

**CURRICULUM VITAE**  
Qing-Hui Chen, MD & Ph.D.

**CURRENT ACADEMIC TITLE**

Associate Professor with Tenure, Department of Kinesiology and Integrative Physiology, Michigan Technological University (MTU).

**CONTACT INFORMATION**

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<http://www.mtu.edu/kip/departement/faculty/chen/>

**EDUCATION**

- 1979-1984: **Bachelor of Medicine**  
Nantong University College of Medicine, Nantong City, China
- 1987-1990: **M.S.**  
“Cardiovascular Pharmacology”  
Medical School of Southeast University, Nanjing City, China
- 1994-1998 **Ph.D.**  
“Biological Regulation Research-Cardiovascular Physiology”  
Dept. of Physiology, Kagawa University Medical School, Kagawa Prefecture, Japan  
Mentor: Hirosh Hosomi, Ph.D. MD.

**POSITION AND EMPLOYMENT**

- 1999-2003 Postdoctoral Fellow, Department of Physiology, University of Texas, Health Science Center at San Antonio (UTHSCSA).  
Mentor: Glenn M. Toney, Ph.D.
- 2004-2006 Postdoctoral Fellow, Department of Physiology, UTHSCSA.  
Mentor: Robert Brenner, Ph.D
- 2006-2010 Assistant Professor/Research Track, Department of Physiology, UTHSCSA.
- 2010-2016 Assistant Professor/Tenure Track, Department of Kinesiology and Integrative Physiology (KIP), Michigan Technological University (MTU).
- 2016, Aug. Associate Professor (Tenured), Department of KIP, MTU
- 2016, Aug. Adjunct Associate Professor, Department of Biological Science, MTU
- 2016, Aug. Adjunct Associate Professor, Department of Biomedical Engineering, MTU

**GRANT SUPPORT**

***Funds available:***

- 1) 09/01/19-08/31/22 1R15HL145655-01A1 NIH;  
“Neural Mechanism of Sympathetic Activation in Heart Failure”  
**PI: Qing-Hui Chen;**  
co-I: Zhiying Shan
- 2) 07/01/16-06/30/20 1R15HL129213-01A1NIH;  
“Prorenin receptor and sympathetic activation in salt-sensitive hypertension”  
**PI: Zhiying Shan (MTU-KIP)**

**co-I: Qing-Hui Chen**

**3)** 06/10/2019-07/31/2020 Songer Research Award for Human Health Research (MTU)  
“Gender Differences in Ethanol Metabolism: Impacts on Sympathetic Activation”  
PI: Jessica Bruning, PhD candidate  
**Supervisor: Qing-Hui Chen**

***Completed research support as PI or Supervisor for students:***

**1)** 11/01/2014-10/31/2018 1R15HL122952-01A NIH;  
“ER STRESS AND REDUCED SK CHANNEL FUNCTION IN PVN IN RATS WITH HIGH SALT INTAKE”  
**PI: Qing-Hui Chen** (1.0 month academic/2.31 summer months each year)

**2)** 07/01/2018-09/30/2019  
Portage Health Foundation Middle-Career Award (MTU)  
“SK CHANNELS IN THE PVN AND SYMPATHETIC ACTIVATION IN HYPERTENSION”  
**PI: Qing-Hui Chen**

**3)** 05/01/2018-08/31/2018  
Summer Undergraduate Research Fellowship (SURF-MTU)  
“Toxicity of Lactic Acid in Neuron Cells Mediates Toward Neurodegenerative Disease”  
PI: Zoe' LaLonde, Under-graduate student  
**Supervisor: Qing-Hui Chen**

**4)** 09/01/2017-04/30/2018  
Undergraduate Research Internship Program (URIP-MTU)  
“Elevated Lactic Acid Levels is Mediated Towards Neurodegenerative Disease”  
PI: Zoe' LaLonde, Under-graduate student  
**Supervisor: Qing-Hui Chen**

**5)** 01/01/2016-12/31/2017  
16PRE27780121 AHA (Predoctoral Fellowship, American Heart Association Midwest Affiliate)  
“Acetate as an Active Metabolite of Ethanol: Neural and Cardiovascular Implications”  
PI: Andrew Chapp, PhD. Candidate  
**Supervisor: Qing-Hui Chen**

**6)** 05/01/2016-08/31/2016  
Portage Health Foundation Graduate Fellowship (MTU)  
PI: Robert Larson, PhD. Candidate  
**Supervisor: Qing-Hui Chen**

**7)** 07/01/2016-06/30/2017  
MTU Research Excellence Fund (REF-IE)-Infrastructure Enhancement Grants  
“BUILDING ULTRASOUND IMAGING CAPABILITIES TOWARD ADVANCING SCIENCES,  
PROMOTING COLLABORATIONS AND ENHANCING EDUCATION”  
PI: Dr. Victor Busov (Director of LSTI),  
**co-I: Qing-Hui Chen**

**8)** 01/01/2010-12/31/2014;  
10SDG2640130 AHA (Scientist Development Grant, National Center)  
Title: “Neural Mechanisms of Sympathetic Activation by High Salt Intake”.  
**PI : Qing-Hui Chen**

**9)** 07/1/12-06/30/13  
Michigan Technological University Research Excellence Fund (REF)  
Title: “Neural Mechanisms of Sympathetic Activation by High Salt Intake”.

**PI : Qing-Hui Chen**

**10)** 07/1/08-06/30/10;

0865107F AHA (Begin-Grant-in-Aid South Central Affiliate)

Title: "Neural Mechanisms of Sympathetic Activation in AngII - Salt Hypertension".

**PI : Qing-Hui Chen**

**11)** 07/1/02-06/30/04;

022502Y AHA (Texas Affiliate Post-Doc Fellowship)

Title: "Ion Channel Modulation by AngII within the Autonomic PVN"

**PI : Qing-Hui Chen**

## **PUBLICATIONS**

### **Published**

1. Bruning J, Chapp A, Kaurala GA, Wang R, Techtmann S, **Chen QH\***. Gut Microbiota and Short Chain Fatty Acids: Influence on the Autonomic Nervous System. *Neurosci Bull.* 2019 Jul 12. doi: 10.1007/s12264-019-00410
2. Sharma D, Jia W, Long F, Pati S, **Chen QH**, Qyang Y, Lee B, Choi CK, Zhao F. Polydopamine and collagen coated micro-grated polydimethylsiloxane for human mesenchymal stem cell culture. *Bioact Mater.* 2019 Dec;4:142-150.
3. Cheng ZJ, Wang R and **Chen QH\***. Autonomic Regulation of Cardiovascular System: Diseases, Treatments, and Novel Approaches. *Editorial for Special Issue on Regulation of Autonomic Nervous System.* Neuroscience Bulletin; Editorial 2019 Feb; 35(1):1-3.
4. Wu JX, Tong L, Hu L, Xia CM, Li M, **Chen QH**, Chen FX, Du DS. Upregulation of Nav1.6 expression in the rostral ventrolateral medulla of stress-induced hypertensive rats. *Hypertension Research* 2018 Dec;41(12):1013-1022
5. Chapp AD, Behnke JE, Driscoll KM, Fan Y, Hoban E, Shan Z, Zhang L, **Chen QH\***. Acetate Mediates Alcohol Excitotoxicity in Dopaminergic-Like PC12 Cells. *ACS Chem Neurosci* 2019 Jan 16;10(1):235-245.
6. Peng T, Qiao M, Liu H, Teotia S, Zhang Z, Zhao Y, Wang B, Zhao D, Shi L, Zhang C, Le B, Rogers K, Gunasekara C, Duan H, Gu Y, Tian L, Nie J, Qi J, Meng F, Huang L, **Chen QH**, Wang Z, Tang J, Tang X, Lan T, Chen X, Wei H, Zhao Q, Tang G. A Resource for Inactivation of microRNAs Using Short Tandem Target Mimic Technology in Model and Crop Plants. *Mol Plant.* 2018 Nov 5;11(11):1400-1417
7. Huber MJ, **Chen QH**, Shan Z. The Orexin System and Hypertension. *Cell Mol Neurobiol.* 2018 Mar;38(2):385-391.
8. Gui L, Guo X, Zhang Z, Xu H, Ji Y, , Wang R, Zhu J, **Chen QH\***. Activation of CaMKII $\delta$ A promotes Ca<sup>2+</sup> leak from the sarcoplasmic reticulum in cardiomyocytes of chronic heart failure rats. *Acta Pharmacol Sin.* 2018 Oct; 39(10):1604-1612.
9. Chapp AD, Schum S, Behnke JE, Shan Z, **Chen QH\***. Measurement of cations, anions, and acetate in serum, urine, cerebrospinal fluid, and tissue by ion chromatography. *Physiological Report* 2018 Apr;6(7):e13666. doi: 10.14814/phy2.13666
10. Fan Y, Jiang E, Hahka T, **Chen QH\***, Yan J\*, Shan Z\*. Orexin A increases sympathetic nerve activity through promoting expression of proinflammatory cytokines in Sprague Dawley rats. *Acta Physiol* 2018 Feb. 222(2):1-15.
11. Jiang E, Chapp AD, Fan Y, Larson RA, Hahka T, Huber MJ, Yan J, **Chen QH**, Shan Z. Expression of proinflammatory cytokines is upregulated in the hypothalamic paraventricular nucleus of Dahl salt-sensitive hypertensive rats. *Frontiers Physiol.* 2018 Feb 22;9:104 (p1-15).
12. Chapp AD, Wang R, Cheng ZJ, Shan Z, **Chen QH\***. Long-term high salt intake involves reduced small conductance Ca<sup>2+</sup>-activated K<sup>+</sup> (SK) current and increased excitability of PVN neurons with projections to the rostral ventrolateral medulla in rats. *Neural Plasticity* 2017 Dec. 06, p1-10.
13. Huber MJ, Fan Y, Jiang E, Zhu F, Larson RA, Yan J, Li N, **Chen QH**, Shan Z. Increased activity of the orexin system in the paraventricular nucleus contributes to salt-sensitive hypertension. *Am J Physiology Heart Circulation Physiology* 2017, 313(6):H1075-H1086.

