintraub NL, Zhou J, Li J, Su H. Neddylation is required for perinatal cardiac development through stimulation of metabolic maturation. <u>Cell Rep.</u> 2023 Jan 31;42(1):112018. doi: 10.1016/j.celrep.2023.112018. Epub 2023 Jan 19. PMID: 36662623; PMCID: PMC10029150.
- 3. Xu C, Zhou H, Jin Y, Sahay K, Robicsek A, Liu Y, Dong K, **Zhou J**, Barrett A, Su H, Chen W. Hepatic neddylation deficiency triggers fatal liver injury via inducing NF-κB-inducing kinase in mice. Nat Commun. 2022 Dec 16;13(1):7782. doi: 10.1038/s41467-022-35525-6. PMID: 36526632; PMCID: PMC9758150.
- 4. Lin HP, Singla B, Ahn W, Ghoshal P, Blahove M, Cherian-Shaw M, Chen A, Haller A, Hui DY, Dong K, **Zhou J**, White J, Stranahan AM, Jasztal A, Lucas R, Stansfield BK, Fulton D, Chlopicki S, Csányi G. Receptor-independent fluid-phase macropinocytosis promotes arterial foam cell formation and atherosclerosis. <u>Sci Transl Med.</u> 2022 Sep 21;14(663):eadd2376. doi: 10.1126/scitranslmed.add2376. Epub 2022 Sep 21. PMID: 36130017.
- Wu Y, Li P, Liu L, Goodwin AJ, Halushka PV, Hirose T, Nakagawa S, Zhou J, Liu M, Fan H. IncRNA Neat1 regulates neuronal dysfunction post-sepsis via stabilization of hemoglobin subunit beta. <u>Mol Ther.</u> 2022 Mar 21: S1525-0016(22)00170-8. doi: 10.1016/j.ymthe.2022.03.011. PMID: 35331906.
- 6. Singla B, Lin HP, Ahn W, Xu J, Ma Q, Sghayyer M, Dong K, Cherian-Shaw M, **Zhou J**, Huo Y, White J, Csanyi G. Loss of myeloid cell-specific SIRPa, but not CD47, attenuates inflammation and suppresses atherosclerosis. <u>Cardiovasc Res.</u> 2021 Dec 23: cvab369. doi: 10.1093/cvr/cvab369. PMID: 34940829.

- 7. Dong K, Shen J, He X, Hu G, Wang L, Osman I, Bunting KM, Dixon-Melvin R, Zheng Z, Xin H, Xiang M, Vazdarjanova A, Fulton DJR, **Zhou J.**\*. *CARMN* Is an Evolutionarily Conserved Smooth Muscle Cell-Specific LncRNA That Maintains Contractile Phenotype by Binding Myocardin. <u>Circulation.</u> 2021 Dec 7;144(23):1856-1875. doi: 10.1161/CIRCULATIONAHA.121.055949. PMID: 34694145; PMCID: PMC8726016.
- Osman I., Dong K., Kang X., Yu L., Xu F., Ahmed ASI., He X., Shen J., Hu G., Zhang W., Zhou J.\*. YAP1/TEAD1 upregulate platelet-derived growth factor receptor beta to promote vascular smooth muscle cell proliferation and neointima formation. <u>Journal of Molecular and Cellular Cardiology</u>. 2021 Mar 19;156:20-32. doi: 10.1016/j.yjmcc.2021.03.005. Epub ahead of print. PMID: 33753119.
- He X., Dong K., Shen J., Hu G., Liu J., Kang X., Wang L., Atawia RT, Osman I., Caldwell RW, Xiang M., Zhang W., Zheng Z., Li L., Fulton DJR, Deng K., Xin H.\*, **Zhou J.\***. Deficiency of the novel high mobility group protein HMGXB4 protects against systemic inflammation-induced endotoxemia in mice. <u>Proc Natl Acad Sci U S A</u>. 2021 Feb 16;118(7):e2021862118. doi: 10.1073/pnas.2021862118. PMID: 33563757.
- 10. Liu J., Wen T., Dong K., He X., Zhou H., Shen J., Fu Z., Hu G., Ma W., Li J., Wang W., Wang L., Akerberg BN, Xu J., Osman I., Zheng Z., Wang W., Du Q., Pu WT, Xiang M., Chen W., Su H., Zhang W.\*, **Zhou J.\***. TEAD1 protects against necroptosis in postmitotic cardiomyocytes through regulation of nuclear DNA-encoded mitochondrial genes. <u>Cell Death Differ</u>. 2021 Jan 19. doi: 10.1038/s41418-020-00732-5. Epub ahead of print. PMID: 33469230
- 11. Zheng JP, He X., Liu F., Yin S., Wu S., Yang M., Zhao J., Dai X., Jiang H., Yu L., Yin Q., Ju D., Li C., Lipovich L., Xie Y., Zhang K., Li HJ, **Zhou J.**\*, Li L\*. YY1 directly interacts with myocardin to repress the triad myocardin/SRF/CArG box-mediated smooth muscle gene transcription during smooth muscle phenotypic modulation. <u>Sci Rep</u>. 2020 Dec 11;10(1):21781PMID: 33311559; PMCID: PMC7732823.
- 12. Ruan J., Zhang L., Hu D., Qu X., Yang F., Chen F., He X., Shen J., Dong K., Sweet M., Sanchez C., Li D., Shou W., **Zhou J.**\*, Cai CL\*. Novel *Myh11* Dual Reporter Mouse Model Provides Definitive Labeling and Identification of Smooth Muscle Cells. <u>Arteriosclerosis</u>, Thrombosis, and Vascular Biology. 2020 Epub ahead of print. PMID: 33356387.
- 13. Dong K., He X., Su H., Fulton DJR, **Zhou J.\***. Genomic analysis of circular RNAs in heart. BMC Med Genomics. 2020 Nov 7;13(1):167. PMID: 33160353
- 14. He XQ, Wang N, Zhao JJ, Wang D, Wang CJ, Xie L, Zheng HY, Shi SZ, He J, **Zhou J**, Xin HB, Deng KY. Specific deletion of CDC42 in pancreatic β cells attenuates glucose-induced insulin expression and secretion in mice. <u>Mol Cell Endocrinol</u>. 2020 Dec 1;518:111004. doi: 10.1016/j.mce.2020.111004. Epub 2020 Aug 29. PMID: 32871224.
- 15. Osman I., Wang L., Hu G., Zheng Z., **Zhou J.\***. GFAP (Glial Fibrillary Acidic Protein)-positive progenitor cells contribute to the development of vascular smooth muscle cells and endothelial cells. <u>Arteriosclerosis</u>, <u>Thrombosis</u>, and <u>Vascular Biology</u>. 2020. 40(5):1231-1238.
  - Selected as the **Cover article**.
- 16. Akerberg B.N., Gu F., VanDusen N.J., Zhang X., Dong R., Li K., Zhang B., Zhou B., Sethi I., Ma Q., Wasson L., Wen T., Liu J., Dong K., Conlon FL, **Zhou J.**, Yuan G.C., Zhou P., Pu W.T.. A reference map of murine cardiac transcription factor chromatin occupancy