14. Ji Y, Guo X, Zhang Z, Huang Z, Zhu J, **Chen QH**, Gui L. CaMKII $\delta$  Meditates Phenylephrine Induced Cardiomyocyte Hypertrophy Through Store-Operated Ca $^{2+}$  Entry. *Cardiovascular Pathology* 2017 27:9-17.
15. Chen J, Li Z, Hatcher JT, **Chen QH**, Chen L, Wurster RD, Chan SL, Cheng Z. Deletion of TRPC6 Attenuates NMDA Receptor-Mediated Ca $^{2+}$  Entry and Ca $^{2+}$ -Induced Neurotoxicity Following Cerebral Ischemia and Oxygen-Glucose Deprivation. *Frontiers Neurosci.* 2017; 11:138 (p1-13).
16. Larson RA, Chapp AD, Gui L, Huber MJ, Cheng ZJ, Shan Z, **Chen QH\***. High salt intake augments excitability of PVN neurons in rats: role of the endoplasmic reticulum Ca $^{2+}$  store. *Frontiers Neurosci.* 2017; 11:182 (p1-12)
17. Huber MJ, Basu R, Cecchetti C, Cuadra AE, **Chen QH**, Shan Z. Activation of the (pro) renin receptor in the paraventricular nucleus increases sympathetic outflow in anesthetized rats. *Am J Physiology Heart Circulation Physiology* 2015 309(5):H880-7.
18. Larson RA, Le Gui, Huber MJ, Chapp AD, Zhu J, LaGrange LP, Shan Z, **Chen QH\***. Sympathoexcitation in ANG II-salt hypertension involves reduced SK channel function in the hypothalamic paraventricular nucleus. *Am J Physiology Heart Circulation Physiology* 2015 308(12):H1547-55.
19. Bardgett ME, **Chen QH**, Guo Q, Calderon AS, Andrade MA, Toney GM. Coping with Dehydration: Sympathetic Activation and Regulation of Glutamatergic Transmission in the Hypothalamic PVN. *Am J Physiol Regul Integr Comp Physiol.* 2014;306(11):R804-13
20. Chapp AD, Gui L, Huber MJ, Larson RA, Zhu J, Carter JR and **Chen QH\***. Sympathoexcitation and pressor responses induced by ethanol in the central nucleus of amygdala involves activation of NMDA receptors in rats. *Am J Physiol Heart Circulation Physiology* 2014;307(5):H701-9.
21. Lin M, Hatcher JT, Wurster RD, **Chen QH**, Cheng ZJ. Characteristics of single large-conductance Ca $^{2+}$ -activated K $^{+}$  channels and their regulation of action potentials and excitability in parasympathetic cardiac motoneurons in the nucleus ambiguus. *Am J Physiol Cell Physiol.* 2014 Jan;306(2):C152-66.
22. Gui L, Bao Z, Jia Y, Qin X, Cheng ZX, Zhu J, **Chen QH\***. Ventricular tachyarrhythmias in rats with acute myocardial infarction involves activation of small-conductance Ca $^{2+}$ -activated K $^{+}$ -channels. *Am J Physiol Heart and Circ Physiol.* 2013;304(1):H118-30.
23. Gui L, LaGrange LP, Larson RA, Gu M, Zhu J, **Chen QH\***. Role of small conductance calcium-activated potassium channels expressed in PVN in regulating sympathetic nerve activity and arterial blood pressure in rats *Am J Physiol Regul Integr Comp Physiol.* 2012;303(3):R301-310.
24. Lin M, Hatcher JT, **Chen QH**, Wurster RD, Harden WS, Li L and Cheng ZX: Maternal diabetes increases large conductance Ca $^{2+}$ -activated K $^{+}$  outward currents that alter action potential properties but do not contribute to attenuated excitability of parasympathetic cardiac motoneurons in the nucleus ambiguus of neonatal mice. *Am J Physiol Regul Integr Comp Physiol* 2011; 300:R1070-1078.
25. **Chen QH\***, Andrade MA Calderon AS and Toney GM: Hypertension induced by angiotensin II and a high salt diet involves reduced SK current and increased excitability of RVLM projecting PVN neurons. *J Neurophysiology.* 2010, 104 (5):2329-2337.
26. Lin M, **Chen QH**, Wurster RD, Hatcher JT, Liu YQ, Li LH, Harden WS, and Cheng ZX: Maternal diabetes increases small conductance Ca $^{2+}$ -activated K $^{+}$  (SK) currents that alter action potential properties and excitability of cardiac motoneurons in the nucleus ambiguus. *J Neurophysiol.* 2010; 104(4):2125-2138.
27. Lin M, Hatcher JT, **Chen QH**, Wurster RD, Harden WS and Cheng ZX: Small Conductance Ca $^{2+}$ -Activated K $^{+}$  Channels Regulate Firing Properties and Excitability in Parasympathetic Cardiac Motoneurons in the Nucleus Ambiguus. *Am J Physiol Cell Physiol.* 2010, 299(6):C1285-1298.
28. **Chen QH** and Toney GM: In vivo discharge properties of hypothalamic paraventricular nucleus neurons with axonal projections to the rostral ventrolateral medulla. *J. Neurophysiology* 2010; 103(1):4-15.
29. **Chen QH\*** and Toney GM: Excitability of paraventricular nucleus neurons that project to the rostral ventrolateral medulla is regulated by small-conductance Ca $^{2+}$ -activated K $^{+}$  channels. *J. Physiology*, 2009; 587:4235-4247. (*This work has already resulted in a Journal of Physiology article that was selected for special commentary*) *J. Physiology* 2009; 587:4129-4130.
30. Shi P, Martinez MA, Calderon AS, **Chen QH**, Cunningham JT, and Toney GM: Intra-carotid hyperosmotic stimulation increases Fos staining in forebrain organum vasculosum laminae terminalis

neurones that project to the hypothalamic paraventricular nucleus. J. Physiology 2008; 586(Pt 21):5231-5245.

31. Brenner R\*, **Chen QH\***, Vilaythong A, Toney GM, Noebels JL, Aldrich RW: BK channel beta4 subunit reduces dentate gyrus excitability and protects against temporal lobe seizures. Nature Neurosci. 2005 Dec; 8(12):1752-9. (**\* co-first authors**)  
(This paper has been evaluated by the Faculty of 1000 Biology Evaluation System; Exceptional).  
(<http://f1000biology.com/article/id/1028946/evaluation>).
32. **Chen QH**, Toney GM: Responses to GABA-A receptor blockade in the hypothalamic PVN are attenuated by local AT1 receptor antagonism. Am J Physiol Regul Integr Comp Physiol 2003; 285(5):R1231-R1239.
33. **Chen QH**, Haywood JR, Toney GM: Sympathoexcitation by PVN-injected bicuculline requires activation of excitatory amino acid receptors. Hypertension 2003; 42(4):725-31.
34. Toney GM, **Chen QH**, Cato MJ, Stocker SD: Central osmotic regulation of sympathetic nerve activity. Acta Physiol Scand. 2003; 177(1):43-55. Review.
35. **Chen QH**, Toney GM: Identification and characterization of two functionally distinct groups of spinal cord-projecting paraventricular nucleus neurons with sympathetic-related activity. Neuroscience 2003; 118:797-807.
36. Nishida Y, **Chen QH**, Zhou MS, Horiuchi J: Sinoaortic denervation abolishes pressure resetting for daily physical activity in rabbits. Am J Physiol Regul Integr Comp Physiol. 2002 Mar; 282(3):R649-657.
37. **Chen QH**, Toney GM: AT1-receptor blockade in the hypothalamic PVN reduces central hyperosmolality-induced renal sympathoexcitation. Am J Physiol Regul Integr Comp Physiol. 2001; 281: R1844-R1853.
38. Zhou MS, Kosaka H, Tian RX, Abe Y, **Chen QH**, Yoneyama H, Yamamoto A and Zhang L: L-Arginine improves endothelial function in renal artery of hypertensive Dahl rats. J Hypertens 2001; 19:421-429.
39. Nishida Y, **Chen QH**, Hiruma MT, Terada SI and Horiuchi J: Neuronal nitric oxide strongly suppresses sympathetic outflow in high-salt Dahl rats. J Hypertens 2001; 19:627-634.
40. Zhou MS, Nishida Y, Yoneyama H, **Chen QH**, Kosaka H: Potassium supplementation increases sodium excretion and nitric oxide production in hypertensive Dahl rats. Clin Exper Hypertens 1999; 21(8):1397-1411.
41. Zhou MS, Nishida Y, **Chen QH**, Kosaka H: Endothelium-derived contracting factor in carotid artery of hypertensive Dahl rats. Hypertension 1999; 34:39-43.
42. Nishida Y, Ding J, Zhou MS, **Chen QH**, Murakami H, Wu XZ, Kosaka H: Role of nitric oxide in vascular hyper-responsiveness to norepinephrine in hypertensive Dahl rats. J Hypertens 1998; 16:1611-1618.
43. **Chen QH**, Nishida Y, Zhou MS, Murakami H, Okada Y, Morita H, Hosomi H, Kosaka H: Organ and development related difference in tissue norepinephrine concentrations in Dahl rats. J Auton Nerv Syst 1998; 71:175-182. (continued Autonomic Neuroscience)
44. Zhou MS, Nishida Y, **Chen QH**, Murakami H, Hosomi H, Kosaka H: Is a hypertensinogenic factor present in the kidney of hypertensive Dahl rats? Clin Exper Pharmacol Physiol 1998; 25:800-804.
45. **Chen QH\***, Nishida Y, Zhou MS, Murakami H, Okada Y, Morita H, Hosomi H, Kosaka H: Sinoaortic denervation produces sodium retention in Dahl salt-sensitive rats. J Auton Nerv Syst 1998; 69:56-63. (continued Autonomic Neuroscience)
46. **Chen QH**, Morita H, Nishida Y, Hosomi H: EFFECTS OF A HIGH-SALT DIET ON TISSUE NORADRENALINE CONCENTRATIONS IN DAHL SALT-RESISTANT AND-SENSITIVE RATS. Clin Exper Pharmacol Physiol 1995; 22(suppl I):209-211
47. Morita H, **Chen QH**, Hosomi H: Role of hepatic nerves in long-term control of NaCl homeostasis in Wistar-Kyoto rats. J Auton Nerv Syst 1995; 54:9-15. (continued Autonomic Neuroscience)
48. Zhou MS, Nishida Y, **Chen QH**, Morita H, Hosomi H, Kosaka H: Effects of environment on tissue norepinephrine concentration in Chum Salmon. J Exper Zoology 1999; 284:107-111.
49. Hosomi H, Negi T, Morita H, **Chen QH**, Nishida Y, Okada Y: Effect of salt intake on tissue catecholamine concentration and physical function. Descente Sports Science 1996; 17; 243-255 (Japanese).

#### List of Published Work in MyBibliography:

<https://www.ncbi.nlm.nih.gov/myncbi/1zgW9wYcGRNAL/bibliography/public/>

### **Book Chapters:**

1. David Petrik, **Qing H. Chen** and Robert Brenner: BK Potassium Channels Mutations Affecting Neuronal Function and Epilepsy: In Animal Models of Epilepsy Methods and Innovations (Scott C. Baraban, Editor. Humana Press), *p87-106. 2009. ISBN 978-1-60327-263-6.*
2. Bin Wang, **Qing H. Chen** and Robert Brenner: Ion Channels/Proepileptic effects of BK channel gene mutations: In Encyclopedia of Basic Epilepsy Research (Philip A. Schwartzkroin, Editor. Elsevier Press), *p662-669. 2009. ISBN: 978-0-12-373961-2.*

### **ABSTRACTS PRESENTED IN SCIENTIFIC MEETING**

1. J. Bruning, A. Chapp, S. Schum, J. Behnke, Z. Shan, L. Zhang, **QH. Chen**. GENDER DIFFERENCES IN ACETIC ACID/ACETATE PRODUCTION FROM ETHANOL METABOLIS. **Research Society on Alcoholism 2019 (Minneapolis, June 22-26, 2019).** ALCOHOLISM-CLINICAL AND EXPERIMENTAL RESEARCH 43, 222A-222A.
2. A. Chapp, K. Driscoll, M. Huber, Z. Shan, L. Zhang, **QH. Chen**. ACETATE INCREASE SYMPATHETIC NERVE ACTIVITY VIA ACTIVATION OF NMDA RECEPTORS IN AUTONOMIC AMYGDALA NEURONS. **Research Society on Alcoholism 2019 (Minneapolis, June 22-26, 2019).** ALCOHOLISM-CLINICAL AND EXPERIMENTAL RESEARCH 43, 267A-267A.
3. WF Alharbi, J Bigalke, **QH Chen**, ZJ Shan. Orexin A receptor 1(OX1R) activation increases expression of cytokines in PC12 cells. . **Experiment Biology 2019 (Orlando, FL, USA. April 05-10, 2019).** The FASEB Journal 33 (1\_supplement), 692.10-692.10
4. JA Bigalke, **QH Chen**, Z Shan. Orexin Function in DOCA-Salt Rat Model. **Experiment Biology 2019 (Orlando, FL, USA. April 05-10, 2019).** The FASEB Journal 33 (1\_supplement), 835.5-835.5
5. **Qing-Hui Chen**. "Exercise and Autonomic Regulation of Cardiovascular Function". Oral Presentation. Invited featured faculty talk in China Heart Congress (2018CHC) Sponsored by Chinese Medical Association and National Center for Cardiovascular Diseases. (China National Conversion Center, Peking, China. Aug. 4-8, 2018)
6. A. Chapp, M. Huber, R. Larson, Z. Shan, L. Zhang, **QH. Chen**. Aldehyde dehydrogenase inhibitor, cyanamide, attenuates ethanol induced sympathoexcitatory response in the central nucleus of amygdala. **Research Society on Alcoholism 2018 (San Diego, June 16-20, 2018).** ALCOHOLISM-CLINICAL AND EXPERIMENTAL RESEARCH 42, 152A-152A
7. A Chapp, J Behnke, K Driscoll, Y Fan, Z Shan, L Zhang, **QH Chen**. Acetate mediates ethanol toxicity in dopaminergic-like PC12 cells. **Research Society on Alcoholism 2018 (San Diego, June 16-20, 2018).** ALCOHOLISM-CLINICAL AND EXPERIMENTAL RESEARCH 42, 36A-36A
8. Zoe' LaLonde, JE Behnke, AD Chapp, Z Shan, **QH Chen**. L-lactate Increases Apoptosis in Dopaminergic-Like PC12 Cells. **Experiment Biology 2018 (Chicago, USA. April 21-25, 2018).** The FASEB Journal 32 (1\_supplement), lb468-lb468
9. JE Behnke, AD Chapp, Z Shan, **QH Chen**. Nicotine Attenuates Acetate-Induced Increase of Cytosolic Reactive Oxygen Species in Dopaminergic-Like PC12 Cells. **Experiment Biology 2018 (Chicago, USA. April 21-25, 2018).** The FASEB Journal 32 (1\_supplement), 616.8-616.8
10. AD Chapp, S Schum, JE Behnke, MJ Huber, E Jiang, RA Larson, Z Shan, **QH Chen**. Measurement of Electrolytes, Including Acetate in Various Physiological Samples Using Ion Chromatography. **Experiment Biology 2018 (Chicago, USA. April 21-25, 2018).** The FASEB Journal 32 (1\_supplement), 844.3-844.3
11. TH Hahka, YY Fan, **QH Chen**, ZJ Shan. High Salt Diet May Stimulate Fructose Uptake in Brain Neurons and Contribute to Neuronal Apoptosis. **Experiment Biology 2018 (Chicago, USA. April 21-25, 2018).** The FASEB Journal 32 (1\_supplement), 847.14-847.14
12. JA Bigalke, EJ Jiang, TM Hahka, **QH Chen**, ZJ Shan. PVN Orexin Receptor 1 Knockdown Effect on Metabolism and Fluid Homeostasis. **Experiment Biology 2018 (Chicago, USA. April 21-25, 2018).** The FASEB Journal 32 (1\_supplement), lb465-lb465
13. **Qing-Hui Chen**. "Integrative Physiology---Exercise and Autonomic Control of Cardiovascular Function". Oral Presentation. Invited featured faculty talk in China Heart Congress (2017CHC) Sponsored by Chinese Medical Association and National Center for Cardiovascular Diseases. (China National Conversion Center, Peking, China. Aug. 10-13, 2017).

14. AD Chapp, KM Driscoll, MJ Huber, Z Shan, JR Carter, L Zhang, **QH Chen**. The Excitatory and Cytotoxic Actions of Acetate on Neurons. **Research Society on Alcoholism 2017 (Denver, CO, June 24-28, 2017)**. ALCOHOLISM-CLINICAL AND EXPERIMENTAL RESEARCH 41, 26A-26A
15. AD Chapp, KM Driscoll, J Behnke, Z Shan, L Zhang, **QH Chen**. Acidification with Acetic Acid Activates NMDAR and Increases Central Nucleus of Amygdala Neurons with Axon Projecting to Rostral Ventrolateral Medulla. **Research Society on Alcoholism 2017 (Denver, CO, Denver, CO, June 24-28, 2017)** ALCOHOLISM-CLINICAL AND EXPERIMENTAL RESEARCH 41, 196A-196A
16. AD Chapp, KM Driscoll, J Behnke, Z Shan, **QH Chen**. Acetate, an Ethanol Metabolite Increases Neuroinflammation and Neuronal Death: Implications in Ethanol Neurodegeneration. **Experiment Biology 2017 (Chicago, USA. April 22-26, 2017)**. The FASEB Journal 31 (1\_supplement), 1061.4-1061.4
17. JE Behnke, AD Chapp, KM Driscoll, Z Shan, **QH Chen**. Acetate, the Metabolite of Ethanol, Increases Cytosolic Calcium and mRNA Expression Levels of EGR1 and TNF $\alpha$  in Dopaminergic Like PC12 Cells. **Experiment Biology 2017 (Chicago, USA. April 22-26, 2017)**. The FASEB Journal 31 (1\_supplement), 1b586-1b586
18. Zixi Cheng, M Lin, GM Toney, **QH Chen**. Small-conductance Ca<sup>2+</sup>-activated K<sup>+</sup> (SK) channels regulate pre-sympathetic neurons in the hypothalamic paraventricular nucleus (PVN) and parasympathetic cardiomotor neurons (CMN) in the nucleus ambiguus (NA): Pathological changes. Selected oral presentation for FT sponsored by APS-NCAR section. **Experiment Biology 2017 (Chicago, USA. April 22-26, 2017)**.
19. E Jiang, M Huber, Y Fan, F Zhu, **QH Chen**, Z Shan. High salt intake induces sympathetic activation in Dahl salt-sensitive rats through activation of orexin-TNF signaling in the hypothalamic paraventricular nucleus (PVN). **Experiment Biology 2017 (Chicago, USA. April 22-26, 2017)**. The FASEB Journal 31 (1\_supplement), 718.10-718.10.
20. TM Hahka, Y Fan, EM Jiang, **QH Chen**, Z Shan. High Salt Diet Plus Fructose Water Intake Induces Hypertension. **Experiment Biology 2017 (Chicago, USA. April 22-26, 2017)**. The FASEB Journal 31 (1\_supplement), 1b660-1b660.
21. MJ Huber, F Zhu, RA Larson, **QH Chen**, Z Shan. Increased Brain iNOS Contributes to Hypertension in Dahl Salt Sensitive Rats. **2016 HBPR Scientific Sessions** (New Orleans, Louisiana USA. Nov. 12-16, 2016). Hypertension 68 (suppl\_1), AP327-AP327.
22. Andrew D. Chapp, Michael Huber, Kyle M. Driscoll, Zhiying Shan, **Qing-Hui Chen**. "The Ethanol Metabolite, Acetate, Increases Sympathetic Nerve Activity, Neuronal Excitability, Cytosolic Ca<sup>2+</sup> and Pro-Inflammatory Cytokine mRNA" ---- Neural Mechanisms in Cardiovascular Regulation: Novel Research and Disease Treatment Strategies. **2016 FASEB Science Research Conferences** (Saxtons River, VT, July 17-22, 2016).
23. **Qing-Hui Chen**. "Exercise and Autonomic Control of Cardiovascular Function". Oral Presentation. Invited featured faculty talk in China Heart Congress (2016CHC) Sponsored by Chinese Medical Association and National Center for Cardiovascular Diseases. (China National Conversion Center, Peking, China. Aug. 11-14, 2016)
24. Robert A. Larson, Fengli Zhu, Stephen Berridge, Ana-Lisia Powdhar, **Qinghui Chen** and Zhiying Shan. Increased Brain Proinflammatory Cytokines Contribute to Augmented Neuronal Activity in Salt Sensitive Hypertension. Oral Presentation. 3<sup>rd</sup> Annual Meeting of Michigan Physiology Society (MPS) 2016 (Detroit, MI, USA. May 12-13, 2016).
25. Andrew D. Chapp, Kyle M. Driscoll, Zhiying Shan, **Qing-Hui Chen**. Acetate, the Metabolite of Ethanol, Increases Neuroinflammation and Cellular Death: Implications in Ethanol Neurodegeneration. 3<sup>rd</sup> Annual Meeting of Michigan Physiology Society (MPS) 2016 (Detroit, MI, USA. May 12-13, 2016).
26. Andrew D. Chapp, Kyle M. Driscoll, Zhiying Shan, Jason R. Carter, **Qing-Hui Chen**. Intraneuronal Acidification with Acetic Acid, an Ethanol Metabolite, Increases Excitability of Central Nucleus of Amygdala Neurons with Axon Projecting to Rostral Ventrolateral Medulla (CeA-RVLM). 3<sup>rd</sup> Annual Meeting of Michigan Physiology Society (MPS) 2016 (Detroit, MI, USA. May 12-13, 2016).
27. *AD Chapp, KM Driscoll, Z Shan, JR Carter, QH Chen*. Intraneuronal Acidification with Acetic Acid, an Ethanol Metabolite, Increases Excitability of Central Nucleus of Amygdala Neurons with Axon Projecting to Rostral Ventrolateral Medulla (CeA-RVLM). **Experiment Biology 2016 (San Diego, USA. April 2-6, 2016)**. The FASEB Journal 30 (1\_supplement), 992.8-992.8