- identifies dynamic and conserved enhancers. <u>Nat Commun.</u> 2019 Oct 28;10(1):4907. doi: 10.1038/s41467-019-12812-3.
- 17. Wen T., Liu J., He X., Dong K., Hu G., Yu L., Yin Q., Osman I., Peng J., Zheng Z., Xin H., Fulton D., Du Q., Zhang W.\*, **Zhou J.\***. Transcription factor TEAD1 is essential for vascular development by promoting vascular smooth muscle differentiation. Cell Death & <u>Differentiation</u>. 2019. 26(12): 2790-2806.
- 18. Zou J., Ma W., Littlejohn R., Li J., Stansfield B.K., Kim I.M., Liu J., **Zhou J.**, Weintraub N.L., Su H.. Transient inhibition of neddylation at neonatal stage evokes reversible cardiomyopathy and predisposes the heart to isoproterenol-induced heart failure. <u>Am J Physiol Heart Circ Physiol.</u> 2019. 316(6): H1406-H1416.
- 19. Livingston M.J., Wang J., **Zhou J.**, Wu G., Ganley I.G., Hill J.A., Yin X.M., Dong Z.. Clearance of damaged mitochondria via mitophagy is important to the protective effect of ischemic preconditioning in kidneys. <u>Autophagy</u>. 2019. 15(12): 2142-2162. doi: 10.1080/15548627.2019.1615822
- 20. Osman I., He X., Liu J., Dong K., Wen T., Zhang F., Yu L., Hu G., Xin H., Zhang W., **Zhou J.\***. TEAD1 (TEA Domain Transcription Factor 1) promotes smooth muscle cell proliferation through upregulating SLC1A5 (Solute Carrier Family 1 Member 5)-mediated glutamine uptake. Circulation Research. 2019. 124(9): 1309-1322.
  - Selected as an "**Editor's Picks**" and highlighted with an **editorial** "Hippo and Hyperplasia: TEAD Promotes mTORC1 Activation Post-Injury".
- 21. Barman S.A., Li X., Haigh S., Kondrikov D., Mahboubi K., Bordan Z., Stepp D.W., **Zhou J.**, Wang Y., Weintraub D.S., Traber P., Snider W., Jonigk D., Sullivan J.C., Crislip G.R., Butcher J.T., Thompson J., Su Y., Chen F., and Fulton D.J.R.. Galectin-3 is expressed in vascular smooth muscle cells and promotes pulmonary hypertension through changes in proliferation, apoptosis and fibrosis. <u>The American Journal of Physiology Lung Cellular and Molecular Physiology</u>. 2019. 316(5): L784-L797.
- 22. Ahmed A.S.I., Dong K., Liu J., Wen T., Yu L., Xu F., Kang X., Osman I., Hu G., Bunting KM., Crethers D., Gao H., Zhang W., Liu Y., Wen K., Agarwal G., Hirose T., Nakagawa S., Vazdarjanova A., **Zhou J.\***. Long noncoding RNA NEAT1 (nuclear paraspeckle assembly transcript 1) is critical for phenotypic switching of vascular smooth muscle cells. Proceedings of the National Academy of Sciences of the United States of America. 2018, 115(37): E8660-E8667.
- 23. Zou J., Ma W., Li J., Littlejohn, R., Zhou H., Kim I., Fulton D., Chen W., Weintraub N., **Zhou J.**, Su H.. Neddylation mediates ventricular chamber maturation through repression of Hippo signaling. <u>Proceedings of the National Academy of Sciences of the United States of America</u>. 2018, 115(17): E4101-E4110.
- 24. Wen T., Yin Q., Yu L., Hu G., Liu J., Zhang W., Huang L., Su H., Wang M., **Zhou J.**\*. Characterization of mice carrying a conditional TEAD1 allele. <u>Genesis</u>. 2017, 55(12).
- 25. Zhao K., Shen C., Lu Y., Huang Z., Li L., Rand C.D., Pan J., Sun X.D., Tan Z, Wang H., Xing G., Cao Y., Hu G., **Zhou J.**, Xiong W., Mei L.. Muscle Yap is a regulator of neuromuscular junction formation and regeneration. <u>Journal of Neuroscience</u>. 2017, 37(13):3465-3477
- 26. Chen F., Li X., Chen F., Li X., Aquadro E., Haigh S., **Zhou J.**, Stepp D.W., Weintraub N.L., Barman S.A., Fulton D.J.R.. Inhibition of histone deacetylase reduces transcription of NADPH oxidases and ROS production and ameliorates pulmonary arterial hypertension. Free Radical Biology & Medicine. 2016, 99: 167-178.