28. Robert A. Larson, Andrew D. Chapp, Zixi Cheng, Zhiying Shan, **Qing-Hui Chen**. Diminished Intracellular Calcium in the Hypothalamic Paraventricular Nucleus Augments Neuronal Excitability and Sympathetic Nerve Activity. *Experiment Biology* 2016 (San Diego, USA. April 2-6, 2016).
29. M Huber, F Zhu, N Li, **QH Chen**, Z Shan. Upregulation of Orexin in the Paraventricular Nucleus Contributes to Salt Sensitive Hypertension. *Experiment Biology* 2016 (San Diego, USA. April 2-6, 2016). *The FASEB Journal* 30 (1\_supplement), 1235.8-1235.8
30. F Zhu, RA Larson, P Shi, N Li, **QH Chen**, Z Shan. High salt augments expression of proinflammatory cytokines and induces neuroexcitation in the hypothalamic paraventricular nucleus. *Experiment Biology* 2016 (San Diego, USA. April 2-6, 2016). *The FASEB Journal* 30 (1\_supplement), 757.14-757.14
31. IT Fonkoue, B Gervais, **QH Chen**, JR Carter. Acute alcohol consumption blunts the muscle sympathetic nerve activity response to mental stress in humans. *Experiment Biology* 2016 (San Diego, USA. April 2-6, 2016). *The FASEB Journal* 30 (1\_supplement), 757.12-757.12
32. **Qing-Hui Chen**. The Mechanisms of blood pressure control and regulation. Oral Presentation. Invited featured faculty talk in China Heart Congress Sponsored by Chinese Medical Association and National Center for Cardiovascular Diseases. (China National Conversion Center, Peking, China. Aug. 06-09, 2015)
33. Robert A. Larson, Andrew D. Chapp, Michael J. Huber, Zixi Cheng, Zhiying Shan, **Qing-Hui Chen**. High salt intake augments excitability of pre-sympathetic PVN neurons through dysfunction of the endoplasmic reticulum Ca<sub>2+</sub> ATPase. Oral Presentation. **2015 HBPR Scientific Sessions** (Washington, DC, USA. Sep. 16-19, 2015).
34. Andrew D Chapp, Michael J Huber, Jason R Carter, **Qing-Hui Chen**. Acetate is an active metabolite of ethanol: increases firing and evokes inward currents through activation of NMDA receptors in RVLM projecting CeA neurons. Oral Presentation. **2nd Annual Meeting of Michigan Physiology Society (MPS) 2015** (Boyne Falls, MI, USA. April 30-May 1, 2015).
35. Robert A. Larson, Le Gui, Andrew D Chapp, Michael J Huber, Jianhua Zhu, Zixi Cheng, Zhiying Shan, **Qing-Hui Chen**. Inhibition of Endoplasmic Reticulum Function in PVN by Thapsigargin Increases Neuronal Excitability and Sympathetic Nerve Activity (SNA). Oral Presentation. **Annual Meeting of Michigan Physiology Society (MPS) 2015** (Boyne Falls, MI, USA. April 30-May 1, 2015).
36. Michael J. Huber, Rupsa Basu, Cassie Cecchetti, **Qing-Hui Chen**, and Zhiying Shan. Sympathoexcitation by PVN Prorenin Receptor Activation May Involve Reactive Oxygen Species and iNOs. Oral Presentation. **2nd Annual Meeting of Michigan Physiology Society (MPS) 2015** (Boyne Falls, MI, USA. April 30-May 1, 2015).
37. Ida T. Fonkoue, **Qinghui Chen**, and Jason R. Carter. Acute Alcohol Consumption Modulates Sympathetic Vascular Transduction Differently in Caucasians and African Americans. Oral Presentation. **2nd Annual Meeting of Michigan Physiology Society (MPS) 2015** (Boyne Falls, MI, USA. April 30-May 1, 2015).
38. M Huber, R Basu, **QH Chen**, Z Shan. Stimulation of the Prorenin Receptor in the Paraventricular Nucleus Increases Sympathetic Outflow in Anesthetized Rat. **Experiment Biology** 2015 (Boston, USA. March 28-April 01, 2015). *The FASEB Journal* 29 (1\_supplement), 984.20
39. M Huber, L Gui, A Chapp, M Gu, J Zhu, Z Shan, **QH Chen**. Sympathoexcitation by inhibition of SK channel activity in the hypothalamic PVN is attenuated by local AT1 receptor blockade. **Experiment Biology** 2015 (Boston, USA. March 28-April 01, 2015). *The FASEB Journal* 29 (1\_supplement), 984.19
40. Andrew D Chapp, Michael J Huber, Jason R Carter, **Qing-Hui Chen**. Acetate is an active metabolite of ethanol: increases firing and evokes inward currents through activation of NMDA receptors in RVLM projecting CeA neurons. **Experiment Biology** 2015 (Boston, USA. March 28-April 01, 2015).
41. I Fonkoue, QH Chen, J Carter. Acute oral ingestion of alcohol modulates muscle sympathetic neural activity differently in Caucasians and African Americans. **Experiment Biology** 2015 (Boston, USA. March 28-April 01, 2015). *The FASEB Journal* 29 (1\_supplement), 652.15
42. **Q.H. Chen**; A.D. Chapp; R. A. Larson; M.J. Huber; M.J. Gu; J.R. Carter. Acetate increases firing and evokes inward currents through activation of NMDA receptors in RVLM projecting CeA neurons. **The 37th Annual Research Society on Alcoholism Scientific Meeting** (Belleve, Washington, June 21-25, 2014). *Alcoholism – Clinical and Experimental Research*. 38:163A, 2014.

43. Stream SF, Durocher JJ, **Chen QH**, and Carter JR. Acute alcohol consumption elicits augmented sympathoexcitation in prehypertensive humans. *Alcoholism – Clinical and Experimental Research*. 38:163A, 2014. **The 37th Annual Research Society on Alcoholism Scientific Meeting** (Bellevue, Washington, June 21-25, 2014).
44. Chapp A, Larson RA, Huber M, Gu MJ, Carter JR, **Qing-Hui Chen**. Ethanol metabolite increases activity of rostral ventrolateral medulla projecting central nucleus of amygdala (CeA-RVLM) and requires activation of local NMDA receptors. Oral Presentation. **1st Annual Meeting of Michigan Physiology Society (MPS) 2014** (East Lansing, MI, USA. May 15-16, 2014).
45. Andrew D Chapp, Robert A Larson, Michael J Huber, Jason R Carter, **Qing-Hui Chen**. Ethanol metabolite increases activity of CeA neurons and requires activation of local NMDA receptors. **Experiment Biology 2014** (San Diego, USA. April 26-30, 2014). *The FASEB Journal*.28.1\_supplement.1125.5
46. Robert A Larson, Le Gui, Andrew D Chapp, Michael J Huber, Jianhua Zhu, Zixi Cheng, Zhiying Shan, **Qing-Hui Chen**. Inhibition of endoplasmic reticulum function in PVN by thapsigargin increased neuronal excitability and sympathetic nerve activity. **Experiment Biology 2014** (San Diego, USA. April 26-30, 2014). *The FASEB Journal*.28.1\_supplement.1125.4
47. Zhiying Shan, Wei Yuan, Xaioli Qi, **Qing-Hui Chen**. Stimulation of endoplasmic reticulum stress and inflammation by neuronal (pro)renin receptor is mediated by toll like receptor 4 activation. **Experiment Biology 2014** (San Diego, USA. April 26-30, 2014). *The FASEB Journal*.28.1\_supplement. 686.32
48. **Qing-Hui Chen**, Le Gui, Andrew D Chapp, Robert A Larson, Michael J Huber, Jianhua Zhu. Inhibition of Endoplasmic Reticulum Function in Pre-sympathetic PVN Neurons by Thapsigargin Increased Neuronal Excitability and Sympathetic Nerve Activity. **2013 HBPR Scientific Sessions** (New Orleans Marriott, New Orleans, LA, USA. Sep. 11-24, 2013).
49. Le Gui, Andrew D Chapp, Robert A Larson, Mingjun Gu, Jianhua Zhu and **Qing-Hui Chen**. Sympathoexcitation and Pressor Response Induced by Central Amygdala-injected Ethanol Requires Activation of Local NMDA Receptors. **Experiment Biology 2013** (Boston, MA, USA. April 20-24, 2013).
50. Robert A Larson, Andrew D Chapp, Alexander P. Keim, Mingjun Gu and **Qing-Hui Chen**. Sympathoexcitation Induced by SK Channel Blockade in PVN Requires Activation of NMDA Receptors. **Experiment Biology 2013** (Boston, MA, USA. April 20-24, 2013).
51. **Qing-Hui Chen**. Invited talk entitled “*SK channels in the autonomic neurons and salt-sensitive hypertension*”. Neural Mechanisms in Cardiovascular Regulation. Oral Presentation. **2013 FASEB Science Research Conferences** (Salishan Spa & Golf Resort, Glendon Beach, OR, USA July 14-19, 2013).
52. Le Gui, Lila P LaGrange, Jianhua Zhu, **Qing-Hui Chen**. Long-term high salt intake involves reduced small conductance  $Ca^{2+}$ -activated  $K^{+}$  (SK) current in pre-sympathetic PVN neurons and increased sympathetic nerve activity. **2012 HBPR Scientific Sessions** (Washington, DC, USA. Sep. 19-22, 2012). *Hypertension*. 2012; 60: A506.
53. **Qing-Hui Chen**, Le Gui, Robert A Larson, Mingjun Gu, Jianhua Zhu. Sympathoexcitation induced by ethanol in the central amygdala involves local activation of NMDA receptors in anesthetized rats. *Autonomic Regulation of Cardiovascular Function in Health and Disease*. **2012 APS Conference** (Omaha, Nebraska, USA. July 7-10, 2012).
54. Le Gui, Xiaotong Qin, Min Pan, Zixi Cheng, Jianhua Zhu, **Qing-Hui Chen**. Inhibition of Small-Conductance  $Ca^{2+}$ -activated  $K^{+}$  Channels Protects against Ventricular Fibrillation in Rats with Acute Myocardial Infarction. **Experiment Biology 2012** (San Diego, USA. April 21-25, 2012).
55. Le Gui, Mingjun Gu, Lila P LaGrange, Jianhua Zhu, **Qing-Hui Chen**. Role of small conductance calcium-activated potassium channels expressed in hypothalamic PVN neurons in regulating sympathetic nerve activity (SNA) in rats. **Experiment Biology 2012** (San Diego, USA. April 21-25, 2012).
56. Le Gui, Jianhua Zhu, Mingjun Gu and **Qing-Hui Chen**. Effect of SK channel blockade on the cardiac arrhythmias in rats. **Experiment Biology 2011** (Washington DC, USA. April 09-13, 2011).
57. Gui L, Zhu JH, Gu MJ, LaGrange LP and **Chen QH**. Reduced SK channel function mediates enhanced excitability of pre-sympathetic PVN neurons and sympathoexcitation in heart failure. **21st International Symposium on the Autonomic Nervous System** (Marco Island, Florida – November 3-6, 2010). *Clin Auton Res* (2010) 20:289–330 DOI 10.1007/s10286-010-0082-6 (poster#49)

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58. Min Lin, **Qing-Hui Chen**, Lihua Li, Robert D. Wurster, Ye-Qi Liu, Zixi (Jack) Cheng. Maternal Diabetes (MD) Increases Large Conductance  $Ca_{2+}$ -activated  $K_{+}$  (BK) Currents Which Alter Action Potential (AP) Properties But Does Not Affect Excitability of Parasympathetic Cardiac Motoneurons (PCMNs) In The Nucleus Ambiguus (NA) of Neonatal Mice. **Experiment Biology 2010** (California, USA. April 24-28, 2010).
59. Min Lin, **Qing-Hui Chen**, Robert D. Wurster, Lihua Li, Scott W. Harden, Ye-Qi Liu, and Zixi (Jack) Cheng. Maternal Diabetes Increases Small Conductance  $Ca_{2+}$ -activated  $K_{+}$  (SK) Currents Which Alter Action Potential Properties and Excitability of Parasympathetic Cardiac Motoneurons (PCMNs) in the Nucleus Ambiguus (NA) of Neonatal Mice. **Experiment Biology 2010** (California, USA. April 24-28, 2010).
60. **Chen QH**, Andrade MA, Calderon AS and Toney GM: Long-term high salt diet involves reduced SK current and increased excitability of RVLM projecting PVN (PVN-RVLM) neurons. **Experiment Biology 2010** (California, USA. April 24-28, 2010).
61. **Chen QH**, Dong Y, Andrade MA, Calderon AS and Toney GM: Down-regulation of SK channel function among pre-sympathetic PVN neurons and sympathoexcitation in salt-sensitive hypertension. **Experiment Biology 2010** (California, USA. April 24-28, 2010).
62. Dong Y, Andrade MA, Calderon AS, **Chen QH**, and Toney GM: Increased NMDA receptor function in the hypothalamic PVN contributes to support of sympathetic nerve activity and blood pressure in Ang II-salt hypertensive rats. **Experiment Biology 2009** (New Orleans, USA. April 18-22, 2009)
63. **Chen QH**, and Toney GM: Small conductance calcium-activated potassium channels (SK) limit the excitability of PVN neurons projecting to RVLM. **Experiment Biology 2009** (New Orleans, USA. April 18-22, 2009)
64. **Chen QH**, Dong Y, Cardoso L, Pedrino GR and Toney GM. Reduced SK current in pre-sympathetic PVN neurons contributes to enhanced neuronal excitability and sympathetic activation in Ang II-dependent, salt-sensitive hypertensive rats. **Jackson Cardiovascular-Renal Meeting 2008** (The Univ. of Mississippi Med. Ctr., Jackson, Oct. 15-11, 2008)
65. Wang B, **Chen QH**, Rothberg B and Brenner R: Mechanism of the human BK channel epilepsy gain-of-function: Epilepsy mutation and it's modulation by the beta 4 subunit. **Gordon Research Conference: Ion Channels 2008** (Tilton School, NH. July 6-11, 2008)
66. **Chen QH**, Andrade MA, Calderon AS, Mifflin SW, and Toney GM: Effects of normoxic and hypoxic breathing on tissue  $pO_2$  in the hypothalamic PVN: implications for hypoxic activation of sympathetic nerve activity (SNA). **Experiment Biology 2008** (San Diego, USA. April 5-9, 2008)
67. **Chen QH**, Dong Y, Cardoso L, Shi P, Calderon AS, Andrade MA and Toney GM: Increased excitability of RVLM-projecting hypothalamic PVN neurons in angiotensin II-salt hypertensive rats. **Experiment Biology 2008** (San Diego, USA. April 5-9, 2008)
68. **Chen QH**, Dong Y, Cardoso L, Shi P, Calderon AS, Andrade MA and Toney GM: Tonic NMDA receptor-mediated inward current in pre-sympathetic PVN neurons is enhanced by heart failure. **Experiment Biology 2008** (San Diego, USA. April 5-9, 2008)
69. **Chen QH**, Mary Ann Andrade, Alfredo S. Calderon, Steven W. Mifflin, and Glenn M. Toney: Effects of normoxic and hypoxic breathing on tissue  $pO_2$  in the hypothalamic PVN: implications for hypoxic activation of sympathetic nerve activity (SNA). **Experiment Biology 2008** (San Diego, USA. April 5-9, 2008)
70. Brenner R, **QH Chen**, B Wang, DJ Cross, JE Cavazos: Regulation of Dentate Gyrus Granule Cell Calcium and Excitability during High Frequency Action Potential. **Society for Neuroscience meeting 2007** (San Diego, USA. Nov. 3-7, 2007).
71. **Chen QH**, Dong Y, Shi P, Calderon AS, Koldzic-Zivanovic N, and Toney GM: Water Deprivation Functionally Upregulates NMDA Receptors in the Hypothalamic PVN to Support Renal Sympathetic Nerve Activity (RSNA) and Arterial Pressure (AP). **Experiment Biology 2007** (April 28-May 2, Washington DC, USA. April, 2007).
72. **Chen QH**, Toney GM and Brenner R: Central mechanisms of salt-sensitive hypertension: the Role of the Large Conductance, Calcium-activated Potassium Channel Beta4 Subunit in the Hypothalamic PVN. **Experiment Biology 2006** (San Francisco, USA. April 1-5, 2006).

73. **Chen QH**, Brenner R and Aldrich RW: The Role of the Large Conductance, Calcium-activated Potassium Channel Beta4 Subunit in the Hypothalamic Neurohypophysis. **Experiment Biology 2005** (San Diego, USA. April 2-5, 2005)
74. Brenner R, **Chen QH**, Noebels JL and Aldrich RW: Knockout of the BK channel beta4 subunit causes increased excitability in the hippocampus and non-convulsive seizures. **Society for Neuroscience meeting 2004** (San Diego, CA, Oct. 23–27, 2004)
75. **Chen QH**, Haywood JR, Toney GM: Renal sympathoexcitation following Bicuculline Methobromide into the hypothalamic PVN depends on local NMDA and non-NMDA receptor activation. **Experiment Biology 2003** (San Diego, USA. April 11-15, 2003) *FASEB J.*, 2003;17(5):A1291-824.3
76. **Chen QH**, Cato MJ, Toney GM: Sympathoexcitation by Bicuculline Methobromide in the hypothalamic PVN is attenuated by local AT1 receptor blockade. **Experiment Biology 2002** (New Orleans, USA. April 20-24, 2002) *FASEB J.*, 2002;16(5):A502-407.5
77. LaGrange LP, **Chen QH**, Toney GM and Bishop VS: Acutely administered Losartan effectively restores the attenuated renal sympathoinhibitory response to volume expansion in rats chronically treated with Ang II. **Experiment Biology 2002** (New Orleans, USA. April 20-24, 2002) *FASEB J.*, 2002;16(5):A496-405.2
78. Toney GM, **Chen QH**, Cato MJ: Angiotensin II AT1 receptor activation evokes a transient inward current in RVLM-projecting neurons of the hypothalamic PVN. **Experiment Biology 2002** (New Orleans, USA. April 20-24, 2002) *FASEB J.*, 2002;16(5):A502-407.6
79. **Chen QH**, Toney GM: AT1-receptor blockade in the hypothalamic PVN reduces central hyperosmolality-induced renal sympathetic nerve activity. **Experiment Biology 2001** (Orlando, Florida, USA. March 31-April 4, 2001) *FASEB J.*, 2001;15(5):A343-647.34
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81. **Chen QH**, Toney GM: Discharge properties and Osmotic Responsiveness of hypothalamic PVN neurons projecting to the rostral ventrolateral medulla. **Experiment Biology 2000** (San Diego, USA. April 15-18, 2000) *FASEB J.*, 2000;14(4):A626-458.4
82. **Chen QH**, Toney GM: Discharge properties and Osmotic Responsiveness of hypothalamic PVN neurons projecting to the RVLM. **1999 FASEB Summer Research Conferences** (Vermont, USA. July 4-9, 1999)
83. Zhou MS, Nishida Y, Yoneyama H, **Chen QH**, Kawazoe T, Kosaka H: Endothelium dysfunction in carotid artery of hypertensive Dahl rats: Protective effect of potassium supplement. **Experiment Biology '99** (Washington, D.C., USA. April 17-21, 1999) *FASEB J.*, 1999;13(5):A777-796.13
84. Nishida Y, **Chen QH**, Zhou MS, Yoneyama H, Kosaka H: Neural NOS inhibitor increases renal sympathetic activity in high sodium-Dahl rats. **Experiment Biology '99** (Washington, D.C., USA. April 17-21, 1999) *FASEB J.*, 1999;13(5):A777-604.5
85. Zhou MS, Nishida Y, Yoneyama H, **Chen QH**, Murakami H, Kosaka H: Potassium supplement enhances sodium excretion and increases constitutive nitric oxide synthase (cNOS) activity in the kidney of hypertensive Dahl rats. **Experiment Biology '98** (San Francisco, USA. April 18-22, 1998) *FASEB J.*, 1998;12(3):A81-468
86. Nishida Y, Ding J, Zhou MS, **Chen QH**, Murakami H, Kosaka H: Impaired NO release causes vascular hyper-responsiveness to norepinephrine in hypertensive Dahl rats. **Experiment Biology '98** (San Francisco, USA. April 18-22, 1998) *FASEB J.*, 1998;12(3):A81-473
87. **Chen QH**, Nishida Y, Zhou MS, Murakami H, Yoneyama H, Kosaka H: L-Arginine improved baroreflex function in prehypertensive Dahl salt-sensitive rats. **Experiment Biology '98** (San Francisco, USA. April 18-22, 1998) *FASEB J.*, 1998;12(3):A81-472
88. Nishida Y, Sugimoto Y, Tsunooka K, **Chen QH**, Zhou MS, Morita H, Hosomi H: Mean arterial pressure (MAP) is reset by increased peripheral resistance (PR) through the baroreflex system during movement. **Experiment Biology '96** (Washington, D.C., USA. April 14-17, 1996) *FASEB J.*, 1996;10(3):A334-1928.
89. **Chen QH**, Morita H, Nishida Y, Zhou MS, Hosomi H: Role of arterial baroreflex in the sodium metabolism in Dahl salt-sensitive rats. **The 1st China-Japan International Congress of**