- 27. Huang Z., Hu J., Pan J., Wang Y., Hu G., **Zhou J.**, Mei L. and Xiong W. YAP stabilizes smad1 and promotes BMP2-induced neocortical astrocytic differentiation. <u>Development</u>. 2016, 143(13): 2398-2409.
- 28. Huang Z., Sun D., Hu J., Tang F., Lee D., Wang Y., Hu G., Zhu X., **Zhou J.**, Mei L. and Xiong W.. Neogenin promotes BMP2-activation of YAP and Smad1 and enhances astrocytic differentiation in developing mouse neocortex. <u>Journal of Neuroscience</u>. 2016, 36(21): 5833-5849.
- 29. Varney S., Betts C., Zheng R., Wu L., Hinz B., **Zhou J.**, and Van De Water L.. Hic-5 is required for myofibroblast differentiation by regulating mechanically dependent, MRTF-A nuclear accumulation. <u>Journal of Cell Science</u>. 2016, 129(4): 774-787.
- 30. Huang Z., Wang Y., Hu G., **Zhou J.**, Mei L. and Xiong W.. YAP is a critical inducer of SOCS3, preventing reactive astrogliosis. <u>Cerebral Cortex</u>. 2016, 26(5): 2299-2310.
- 31. Xu F., Ahmed A., Kang X., Hu G., Liu F., Zhang W., **Zhou J.\***. MicroRNA-15b/16 attenuates vascular neointima formation by promoting the contractile phenotype of vascular smooth muscle through targeting YAP. <u>Arteriosclerosis</u>, <u>Thrombosis</u>, and <u>Vascular Biology</u>. 2015, 35(10): 2145-2152.
- 32. **Zhou J.\***. An emerging role for Hippo-YAP signaling in cardiovascular development. Journal of Biomedical Research. 2014, 28(4): 251-254. **Review article**.
- 33. Wang Y., Hu G., Liu F., Wang X., Wu M., Schwarz J., **Zhou J.\***. Deletion of Yes-Associated Protein (YAP) specifically in cardiac and vascular smooth muscle cells reveals a crucial role for YAP in mouse cardiovascular development. <u>Circulation Research</u>. 2014, 114(6): 957-965.
  - Selected as the Cover Article and an Editor's Picks.
- **34.** Liu F., Wang X., Hu G., Wang Y., and **Zhou J.\***. The transcription factor TEAD1 represses smooth muscle-specific gene expression by abolishing myocardin function. <u>J. Biol. Chem.</u>. 2014, 289(6): 3308-3316.
  - Selected as a "Paper of the Week" with the criteria that ranked in the top 2 percent of manuscripts in a year in significance and overall importance by the editorial board members and associate editors.
- 35. Fang F., Chen D., Yang Y., Tian W., Xu H., Cheng X., Yu L., Dai X., Fang M., **Zhou J.**, Gao Y., Chen Q., Xu Y.. Pro-inflammatory stimuli engage Brahma related gene 1 (Brg1) and Brahma (Brm) in endothelial injury. Circulation Research. 2013, 113(8): 986-996.
- 36. Wang X., Hu G., Gao X., Wang Y., Zhang W., Harmon E.Y., Zhi X., Xu Z., Lennartz M.R., Barroso M., Trebak M., Chen C., and **Zhou J.\***. The induction of Yes-Associated Protein expression after arterial injury is crucial for smooth muscle phenotypic modulation and neointima formation. <u>Arteriosclerosis, Thrombosis, and Vascular Biology</u>. 2012, 32(11): 2662-2669.
- 37. Xu Z., Ji G., Shen J., Wang X., **Zhou J.**, and Li L.. SOX9 and myocardin counteract each other in regulating vascular smooth muscle cell differentiation. <u>Biochem. Biophys. Res.</u> Commun.. 2012, 422:285-90.
- 38. Wang X., Hu G., Courtney B.C., Harmon E.Y., Keller R.S., Van De Water L., and **Zhou J.\***. Transforming Growth Factor-β1-induced Transcript 1 protein, a novel marker for smooth muscle contractile phenotype, is regulated by serum response factor/myocardin protein. <u>J. Biol. Chem.</u>. 2011, 286(48): 41589-41599.
- 39. Zhang W., Halligan K.E., Zhang X., Bisaillon J.M., Gonzalez-Cobos J.C., Motiani R.K., Hu

- G., Vincent P.A., **Zhou J.**, Barroso M., Singer H.A., Matrougui K., Trebak M.. Orai1-mediated ICRAC is essential for neointima formation after vascular injury. <u>Circulation Research</u>. 2011, 109(5): 534-542.
- 40. Zhang M., Chen M., Kim J.R., **Zhou J.**, Jones R.E., Tune J.D., Kassab G.S., Metzger D., Ahlfeld S., Conway S.J., Herring B.P.. SWI/SNF complexes containing Brahma or Brahma related gene 1 play distinct roles in smooth muscle development. <u>Mol. Cell. Biol..</u> 2011, 31(13): 2618-2631.
- 41. Fang F., Yang Y., Yuan Z., Gao Y., **Zhou J.**, Chen Q., Xu Y.. Myocardin-related transcription factor A mediates OxLDL-induced endothelial Injury. <u>Circulation Research</u>. 2011, 108(7): 797-807.
- 42. **Zhou J.\***, Hu G., Wang X.. Repression of smooth muscle differentiation by a novel high-mobility-group box containing protein, HMG2L1. <u>J. Biol. Chem.</u>. 2010, 285(30): 23177-23185.
- 43. Wang X., Hu G., **Zhou J.\***. Repression of versican expression by miR-143. <u>J. Biol. Chem.</u>. 2010, 285(30): 23241-23250.
- 44. Hu G., Wang X., Saunders D., Henderson M., Russell A., Herring B.P., **Zhou J.\***. Modulation of myocardin function by the ubiquitin E3 ligase, UBR5. <u>J. Biol. Chem.</u>. 2010, 285(16): 11800-11809.
- **45. Zhou J.,** Zhang M., Fang H., El-Mounayri O., Rodenberg J., Imbalzano A., and Herring B.P.. The SWI/SNF chromatin remodeling complex is essential for myocardin induced smooth muscle cell differentiation. <u>Arteriosclerosis, Thrombosis, and Vascular Biology</u>. 2009, 29(6): 921-928.
- 46. **Zhou J.\***, Blue K.E., Hu G. and Herring B.P.. Thymine DNA glycosylase represses myocardin-induced smooth muscle cell differentiation by competing with SRF for myocardin binding. J. Biol. Chem.. 2008, 283(51): 35383-35392.
- 47. Herring B.P., **Zhou J.**. mCAT got youR TEF? <u>Circulation Research</u>. 2007, 101(9): 856-858. (Editorial)
- 48. Zhang M., Fang H., **Zhou J.** and Herring B.P.. A novel role of Brg1 in the regulation of SRF/MRTFA-dependent smooth muscle-specific gene expression. <u>J. Biol. Chem.</u>. 2007, 282(35): 25708-25716.
- 49. Herring B.P., El-Mounayri O., Gallagher P.J., Yin F., **Zhou J.**. Regulation of myosin light chain kinase and telokin expression in smooth muscle tissues. <u>Am. J. Physiol: Cell Physiol.</u>, 2006, 291(5): C817-C827. (Invited Review)
- 50. Yin F., Hoggatt A.M., **Zhou J**., and Herring B.P.. The 130kDa smooth muscle myosin light chain kinase is transcribed from a CArG-box dependent promoter within the mouse MYLK Gene. Am. J. Physiol: Cell Physiol.. 2006, 290: 1599-1609.
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- 54. **Zhou J.**, Hoggatt A.M. and Herring B.P.. Activation of the smooth muscle-specific telokin gene by thyrotroph embryonic factor (TEF). <u>J. Biol. Chem.</u>. 2004, 279: 15929-15937.