- Pathophysiology** (Dalian, China, Oct., 1995) *Journal of Japanese Pathophysiology* 1995;4(2):10A-1415
90. Zhou MS, **Chen QH**, Morita H, Nishida Y, Yamashida Y, Hosomi H: Effect of environment on tissue norepinephrine concentration in the Hokkaido Salmon. **The 1<sup>st</sup> China-Japan International Congress of Pathophysiology** (Dalian, China, Oct., 1995) *Journal of Japanese Pathophysiology* 1995;4(2):10B-1415
  91. **Chen QH**, Morita H, Nishida Y, Hosomi H: High salt food intake decreases tissue noradrenaline contents and increases organ weight in Dahl salt sensitive rats. **The 2<sup>nd</sup> International Congress of Pathophysiology** (Kyoto, Japan, Nov., 1994)
  92. **Chen QH**, Morita H, Nishida Y, Hosomi H: Effect of high-salt diet on tissue noradrenaline concentration in Dahl-strain rats. **The 8<sup>th</sup> International Symposium on SHR and Related Studies** (Osaka, Japan, Oct., 1994)
  93. **Chen QH**, Chen RX: Effect of clonidine on cat arrhythmias during myocardial ischemia and reperfusion. **International Symposium on Hypertension and Coronary Heart Disease** (Beijing, China, Oct., 1991) *Chinese Medical Sciences Journal*. 1991;6 (suppl):123.
  94. Zhou MS, Nishida Y, **Chen QH**, Yoneyama H, Kawazoe T, Kosaka H: Endothelium-derived contracting factor in the carotid artery of hypertensive Dahl rats. **The 76<sup>th</sup> Japanese Physiology Conference** (Nagasaki, Japan, Mar., 1999) *Jpn. J. Physiol.* 1999;49 (suppl):S109
  95. Nishida Y, **Chen QH**, Zhou MS, Yoneyama H, Kosaka H: Neural NO regulates sympathetic nerve activity in Dahl salt-sensitive and -resistant rats. **The 76<sup>th</sup> Japanese Physiology Conference** (Nagasaki, Japan, Mar., 1999) *Jpn. J. Physiol.* 1999;49 (suppl):S171
  96. Zhou MS, **Chen QH**, Nishida Y, Yoneyama H, Murakami H, Kosaka H: High potassium diet augments vascular relaxation in the carotid artery of hypertensive Dahl rats. **The 75<sup>th</sup> Japanese Physiology Conference** (Kanazawa, Japan, Mar., 1998) *Jpn. J. Physiol.* 1998;48 (suppl):S67
  97. **Chen QH**, Nishida Y, Zhou MS, Yoneyama H, Murakami H, Kosaka H: L-Arginine improved baroreflex function in prehypertensive Dahl salt-sensitive rats. **The 75<sup>th</sup> Japanese Physiology Conference** (Kanazawa, Japan, Mar., 1998) *Jpn. J. Physiol.* 1998;48 (suppl):S177
  98. Zhou MS, **Chen QH**, Drobnik J, Okada K, Murakami H, Nishida Y: High potassium (K) diet attenuates development of hypertension without reduction of water retention in Dahl salt-sensitive rats. **The 74<sup>th</sup> Japanese Physiology Conference** (Hamamasu, Japan, Mar., 1997) *Jpn. J. Physiol.* 1997;47(suppl):S77
  99. Ding J, **Chen QH**, Zhou MS, Sugimoto I, Drobnik J, Okada K, Murakami H, Nishida Y: Nitric oxide is responsible for the abnormal vascular responses to norepinephrine (NE) in hypertensive Dahl rats. **The 74<sup>th</sup> Japanese Physiology Conference** (Hamamasu, Japan, Mar., 1997) *Jpn. J. Physiol.* 1997;47(suppl):S77
  100. Drobnik J, Okada K, **Chen QH**, Zhou MS, Murakami H, Sugimoto I, Nishida Y: Vasoconstriction of the renal artery in Dahl salt-sensitive rats induced by endothelin. **The 74<sup>th</sup> Japanese Physiology Conference** (Hamamasu, Japan, Mar., 1997) *Jpn. J. Physiol.* 1997;47(suppl):S77
  101. Nishida Y, Drobnik J, **Chen QH**, Zhou MS, Okada K, Murakami H: The baroreflex system causes physiologic movement-induced high blood pressure by an increase in total peripheral resistance (TPR). **The 74<sup>th</sup> Japanese Physiology Conference** (Hamamasu, Japan, Mar., 1997) *Jpn. J. Physiol.* 1997;47(suppl):S87.
  102. **Chen QH**, Zhou MS, Morita H, Nishida Y, Yamashida Y, Sugimoto I, Tsunooka K, Hosomi H: Effect of a high salt diet on tissue noradrenaline concentration in Dahl rats and its sinoaortic denervated rats. **The 73<sup>rd</sup> Japanese Physiology Conference** (Fukui, Japan, Apr., 1996) *Jpn. J. Physiol.* 1996;46(suppl):S223
  103. Morita H, Tsunooka J, Sugimoto I, **Chen QH**, Zhou MS, Nishida Y, Hosomi H: Role of the hepatoportal Na<sup>+</sup> sensitive mechanism in controlling Na<sup>+</sup> balance and arterial pressure in Dahl rats. **The 73<sup>rd</sup> Japanese Physiology Conference** (Fukui, Japan, Apr., 1996) *Jpn. J. Physiol.* 1996;46(suppl):S165
  104. Tsunooka J, Morita H, Sugimoto I, **Chen QH**, Zhou MS, Nishida Y, Hosomi H: Effect of high salt diet on organ sodium contents in Dahl rats. **The 73<sup>rd</sup> Japanese Physiology Conference** (Fukui, Japan, Apr., 1996) *Jpn. J. Physiol.* 1996;46(Suppl):S49
  105. **Chen QH**, Morita H, Nishida Y, Hosomi H: Age and time course of a high-salt diet on the tissue noradrenaline concentration in Dahl rats. **The 72<sup>nd</sup> Japanese Physiology Conference** (Nagoya, Japan, Apr., 1995) *Jpn. J. Physiol.* 1995;45 (suppl):763

106. Zhou MS, Morita H, **Chen QH**, Nishida Y, Yamashida Y, Hosomi H: Effect of kidney extract on blood pressure in conscious Dahl-salt sensitive rats. **The 4<sup>th</sup> Japanese Pathophysiology Conference** (Japan, Jan., 1996) *Jpn. J. Pathophysiology*. 1996;4(3):S51
107. **Chen QH**, Zhou MS, Morita H, Nishida Y, Yamashida Y, Hosomi H: Effect of baroreflex on sodium metabolism in hypertensive Dahl rats. **The 4<sup>th</sup> Japanese Pathophysiology Conference** (Japan, Jan., 1996) *Jpn. J. Pathophysiology*. 1996;4(3) :S51

## **HONORS/AWARDS**

- 2009 Research Recognition Award at 2009EB meeting; For the research on “Small Conductance Calcium-Activated Potassium Channels (SK) Limit the Excitability of PVN neurons projecting to RVLM” (The American Physiological Society, Central Nervous System Section)
- 2008 New Investigator Travel Award at 2008 Jackson Cardiovascular-Renal meeting. “Reduced SK current in pre-sympathetic PVN neurons contributes to enhanced neuronal excitability and sympathetic activation in Ang II-dependent, salt-sensitive hypertensive rats”
- 2007 2<sup>nd</sup> Place Winner (Junior Faculty Category) by the Center for Biomedical Neuroscience in UTHSCSA. “Water deprivation functionally up-regulates NMDA receptors in the hypothalamic PVN to support renal sympathetic nerve activity and arterial pressure”.
- 2001 Recognition Award for Meritorious Research by young Investigator at 2001EB meeting; For the outstanding research on “AT1-receptor blockade in the hypothalamic PVN reduces central hyperosmolality-induced renal sympathetic nerve activity”. (The American Physiological Society, Central Nervous System Section)
- 2000 Michael J. Brody Young Investigator Award at 2000EB meeting; For the outstanding research on “Discharge properties and osmotic responsiveness of hypothalamic paraventricular nucleus projecting to the rostral ventrolateral medulla” project. (The American Physiological Society, Neuronal Control and Autonomic Regulation Section)