- 55. **Zhou J.**, Yao G., Zhang J., and Chang Z.. CREB DNA binding activation by a 50-Hz magnetic field in HL60 cells is dependent on extra- and intracellular Ca<sup>2+</sup> but not PKA, PKC, ERK, or p38 MAPK. Biochem Biophys Res Commun.. 2002, 296: 1013-1018.
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- 57. **Zhou J.\***, Zhang Y., Huang M., Chen Y., Chen X., Yao G.. Phylogenetic relationships among *Crotalinae* based on mitochondrial cytochrome *b* gene sequence variations. <u>Acta Zoologica Sinica.</u> 2001, 47(4): 361-366.
- 58. **Zhou J.**, Yao Y., Huang M., Yang D., Lv S., Zhang Y.. Phylogenetic relationships among *Viperidae*, *Crotalinae* based on mitochondrial 12S rRNA sequence variations. <u>Acta Genetica Sinica</u>. 2000, 27(4): 283-289.

## **Abstract**

- 1. Dong K., He X., Hu G., Joseph Miano, **Zhou J.**. Smooth muscle cell-specific IncRNA CARMN is regulated by SRF/MYOCD complex. Vascular Discovery: From Genes to Medicine Scientific Sessions, 2022. May 11-14, 2022. Seattle, WA. The presenter Dr. Dong won a travel award to the meeting.
- 2. He X., Dong K., Hu G., Zhao J., Joseph Miano, **Zhou J.**. The smooth muscle cell-specific lncRNA CARMN plays a potential role in aortic aneurysm. Vascular Discovery: From Genes to Medicine Scientific Sessions, 2022. May 11-14, 2022. Seattle, WA. The presenter Dr. He won a travel award to the meeting.
- 3. He X., Dong K., Hu G., Shen J., Osman I., **Zhou J.**. Critical role of the novel high mobility protein HMGXB4 in vascular smooth muscle cells. Selected as an "Oral Presentation". 2020 AHA Scientific Sessions. December 14-16, 2020.
- 4. Osman I., Yu L., Kang X., Ahmed A., Hu G., Zhang W., Zhou J. Yes-associated Protein 1 (YAP1) upregulates platelet-derived growth factor receptor beta to promote vascular smooth muscle cell proliferation and neointima formation. Vascular Discovery: From Genes to Medicine. Selected as an "Oral Presentation". 2019 AHA Scientific Sessions. May 14-16, 2019. Boston, MA
- Osman I., Wen T., Dong K., He X., Zhang F., Liu J., Hu G., Xin H., Zhang W., Offermanns, S., Zhou J.. Transcription factor TEAD1 is critical for smooth muscle cell proliferation by regulating SLC1A5-mediated glutamine uptake. International MADS Box Conference. July 8. 2018. Lake Placid. NY
- 6. Wen T., Liu J., Dong K., Hu G., Yu L., Osman I., Peng J., Zheng Z., Zhang W., **Zhou J.**. The transcription factor TEAD1 is critical for vascular development in mouse by promoting differentiation of vascular smooth muscle cells. International MADS Box Conference. July 8, 2018. Lake Placid, NY
- 7. Wen T., Liu J., Dong K., Hu G., Yu L., Osman I., Peng J., Zheng Z., Zhang W., **Zhou J.**. The transcription factor TEAD1 is critical for vascular development in mouse by promoting differentiation of vascular smooth muscle cells via regulating Pitx2c and myocardin expression. ATVB. May 10, 2018. San Francisco, CA
- 8. Xu F., Ahmed A., Kang X., Hu G., Liu F., Zhang W., **Zhou J.**. MicroRNA-15b/16 attenuates vascular neointima formation by promoting the contractile phenotype of vascular smooth muscle through targeting YAP. Annual Scientific Sessions 2015. International Academy of Cardiology. July 26, 2015. Vancouver, BC, Canada.
- 9. Wang Y., Hu G., Wang X., Wu M., Schwarz J., **Zhou J.**. Critical role YAP in vascular smooth muscle development. 1<sup>st</sup> International MADS box transcription factor meeting. Rochester, NY. 2013.

- 10. Wang X., Hu G., Zhang W., Zhi X., Trebak M., Chen C., Zhou J. The induction of Yes-Associated Protein (YAP) expression after arterial injury is crucial for smooth muscle phenotypic modulation and neointima formation. American Heart Association, Scientific Sessions. Los Angeles, CA. 2012.
- 11. Wang X., Hu G., Zhang W., Zhi X., Trebak M., Chen C., **Zhou J.**. A novel role of YAP in smooth muscle phenotypic modulation. NAVBO Meeting. Cape Cod, MA. 2011.
- 12. Wang X., Hu G., **Zhou J.**. Repression of versican expression by miR-143. American Heart Association, Scientific Sessions. Chicago, IL. 2010.
- 13. Wang X., Hu G., **Zhou J.**. Hic-5 is a novel marker for smooth muscle contractile phenotype. North East Smooth Muscle Meeting. Albany, NY. 2010.
- 14. Hu G., Wang X., Saunders D., Henderson M., Russell A., Herring B.P., **Zhou J.**. Activation of myocardin function by an ubiquitin E3 ligase, EDD. American Heart Association, Scientific Sessions. Orlando, Florida. 2009.
- 15. Wang X., Hu G., **Zhou J.**. Myocardin Induces MicroRNA-143 Expression to Repress Smooth Muscle Cell Migration. North East Smooth Muscle Meeting. Burlington, VT. 2009.
- 16. **Zhou J.**, Blue EK., Hu G., Herring BP. TDG represses myocardin-induced smooth muscle cell differentiation by competing with SRF for myocardin binding. American Heart Association, Scientific Sessions. New Orleans, Louisiana. 2008.
- 17. Touw K., **Zhou J.** and Herring BP. Transcriptional regulation of GI smooth muscle in normal and diabetic mice. Experimental Biology Meeting. San Diego, CA. 2008.
- 18. Zhang M., Fang H, **Zhou J.** and Herring BP. A novel role of Brg1 in the regulation of SRF/MRTFA-dependent smooth muscle-specific gene expression. Weinstein Meeting. Indianapolis, IN. 2007.
- 19. **Zhou J.**, Fang H., Zhang M., El-Mounayri O., Rodenberg J., Imbalzano A. and Herring BP. The SWI/SNF chromatin remodeling complex is essential for myocardin induced smooth muscle cell differentiation. Weinstein Meeting. Indianapolis, IN. 2007.
- 20. Zhang M., Fang H., **Zhou J.** and Herring BP. A novel role of Brg1 in the regulation of SRF/MRTFA-dependent smooth muscle-specific gene expression. Experimental Biology Meeting. Washington DC. 2007.
- 21. Herring BP, **Zhou J.**, Zhang M., Fang H., and Rodenberg J. Regulation of smooth muscle differentiation by ATP-dependent chromatin remodeling enzymes. ASBMB conference on "Transcription Regulation". San Francisco, CA. 2006.
- 22. **Zhou J.**, Hu G., Herring BP. ELK-1 Inhibits expression of the smooth muscle-specific telokin gene. CSHL conference on "Mechanism of Eukaryotic Transcription". Long Island, NY. 2005.
- 23. Yin F., **Zhou J.**, Zhang M., Hoggatt A. and Herring BP. Transcriptional regulation of the *MYLK* Gene. CSHL conference on "Mechanism of Eukaryotic Transcription". Long Island, NY. 2005.
- 24. **Zhou J.**, Hu G., Yin F. and Herring BP. Myocardin regulation of smooth muscle-specific gene. ASCB conference on "Developmental Control Gene Expression". Washington DC. 2004.
- 25. Herring BP., Touw K., Hoggatt A., Azriel J., **Zhou J.**, El-Mounayri O. Smooth muscle cell-restricted expression of telokin. NAVBO Workshop on Vascular Development. Pacific Grove, CA. 2004.
- 26. **Zhou J.**, Hoggatt A. and Herring BP. Activation of the smooth muscle-specific telokin gene by thyrotroph embryonic factor (TEF). FASEB Summer Research Conference on Smooth Muscle. Snowmass, CO. 2003.

## **INVITED SEMINAR/PRESENTATION**

- 1. "Essential Role of the LncRNA CARMN in regulating Smooth Muscle Phenotype". August 10, 2023. Nationwide Children's Hospital, Ohio State University. Columbus, OH.
- 2. "Molecular Control of Smooth Muscle Differentiation & Homeostasis". Jan. 11, 2023. Department of Pharmacology, Tulane University School of Medicine.
- 3. "The class III phosphatidylinositol 3-kinase PIK3C3 is a master regulator for smooth muscle cell identity". Invited presentation at the session "Revealing Vascular Biology through Omics". 22nd International Vascular Biology Meeting. October 13-17, Oakland Marriott City Center, Oakland, CA.
- 4. "Discovery of the smooth muscle-specific IncRNA CARMN". Invited session presentation (Molecular, Developmental and Cellular Biology of the Vessel Wall) at Vascular Discovery: From Genes to Medicine Scientific Sessions, 2022. May 11-14, 2022. Seattle, WA
- 5. "The dark that matters: long non-coding RNAs in smooth muscle biology". Dec. 1, 2021. Institute of Translational Medicine, Georgia State University. Atlanta, GA.
- 6. "A surprising role of the transcription factor TEAD1 in cardiac homeostasis by regulating cardiomyocyte necroptosis". Oct. 24, 2020. The 31st Great Wall International Congress of Cardiology (GW-ICC). Beijing, China. Virtual conference.
- 7. "Emerging roles of IncRNAs in smooth muscle". February 19-20, 2020. Department of Pathology, Medical University of South Carolina. Charleston, SC.
- 8. "Hippo-YAP signaling, IncRNA and smooth muscle". December 10-11, 2019. Department of Pathology, School of Medicine, University of Alabama at Birmingham. Birmingham, AL.
- 9. "Hippo-YAP-TEAD in smooth muscle cells". AHA Annual Scientific Sessions. November 17, 2019. Philadelphia. PA.
- 10. "Non-coding RNA in smooth muscle biology". June 13, 2019. College of Life Sciences, Nanchang University. Nanchang, China
- 11. "Critical role of Hippo-YAP-TEAD pathway in vascular smooth muscle cells". 2019 ISHR World Congress. International Society for Heart Research. June 3-6, 2019. Beijing, China.
- 12. "Hippo, YAP and TEAD1 in vascular smooth muscle cells". July 16, 2018. National Center for Cardiovascular Research. Fuwai Hospital, Chinese United Medical University. Beijing, China.
- 13. "Role of long non-coding RNA NEAT1 in smooth muscle phenotypic modulation". AHA Annual Scientific Sessions. November 13, 2017. Anaheim, CA.
- 14. "Novel role of long non-coding RNA in smooth muscle phenotypic modulation". August 5, 2016. Georgia State University. Atlanta, GA.
- 15. "Hippo-YAP signaling, long non-coding RNA and smooth muscle phenotypic modulation". June 15, 2016. Children's National Health System. Washington, DC.
- 16. "Hippo-YAP signaling, IncRNA and smooth muscle phenotypic switching". January 7, 2016. Wayne State University School of Medicine. Detroit, MI.
- 17. "MicroRNA-15/16 promotes smooth muscle contractile phenotype and attenuates vascular neointima formation by targeting yes-associated protein YAP". Annual Scientific Sessions. International Academy of Cardiology. July 26, 2015. Vancouver, BC, Canada.
- 18. "Novel role of the IncRNA NEAT1 in smooth muscle cells". July 3, 2015. Institute for Nutritional Sciences, Chinese Academy of Sciences. Shanghai, China.