## **ORAL PRESENTATION AT SCIENTIFIC MEETING/CONFERENCE**

- 2019 Invited Oral Presentation in Annual Meeting of Research Society on Alcoholism Sponsored by National Institute on Alcohol Abuse and Alcoholism (NIAAA).  
Title: ACETATE INCREASE SYMPATHETIC NERVE ACTIVITY VIA ACTIVATION OF NMDA RECEPTORS IN AUTONOMIC AMYGDALA NEURONS. Research Society on Alcoholism 2019 (Minneapolis, Minnesota, June 22-26, 2019).
- 2018 Invited featured faculty talk in China Heart Congress (CHC) Sponsored by Chinese Medical Association and National Center for Cardiovascular Diseases  
Title: “Exercise and Autonomic Regulation of Cardiovascular Function” (China National Convention Center, Peking, China. Aug. 04-08, 2018)
- 2018 Invited featured faculty talk in 10th Symposium for Chinese Neuroscientists Worldwide (SCNW 2018) sponsored by Chinese Neuroscience Society  
Title: “Acetate, the ethanol metabolite, increases the excitability of central nucleus of amygdala” (Qingdao Huanghai Hotel, Qingdao, China, July 6-9, 2018)
- 2018 Invited oral presentation in Gull Lake Hypertension Conference sponsored by Michigan State University (MSU and Michigan Physiology Society (MPS)).  
Title: “Long-term High Salt Intake Involves Reduced Small Conductance Ca<sup>2+</sup>-activated K<sup>+</sup> (SK) Current and Increased Excitability of Autonomic PVN Neurons” (Chair: Chen QH/Lansdell T)  
(W.K. Kellogg Biological Station, MSU, May 3-4, 2018)

- 2017 Invited talk for featured topic in APS Neuronal Control and Autonomic Regulation (NCAR)-Sponsored Session--- Ion Channel Modulation: Contributions to Autonomic Dysfunction in Cardiovascular and Metabolic Diseases (Chair: Chen QH/Toney GM) at Experimental Biology meeting (Chicago, USA. April 22-26, 2017).  
Title: "Small-conductance Ca<sup>2+</sup>-activated K<sup>+</sup> (SK) channels regulate pre-sympathetic neurons in the hypothalamic paraventricular nucleus (PVN) and parasympathetic cardiomotor neurons (CMN) in the nucleus ambiguus (NA): Pathological changes".
- 2017 Invited featured faculty talk in China Heart Congress Sponsored by Chinese Medical Association and National Center for Cardiovascular Diseases  
Title: "Integrative Physiology---Exercise and Autonomic Control of Cardiovascular Function"  
(China National Conversion Center, Peking, China. Aug. 10-13, 2017)
- 2016 Invited featured faculty talk in China Heart Congress Sponsored by Chinese Medical Association and National Center for Cardiovascular Diseases  
Title: "Exercise and Autonomic Control of Cardiovascular Function"  
(China National Conversion Center, Peking, China. Aug. 11-14, 2016)
- 2015 Invited featured faculty talk in China Heart Congress Sponsored by Chinese Medical Association and National Center for Cardiovascular Diseases  
(China National Conversion Center, Peking, China. Aug. 06-09, 2015)  
Title: "The Mechanisms of blood pressure control and regulation"
- 2015 Selected oral presentation at 2015 HBPR sponsored by American Heart Association (Washington, DC, USA. Sep. 16-19, 2015)  
(Presented by R. A. Larson who was graduate student in my Lab at MTU)  
Title: "High salt intake augments excitability of pre-sympathetic PVN neurons through dysfunction of the endoplasmic reticulum Ca<sup>2+</sup> ATPase".
- 2015 Selected oral presentation at 2<sup>nd</sup> Annual Meeting of Michigan Physiology Society 2015 (Boyer Falls, MI at the Boyne Mountain Resort, USA. April 30-May 01, 2015)  
(Presented by A.D. Chapp who was graduate student in my Lab at MTU)  
Title: "Acetate is an Active Metabolite of Ethanol: Increases Firing and Evokes Inward Currents through Activation of NMDA Receptors in RVLM Projecting CeA Neurons".
- 2015 Selected oral presentation at 2<sup>nd</sup> Annual Meeting of Michigan Physiology Society (Boyer Falls, MI at the Boyne Mountain Resort, USA. April 30-May 01, 2015)  
(Presented by R. A. Larson who was graduate student in my Lab at MTU)  
Title: "Inhibition of Endoplasmic Reticulum Function in PVN by Thapsigargin Increases Neuronal Excitability and Sympathetic Nerve Activity (SNA)".
- 2014 Selected oral presentation in 1<sup>st</sup> Annual Meeting of Michigan Physiology Society 2014 (East Lansing, MI, USA. May 15-16, 2014)  
(Presented by A.D. Chapp who was graduate student in my Lab at MTU)  
Title: "Ethanol metabolite increases activity of rostral ventrolateral medulla projecting central nucleus of amygdala (CeA-RVLM) and requires activation of local NMDA receptors".
- 2013 Invited talk in American Physiological Society (APS) Sponsored FASEB Science Research Conferences---Neural Mechanisms in Cardiovascular Regulation (Salishan Spa & Golf Resort, Gleneden Beach, OR, USA July 14-19, 2013)  
Title: "SK channels in the autonomic neurons and salt-sensitive hypertension".

- 2010 Invited talk for featured topic in APS Neuronal Control and Autonomic Regulation (NCAR)-Sponsored Session---Neural mechanisms of sympathetic activation in cardiovascular diseases at Experimental Biology meeting (California, USA. April 24-28, 2010).  
Title: "Ion channel mechanisms among pre-sympathetic PVN neurons and sympathetic activation in salt-sensitive hypertension".
- 2009 Invited talk for featured topic in APS Central Nervous System (CNS)-Sponsored Session at Experimental Biology meeting (New Orleans, USA. April 18-22, 2009)  
Title: "Small Conductance Calcium-Activated Potassium Channels (SK) Limit Excitability of PVN neurons projecting to RVLM".
- 2008 Invited talk for symposium sponsored by Chinese Journal of Hypertension and American J of Hypertension---Hypertension and Diabetes Conference (Oct. 2008 DaLian, China).  
Title: "Neural mechanisms of sympathetic activation in salt-sensitive hypertension"
- 2007 Invited talk for featured topic in APS sponsored session of Water and Electrolyte Homeostasis (WEH) at Experimental Biology meeting. (Washington DC, USA. April 28-May 02, 2007)  
Title: "Water deprivation functionally up-regulates NMDA receptors in the hypothalamic PVN to support renal sympathetic nerve activity and arterial pressure".
- 2001 Invited talk for featured topic in APS CNS sponsored session at Experimental Biology meeting. (Orlando, Florida, USA. March 31–April 04, 2001)  
Title: "AT1-receptor blockade in the hypothalamic PVN reduces central hyperosmolality-induced renal sympathetic nerve activity".
- 2000 Invited talk for featured topic in APS NCAR sponsored session at Experimental Biology meeting. (San Diego, California, USA. April 15–18, 2000)  
Title: "Discharge properties and osmotic responsiveness of hypothalamic paraventricular nucleus projecting to the rostral ventrolateral medulla".

### **STUDENTS HONORS/AWARDS**

- 2014 Outstanding Research Recognition Van Harreveld Award to Robert A Larson (graduate student working in my Lab) for the outstanding research on "Inhibition of Endoplasmic Reticulum Function in Pre-sympathetic PVN Neurons by Thapsigargin Increased Neuronal Excitability and Sympathetic Nerve Activity" (April 26-30, 2014 Experimental Biology annual meeting, APS, CNS Section)  
<http://www.the-aps.org/mm/awards/sections/cns/CNS-past-awardees/cnsvanhi.html>
- 2014 Outstanding Oral Presentation Award to Andrew D Chapp (graduate student working in my Lab) for the Research on "Ethanol metabolite increases activity of rostral ventrolateral medulla projecting central nucleus of amygdala (CeA-RVLM) neurons and requires activation of local NMDA receptors". (May 15-16, 2014, East Lansing, MI, 1<sup>st</sup> Annual Meeting of Michigan Physiology Society).
- 2015 Outstanding Oral Presentation Award to Andrew D Chapp (graduate student working in my Lab) for the Research on "Acetate is an active metabolite of ethanol: increases firing and evokes inward currents through activation of NMDA receptors in RVLM projecting CeA neurons". (April 30 – May 01, 2015, Boyne Mountain Resort, Boyne, MI, 2<sup>nd</sup> Annual Meeting of Michigan Physiology Society).
- 2015 Merit Research Award to Robert A Larson (graduate student working in my Lab) for the research on "High salt intake augments excitability of pre-sympathetic PVN neurons

through dysfunction of the endoplasmic reticulum Ca<sub>2+</sub> ATPase". (Sep. 24-25, 2015, 1<sup>st</sup> Life Science and Technology Institute (LSTI) Research Forum of Michigan Tech. Univ., MI).

- 2016 Caroline tum Suden/Frances Hellebrandt Professional Opportunity Awards to graduate student, Andrew D Chapp, PhD candidate in my Lab, American Physiological Society, 2016 EB meeting (San Diego, CA, USA).
- 2016 FASEB Graduate Student Travel Award to student, Andrew D Chapp, PhD candidate in my Lab. FASEB Summer Research Conference on Hypertension, 2016 FASEB Science Research Conferences (Saxtons River, VT, July 17-22, 2016). Research on "The Ethanol Metabolite, Acetate, Increases Sympathetic Nerve Activity, Neuronal Excitability, Cytosolic Ca<sub>2+</sub> and Pro-Inflammatory Cytokine mRNA".
- 2017 Student Merit Award to graduate student, Andrew D Chapp, PhD candidate in my Lab, 2017 Research Society on Alcoholism meeting (Denver, CO, June 24-28, 2017). Research on "Acidification with Acetic Acid Activates NMDAR and Increases Central Nucleus of Amygdala Neurons with Axon Projecting to Rostral Ventrolateral Medulla".
- 2017 Andrew D Chapp, PhD candidate in my Lab. has received 2017 Michigan Technological University (MTU) Outstanding Scholarship Award to recognize his academic performance.
- 2018 Zoe' LaLonde, Under-graduate student in my Lab. Has received 2018 Summer Undergraduate Research Fellowship (SURF-MTU) for her project "Toxicity of Lactic Acid in Neuron Cells Mediates Toward Neurodegenerative Disease".
- 2019 Jessica R Bruning, PhD candidate in my Lab has received 2019 Michigan Technological University (MTU) Songer Research Award for Human Health Research for the project "Gender Differences in Ethanol Metabolism: Impacts on Sympathetic Activation".