- 19. "Hippo-YAP pathway, autophagy and smooth muscle phenotype". June 16, 2014. Suzhou University School of Medicine. Suzhou, China.
- 20. "Determinants of smooth muscle phenotype". June 13, 2014. Institute for Nutritional Sciences, Chinese Academy of Sciences. Shanghai, China.
- 21. "Novel role of HMG2L1 in smooth muscle and macrophages". January 22, 2014. Vascular Biology Center, Medical College of Georgia, Georgia Regents University. Augusta, Georgia.
- 22. "Emerging role of Hippo-YAP signaling in smooth muscle phenotypic modulation and development". October 14, 2013. Institute of Molecular Medicine & Genetics, Medical College of Georgia, Georgia Regents University. Augusta, Georgia.
- 23. "Critical role of Hippo-YAP signaling in vascular development and diseases". February 7, 2013. Department of Physiology, Medical College of Georgia, Georgia Regents University. Augusta, Georgia.
- 24. "Essential role of YAP in cardiovascular development and diseases". April 19, 2012. Department of Physiology, University of Tennessee Health Science Center. Memphis, Tennessee.
- 25. "Hippo-YAP signaling: an emerging role in cardiovascular biology". April 10, 2012. Department of Pharmacology and Toxicology, Georgia Health Sciences University. Augusta, Georgia.
- 26. "Hippo-YAP signaling: an emerging role in cardiovascular development and diseases". January 18, 2012. Burnett School of Biomedical Sciences, University of Central Florida. Orlando, Florida.
- 27. "Essential role of YAP in cardiovascular development and diseases". October 26, 2011. Department of Cellular and Integrative Physiology, University of Nebraska Medical Center. Omaha, Nebraska.
- 28. "Hippo-YAP signaling: an emerging role in cardiovascular biology". September 14, 2011. Department of Molecular and Cellular Physiology, Louisiana State University Health Sciences Center-Shreveport. Shreveport, Louisiana.
- 29. "Myocardin, Hippo-YAP pathway and smooth muscle differentiation". November 19, 2010. Herman B Wells Center for Pediatric Research, Indiana University School of Medicine. Indianapolis, Indiana.
- 30. "A novel role of Hippo-YAP pathway in smooth muscle phenotypic modulation". August 26, 2010. Nanchang University School of Medicine. Nanchang, China.
- 31. "Hic-5, a novel marker for smooth muscle contractile phenotype". July 30, 2010. Nanjing Medical University. Nanjing, China.
- 32. "MicroRNA functions in smooth muscle cells". July 26, 2010. Zhejiang University School of Medicine. Hangzhou, China.
- 33. "Activation of myocardin function by an ubiquitin E3 ligase, EDD". November 17, 2009. AHA Scientific Sessions. Orlando, FL.
- 34. "Yin and Yang modulation of myocardin function in smooth muscle differentiation". February 7, 2008. Albany Medical College. Albany, NY.
- 35. "Yin and Yang modulation of myocardin function". January 16, 2008. University of South Alabama. Mobile, AL.

#### **TEACHING**

# **Course Teaching**

1. 2016-current VBIO 8130, Modern Drug Discovery and Development, Ph.D. students, 2 hours total/year, Augusta University COGS 8120, Cardiovascular Physiology and Pharmacology, Ph.D. 2. 2015-current students, 5 hours total/year, Augusta University 3. 2014-current PHRM 5012, Clinical Pharmacology and Therapeutics, M.D. students, 6 hours total/year, Augusta University 4. 2014-current MEDI 5244, Androgen and Estrogen, M.D. students, 2 hours total/year, Augusta University USMLE review, M.D. students, 1 hour total/year, Augusta University 5. 2014-current 6. 2014-current PHRM 5240, Pharmacology Small Group Discussion, M.D. students, 2 hours total/year, Augusta University VBIO 8020, Frontiers in Vascular Biology, M.S. and Ph.D. students, 2 7. 2014-current hours total/year, Augusta University 8. 2013 PHRM 8043, Pharmacology and Therapeutics, M.S. and Ph.D. students, 2 hours total/year, Augusta University 9. 2013 PHRM 5003, Pharmacology and Toxicology Elective Tutorial, M.D. students, 8 hours total/year, Augusta University 10. 2008 - 2012 CS 605, Cellular and Molecular Basis of Disease, M.S. and Ph.D. students of CCS, 4 hours total/year, Albany Medical College 11. 2008 - 2012 CBCR 606, Transcriptional Control in Cancer, Inflammation and Cardiovascular Diseases, M.S. and Ph.D. students of CCS and CRCR, 8 hours total/year, Albany Medical College

# **Mentorship and Advisement**

- 1. Xiaohui Guan, May 2023 present. Postdoc, mentoring Xiaohui's research in the work of role of *Tead1/3* in smooth muscle homeostasis.
- 2. Zhixia Bai, Jan. 2023 present. Visiting scholar, mentoring Zhixia's research in the work of role of Tead1/3 in smooth muscle development.
- 3. Jian Sheng. Nov. 2018 Feb. 2021. Visiting Ph.D. student, mentoring Jian's research in studies of Vps34 in VSMCs.
- 4. Liang Wang, May 2018 July 2020. Visiting Scientist, mentoring Dr. Wang's research in the studies of Vps34 in GI SMCs.
- 5. **Xiangqin He**, Sept. 2017 present, former visiting student and now is a post-doc at the lab, mentoring Xiangqin's research in the studies of HMG2L1 in VSMCs. 1): Published one manuscript in PNAS 2021 as a first author. 2): Funded by a postdoctoral fellowship from the AHA from April 2021 to March 2023. 3): Won the best poster presentation award in the 36<sup>th</sup> Annual Graduate Research Day, Augusta University, 2022. 4): Submitted a K99 application in Feb. 2023. 5): Published a manuscript in Gastroenterology at the first author in 2023. This publication was highlights by an editorial in the same issue.
- 6. Kunzhe Dong, Ph.D., August 2017 present, Postdoctoral Fellow, mentoring Dr. Dong's research in the studies of CARMN in VSMCs. 1): Funded by a postdoctoral fellowship from the AHA from Jan. 2019 to Dec. 2021. 2): Received the 35<sup>th</sup> Annual Graduate Research Day Award for Excellence in Research for 2nd place in the postdoctoral poster

- presentation. **3**): Published a research article in PNAS in 2018 as a co-first author. **4**): One manuscript has been published in BMC Medical Genomics in 2020 and one is published in Circulation in 2022 as the first author. **5**): Received a Career Development Award (2022 2024) from AHA. **6**): Secured a tenure-track assistant professor position at the Center for Immunology of Georgia, Augusta University, starting from Jan. 1<sup>st</sup>, 2023.
- 7. Fanzhi Zhang, M.D., Dec. 2016 Dec. 2017, Visiting Scientist, mentoring Dr. Zhang's research in the studies of VSMC-expressed YAP in atherosclerosis
- 8. Jinhua Liu, M.D., Sept. 2016 Jan. 2019, Visiting Scientist, mentoring Dr. Liu's research in the studies of TEAD1 function in neural crest development and the heart homeostasis in mouse. Published one manuscript as the first author in CDD in 2021.
- 9. Islam Osman, Ph.D., August 2016 April 2022, Postdoctoral Fellow, mentoring Dr. Osman's research in the studies of TEAD1 in restenosis. 1): Funded by a postdoctoral fellowship from the AHA from July 2018 to June 2020; 2): Received a travel award from International MADS Box Conference, 2018. Lake Placid, NY; 3): Received the 35th Annual Graduate Research Day Award for Excellence in Research for 1st place in the postdoctoral oral presentation; 4): Received the 33rd Annual Graduate Research Day Award for Excellence in Research for 1st place in the postdoctoral poster presentation. 5): Abstract was selected as an "Oral Presentation" at "Vascular Discovery: From Genes to Medicine" 2019 Scientific Sessions. May 14-16, 2019. Boston, MA. 6): Published a research article in "Circulation Research" as the first author in 2019. The paper was selected as an "Editor's Pick" and highlighted by an accompanying editorial. 7): Published a brief report in "ATVB" as the first author in 2020. This paper was selected as the "Cover Article". 8): Awarded with a K99/R00 grant from NIH in 2020. 9): Published one manuscript in JMCC in 2021 as the first author. 10): Started his independent research program at University of Toledo as a tenure-track assistant professor starting from April 2022.
- 10. Tong Wen, M.D., April 2016 Feb. 2018, Visiting Scientist, mentoring Dr. Wen's research in the studies of TEAD1 in mouse cardiovascular development. Published 2 first author papers in "Genesis" in 2017 and in "Cell Death and Differentiation" in 2019, respectively. Published one manuscript in CDD as the first author in 2019.
- 11. Yao He, M.D., Jan. March 2016, Visiting Scientist, mentoring Dr. He's research in the studies of NEAT1 in the vascular remodeling
- 12. Qin Yin, M.D./Ph.D., Sept. 2015 July, 2016, Visiting Scientist, mentoring Dr. Yin's research in the studies of YAP function in adult mouse
- 13. Luyi Yu, M.D., June 2015 June 2016, Visiting Scientist, mentoring Dr. Yu's research in the studies of HMG2L1 function in atherosclerosis
- 14. Brittany Crowe, B.S., March 2015 July 2015, Rotation Ph.D. Student, mentoring Ms. Crowe's research in the studies of neogenin function in the mouse cardiovasculature
- 15. Xiuhua Kang, M.D., March 2014 March 2015, Visiting Scientist, mentoring Dr. Kang's research in the studies of Vps34 function in vascular development in mouse
- 16. Fei Xu, M.D./Ph.D., September 2014 March 2015, Visiting Scientist, mentoring Dr. Xu's research in the studies of miR-16 function in the neointima formation after artery injury. Published one 1<sup>st</sup> author paper in the ATVB in 2015.
- 17. Abu Ahmed, Ph.D., Feb. 2014 July 2015, Postdoctoral Fellow, mentoring Dr. Ahmed's research in the studies of IncRNA function in smooth muscle cells. Published a 1<sup>st</sup> author paper in PNAS and a 2<sup>nd</sup> author paper in ATVB

- 18. Nicole Yiew, Ph.D. Student, 2014 2018, Ph.D. thesis committee member
- 19. Islam Osman, Ph.D. Student, 2014 2017, Ph.D. thesis committee member
- 20. Arwa Fairaq, Ph.D. Student, 2014 2018, Ph.D. thesis committee member
- 21. Prasanna Abeyrathna, Ph.D. Student, 2013 2017, Ph.D. thesis committee member
- 22. Fang Liu, Ph.D., 2012 2013, Postdoctoral Fellow, mentoring Dr. Liu's research in the studies of TEAD1 function in smooth muscle cells. Published 1 1<sup>st</sup> author in the JBC in 2014 which was selected as a "Paper of the Week"
- 23. Jovany Martinez, 2012 (June August), Summer Student, mentoring Mr. Martinez's research in the studies of induction of YAP in smooth muscle cells
- 24. Yong Wang, Ph.D., 2011 2014, Postdoctoral Fellow, mentoring Dr. Wang's research in the studies of smooth muscle-specific YAP knock-out mice. Published 1 1<sup>st</sup> author paper in the "Circulation Research" in 2014. This paper was selected as an "Editor's Pick" and the "Cover Article".
- 25. Xiangwei Gao, Ph.D., 2011 (June-September), Visiting Scientist, mentoring Dr. Gao's research in the studies of trans-differentiation of smooth muscle cells to macrophages
- 26. Amy Spinelli, Ph.D. Student, 2011 2012, Ph.D. thesis committee member
- 27. Kimberly Viles, M.S. Student, 2011 2012, M.S. thesis committee member
- 28. Fatima Saddouk, Ph.D. Student, 2011 (January-March), rotation research, mentoring
- 29. Jose Gonzalez, Ph.D. Student, 2010 2012, Ph.D. thesis committee member
- 30. Xiaobo Wang, Ph.D., 2009 2012, Postdoctoral Fellow, mentoring Dr. Wang's research program in microRNA and Hippo-YAP pathway in smooth muscles. 1): Dr. Wang received a postdoctoral fellowship from AHA under my sponsorship. 2): Published 2 papers in the JBC and 1 in the ATVB as the first author. 3): Awarded with a postdoctoral fellowship from AHA in 2012.
- 31. Guoqing Hu, DDS, 2008 present, Research Associate, mentoring Dr. Hu's research program in transcriptional regulation of smooth muscle genes by myocardin. Published one 1<sup>st</sup> author paper in the JBC in 2010.