## **TEACHING EXPERIENCE**

### *Michigan Technological University (MTU):*

- 2011 Spring: [EH5350] - Advanced Exercise Integrative Physiology (2 credit hr)
- 2011- present Fall: [BL4380] - Cardiopulmonary Physiology (3 credit hr)
- 2012 Spring: [EH5350] - Neuroendocrine Physiology (2 credit hr)
- 2012- 2013 Summer: [BL4995] – Research in Biochemistry (1 credit hr)
- 2013- present Spring: [BH4990] – Cardiac Electrophysiology and ECG Interpretation (2 credit hr)
- 2013-2014 Fall [BL1800]-Biochemistry Orientation, lecturing on "Careers in Electrophysiology".
- 2015 Spring [EH 5920]- KIP Graduate Seminar course (1 credit hr).
- 2016-present Spring [EH 4220]- Exercise Pharmacology (2 credit hr).

### *Univ. of Texas, Health Science Center at San Antonio (UTHSCSA):*

- 2009 Fall: Master program course for K-12 teacher: lecturing on "Neural, Hormonal and Renal Involvement in Hypertension".

## **GRADUATE STUDENT ADVISING AT MTU (Committee Member)**

1. Huan Yang, PhD in Biological Science (2013 Graduated; Mentor: Dr. Jason Carter).
2. Christopher Schwartz, Ph.D in Biological Sciences (2011 Graduated; Mentor: Dr. Jason Carter)
3. Andrew Chapp, MS in Chemistry Department (2012 Graduated; Mentor: Dr. Lanrong Bi).
4. Sarah Stream, MS in KIP Department (2012 Graduated; Mentor: Dr. Jason Carter).
5. Srinivas Rao Mandalapu, MS in Chemistry Department (2012 Graduated; Mentor: Dr. Lanrong Bi).
6. Robert Larson, MS in KIP Department (2012 Graduated; Mentor: Dr. Jason Carter).
7. Weixiang Liu MS in Biological Sciences (2016 Graduated; Mentor: Xiaoqing Tang).
8. Mu Yang, Ph.D. Chemistry Department (2016 Graduated; Mentor: Dr. Ashutosh Tiwari).
9. Ida Fonkoue, Ph.D. Biological Science Department (2016 Graduated; Mentor: Dr. Jason Carter).
10. Xin Yan Ph.D. candidate in Chemistry Department (2017 Graduated; Mentor: Dr. Lanrong Bi).
11. Shanshan Hou Ph.D. candidate in Chemistry Department (2018 Graduated; Dr. Lanrong Bi).
12. Taija Hahka, MS in Biological Sciences (2018 Graduated; Mentor: Zhiying Shan).
13. Jeremy Bigalke, MS. KIP Department (2018 Spring Graduated; Mentor: Dr. Zhiying Shan).

14. Wafa Fhad A Alharbi, MS in Biological Sciences (2019 Graduated; Mentor: Zhiying Shan).
15. Christina Welch, Ph.D. Chemistry Department (in Progress 2016; Mentor: Dr. Lanrong Bi).
16. Zhihong Wang, Ph.D. Biological Sciences (in Progress 2017, Mentor: Dr. Xiaoqing Tang).
17. Shulin Wan, Ph.D. Chemistry Department (in Progress 2018, Mentor: Dr. Haiying Liu).

## **MENTORING EXPERIENCE:**

### **Students, post-doc and research associate mentoring at MTU (in progress)**

<b>Name</b>	<b>Type</b>	<b>Training Period</b>	<b>Employer</b>
Mingjun Gu	Research Associate	2011-	KIP Dept. MTU
Jessica Bruning	PhD candidate	2018 Fall-	KIP Dept. MTU
Qi Guo	Visiting Scholar	2018.12-2020.08	KIP Dept. MTU
Greg Miodonski	Lab Technician	2019 Fall-	KIP Dept. MTU
Hunter Dercks	Under-Grad Student	2019 Fall-	BME Dept. MTU
Marissa Labyak	Under-Grad Student	2019 Fall-	Bio. Sci. Dept. MTU

### **Students, post-doc and research associate mentoring at MTU (past)**

<b>Name</b>	<b>Type</b>	<b>Training Period</b>	<b>Employer</b>
<b><u>Under-graduate students:</u></b>			
Alexander Keim	Under-Grad Student	2012 Summer Research	Bio. Med. Dept. MTU
Sonethong Sitdamlong	Under-Grad Student	2012 Fall	Bio. Sci. Dept. MTU
Cassandra Matchinski	Under-Grad Student	2012 Fall	Bio. Sci. Dept. MTU
Michael J. Huber	Under-Grad Student	2013 Summer Research	Bio. Sci. Dept. MTU
Jared Pecore	Under-Grad Student	2014 Fall	Bio. Sci. Dept. MTU
Dave Schreifels	Under-Grad Student	2014 Fall	Cognitive & Learning Sci., MTU
Yonas Araya	Under-Grad Student (MiCUP program)	2016 Summer-track A (May 9-June 24)	MiCUP program (MTU) (Grand Rapids Community College)
Ken. Juras	Under-Grad Student	2016 Fall-2017 Spring	BioMed Engineering Dept. MTU
Eileen Hoban	Under-Grad Student	2016 Spring-2017 Fall	Bio. Sci. Dept. MTU (pre-med)
Zoe' LaLonde	Under-Grad Student	2016 Fall-2018 Summer	Bio. Sci. Dept. MTU
Greg Kaurala	Under-Grad Student	2018 Fall-2019 Spring	Bio. Sci. Dept. MTU
Greg Miodonski	Under-Grad Student	2018 Fall-2019 Spring	Bio. Sci. Dept. MTU

### **Graduate students:**

Michael J. Huber	MS student	2014 Spring-2016 Fall	Bio. Sci. Dept. MTU
Robert A. Larson	Ph.D. student	2013 Spring-2016 Summer	Bio. Sci. Dept. MTU
Andrew D. Chapp	Ph.D. student	2013 Fall-2017 Fall	Bio. Sci. Dept. MTU
Jessica B. Behnke	MS student	2016 Spring-2018 Spring	Bio. Sci. Dept. MTU

### **Other:**

Le Gui	Visiting Scholar	2011-2012	KIP Dept. MTU
Andrew D. Chapp	Research Associate	2012-2013	KIP Dept. MTU
Tao Liu	Visiting Scholar	2015.10-2016.09	KIP Dept. MTU
Renjun Wang	Visiting Scholar	2016.8-2017.07	KIP Dept. MTU

## **PROFESSIONAL SERVICE**

### **Michigan physiological society (MPS):**

1. 2014 Inaugural MPS Meeting Planning Committee Member
2. 2014 Chair of Abstract Review Committee Inaugural MPS Meeting
3. 2015 MPS Meeting Membership/Fundraising and Abstract Awards Subcommittee
4. 2016-19 MPS Meeting Abstract Review Committee

### **American Physiological Society (APS):**

Chair of Featured Topics entitled "Ion channel modulation: Contributions to Autonomic Dysfunction in Cardiovascular and Metabolic Diseases", sponsored by APS NCAR for 2017EB meeting (Chicago, IL, April 22-26, 2017).

### **Manuscript peer review for Journals:**

- American Journal of Physiology Cell Physiology
- American Journal of Physiology Integrative and Comparative Physiology
- American Journal of Physiology Heart and Circulation Physiology
- Acta Physiologica
- Brain Research
- Brain Research Bulletin
- British Journal of Pharmacology
- Cellular Physiology and Biochemistry
- Frontiers in Neuroscience
- Frontiers in Physiology
- Hypertension
- International Journal of Hypertension
- Journal of Neurological Sciences
- Journal of Neurophysiology
- Journal of Applied Physiology
- Journal of Molecular and Cellular Cardiology
- Journal of the American Heart Association
- Neuroscience Bulletin
- Neural Plasticity
- PLoS One
- Psychopharmacology
- The Journal of Physiology (London)
- The Journal of Physiological Science

**Journal editorial board:**

- Frontiers in Autonomic Neuroscience (2015-present)
- Cardiovascular Pathology (2015-present)
- Chinese Journal of Hypertension (Foreign Editor) (2008-present)
- Neuroscience Bulletin (2018 Jan.-present)
- Chief editor proposed and were responsible for the Special Issue entitled “Regulation of Autonomic Nervous System” for Neuroscience Bulletin 2018-2019. <https://link.springer.com/journal/12264/35/1>

**OTHER EXPERIENCE AND PROFESSIONAL MEMBERSHIP**

1999-2004 Member of Society for Neuroscience  
 1999-present Member of American Physiological Society  
 2008-present Member of American Heart Association  
 2018-present Member of Chinese Neuroscience Society

**UNIVERSITY, COLLEGE AND DEPARTMENT COMMITTEE SERVICE (MTU)**

2011 Member, KIP Department Charter Committee  
 2011-present Member, KIP Department Council Committee  
 2011-2014 Member, KIP Department Graduate Proposal Committee  
 2011-present Member, Biotechnology Research Center (BRC/LSTI/HRI) in MTU  
 2012 Member, Biological Science Dept. Faculty Search Committee  
 2012, 2014 Member, KIP Assessment Committee  
 2013-2016 MTU Senate Representative  
 2013-2014 Member, MTU Academic Policy Committee (APC)  
 2012-2015 Chair, KIP Department, Faculty Search Committee  
 2014-2015 Member, MTU Research Policy Committee (RPC)  
 2014-2017 Member, MTU Graduate Faculty Council (GFC)  
 2016 Member, MTU College of Science & Arts (CSA) Dean Review Committee  
 2016-2017 Member, General Education and Assessment Committee  
 2017- Member, Biochemistry and Molecular Biology (BMB) steering committee  
 2017-2019 Member, MTU CSA Promotion & Tenure (P&T) review committee

2018 Member, MTU KIP Department Chair search committee member  
2019- Chair, MTU KIP Department Promotion, Tenure, and Reappointment (PTR) Committee.

**OTHER SERVICE**

2008 Serving as a judge at the Science & Engineering Fair of the Alamo Regional Academy of Science and Engineering, San Antonio, TX  
2011 KIP Department SFHI Cognate Reviewer  
2012-2014 Serving as a judge at the Graduate Research Colloquium (GRC), Graduate Student Government at Michigan Technological University  
2014 Serving as a faculty sponsor for Emily Morin's research paper (Under-Grad Student), Honors Institute, Michigan Technological University  
2014-present Serving as a judge at BRC/LSTI Research Forum at Michigan Technological University  
2014-present Serving as a judge at the Undergraduate Research Expo at Michigan Technological University  
2011-present Biological Science Dept. Graduate Candidates Review  
2014-present MTU Internal Research Excellence Fund (REF) Seed Grant Review  
2014-present KIP Dept. Graduate Candidates Review