# **PROFESSIONAL SERVICES**

# **Departmental, College, University or Organization Activities**

- 1. Abstract reviewer, poster professor and session modulator. AHA Scientific Sessions. Chicago, Nov. 2022.
- 2. Promotion & Tenure committee, Dept. of Pharmacology and Toxicology, Augusta University. 2022
- 3. IACUC committee, Augusta University. 2019 present
- 4. Abstract reviewer and poster professor. AHA Scientific Sessions. 2016 present
- 5. Basic Science Advisory Council. Medical College of Georgia, Augusta University. 2017 present
- 6. Scholarship review committee. Dept. of Pharmacology and Toxicology, Augusta University. 2017 present
- 7. Organization committee. Chinese American Academy of Cardiology (CAAC). 2015 present
- 8. Faculty search committee. VBC, Georgia Regents University. 2013 2018
- 9. Intramural Grants Program Review Committee. Georgia Regents University. 2013 2019

- 10. Poster and oral presentation judge of Annual Graduate Student Research Day. Georgia Regents University. 2013 present
- 11. Committee member of 31<sup>st</sup> Annual Graduate Students Research & Reward Day (Judge for poster and oral presentation competition). Albany Medical College. 2010.
- 12. Reviewer for Mock Grants of M.D. Program Students. Albany Medical College. 2009.
- 13. Committee Chair of Departmental State-wide Retreat. Department of Cellular & Integrative Physiology, Indiana University School of Medicine. 2007.

## **Study Sections**

- 1. UK Research and Innovation (UKRI). Medical Research Council (MRC), Molecular and Cellular Medicine. *Ad hoc*, 2022.
- Grant review for NIH VCMB (Vascular Cell and Molecular Biology) Study Section, Ad Hoc, Oct. 2019
- 3. Grant review for British Heart Foundation, Ad Hoc, 2019 present
- AHA, Vascular Wall Biology Basic Science, Study Section 1. Co-chair and/or Peer Reviewer. 2018 - present
- 5. NIH, Center for Scientific Review, Anonymization Project, Peer Reviewer, 2018 present
- 6. Grant review for Research Grants Council (RGC) of Hong Kong, *Ad Hoc*, 2017, 2018, 2019, 2020
- 7. Grant review for NIH VCMB (Vascular Cell and Molecular Biology) Study Section, *Ad Hoc*, June 2016
- 8. Grant review for National Natural Science Foundation of China, Ad Hoc, 2014, 2016
- AHA Vascular Wall Biology Basic Science, Study Section 2, Peer Reviewer, 2013 present
- 10. Grant review for Program Project Grant (National Heart, Lung, and Blood Institute), *Ad Hoc*, 2011, 2012

# **Editorial Services**

- 1. Atherosclerosis
- 2. Arteriosclerosis, Thrombosis, and Vascular Biology
- 3. Autophagy
- 4. BBA
- 5. Biochemical Pharmacology
- 6. BioTechniques
- 7. BMC Genomics
- 8. British Journal of Pharmacology
- 9. Cancer letters
- 10. Cell Death and Differentiation
- 11. Cell Death and Diseases
- 12. Cell Reports
- 13. Circulation
- 14. Circulation Research
- 15. Gastroenterology
- 16. Hypertension
- 17. International Journal of Biological Sciences
- 18. International Journal of Cancer
- 19. iScience
- 20. Journal of Biological Chemistry
- 21. Journal of Biological Sciences
- 22. Journal of Clinical Investigation
- 23. Journal of Clinical Investigation-Insight

- 24. Molecular and Cellular Biochemistry
- 25. Nature Communications
- 26. Nature Medicine
- 27. Nucleic Acids Research
- 28. Oncogene
- 29. Oncotarget
- 30. Pediatric Cardiology
- 31. PLOS ONE
- 32. PLOS Genetics
- 33. Redox Biology
- 34. Science Signaling
- 35. Scientific Reports
- 36. Stem Cells
- 37. Stem Cell Research and Therapy
- 38. Translational Research
- 39. Theranostics

## **Editorial Board**

Vascular Pharmacology

Frontiers in Cardiovascular Medicine

## RELEASE OF RESEARCH NEWS FROM THE LAB

- Long molecule of RNA essential to our GI tract's ability to contract and move food along.
   JagWire. May 9, 2023
  - https://jagwire.augusta.edu/long-molecule-of-rna-essential-to-our-gi-tracts-ability-to-contract-and-move-food-along/
- 2. Novel treatment target for heart disease found in the blood vessel wall. JagWire. Jan. 14, 2022.
  - https://jagwire.augusta.edu/novel-treatment-target-for-heart-disease-found-in-the-blood-vessel-wall/
- Albany Med draws disease study funds. Four researchers get a total of \$6M to explore heart, lung problems. Times Union. May 21, 2012. <a href="http://www.timesunion.com/business/article/Albany-Med-draws-disease-study-funds-3575074.php">http://www.timesunion.com/business/article/Albany-Med-draws-disease-study-funds-3575074.php</a>.
- Close to \$6 Million in Government Grants Fund Heart/Lung & Cancer Research. Albany Medical Center News and Publications. May 21, 2012. <a href="http://www.amc.edu/pr/PressRelease/05.21.12">http://www.amc.edu/pr/PressRelease/05.21.12</a> \$.html
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