CURRICULUM VITAE

Qing-Hui Chen, M.D. & 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/department/faculty/chen/

EDUCATION

1979-1984: **Bachelor of Medicine (M.D.)**
Nantong University College of Medicine, Nantong City, China

1987-1990: **M.S.**
Medical School of Southeast University, Nanjing City, China
Mentor: Re-Xing Chen, Ph.D. MD; Da-Guang Chen, Ph.D. MD;

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.

2010-2015 Assistant Professor/Tenure Track, Department of Kinesiology and Integrative Physiology (KIP), Michigan Technological University (MTU).

2016- Associate Professor (Tenured), Department of KIP, MTU

2016- Adjunct Associate Professor, Department of Biological Science, MTU

2016- Adjunct Associate Professor, Department of Biomedical Engineering, MTU

GRANT SUPPORT

Funds available:

1) 12/01/14-11/30/18
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 month summer)
The goal this project is to test the hypothesis that endoplasmic reticulum (ER) stress diminishes small conductance, Ca2+-activated K+ (SK) current within pre-sympathetic PVN neurons to increase their excitability, which may underlie the mechanisms of elevated sympathetic outflow in rats with high salt (HS) intake

2) 01/01/2016-12/31/2017
16PRE27780121 AHA (Predoctoral Fellowship, Midwest Affiliate)
"Acetate as an Active Metabolite of Ethanol: Neural and Cardiovascular Implications"
The goal of this project is to understand how acetate affects the central nucleus of amygdala projecting neurons to the rostral ventrolateral medulla and that impact on the sympathoexcitatory response.
PI: Andrew Chapp, PhD. Candidate
Supervisor: Qinghui Chen

3) 05/01/2016-08/31/2016
Portage Health Foundation Graduate Fellowship (MTU)
PI: Robert Larson, PhD. Candidate
Supervisor: Qinghui Chen

4) 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-PI: Qing-Hui Chen

5) 07/01/16-06/30/19
1R15HL129213-01NIH
"Prorenin receptor and sympathetic activation in salt-sensitive hypertension"
Co-PI: Qing-Hui Chen
PI: Zhiying Shan

PUBLICATIONS

Peer-Reviewed Journal publication since I have joined in KIP Dept, MTU (18 papers)

1. Andrew D. Chapp, Zixi Cheng**,** Zhiying Shan**,** **Qing-Hui Chen**. Long-term high salt intake involves reduced small conductance Ca2+-activated K+ (SK) current and increased excitability of PVN neurons with projections to the rostral ventrolateral medulla in rats. Neural Plasticity 2017 Sep. (In press) https://www.hindawi.com/journals/np/aip/7282834/
2. 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 Physiologica 2017 Aug. 30 [Epub ahead of print]
3. 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 Jun 30 [Epub ahead of print]
4. Huber MJ, **Chen QH,** Shan Z. The Orexin System and Hypertension. Cellular and molecular neurobiology. 2017 Mar 27 [Epub ahead of print]
5. 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 Ca2+ Store. Frontiers in neuroscience. 2017; 11:182 (p1-12).
6. Chen J, Li Z, Hatcher JT, **Chen QH**, Chen L, Wurster RD, Chan SL, Cheng Z. Deletion of TRPC6 Attenuates NMDA Receptor-Mediated Ca2+ Entry and Ca2+-Induced Neurotoxicity Following Cerebral Ischemia and Oxygen-Glucose Deprivation. Frontiers in neuroscience. 2017; 11:138 (p1-13).
7. Ji Y, Guo X, Zhang Z, Huang Z, Zhu J, **Chen QH**, Gui L. CaMKIIδ Meditates Phenylephrine Induced Cardiomyocyte Hypertrophy Through Store-Operated Ca^{2+} Entry. Cardiovascular Pathology 2017 27:9-17
8. Huber MJ, Basu R, Cecchettini 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.

9. Larson RA, Le Gui, Huber MJ, Chapp AD, Zhu J, LaGrange LP, Shan Z, **Chen QH.** Sympathoexcitation in AngII-salt hypertension involves reduced SK channel function in the hypothalamic paraventricular nucleus. Am J Physiology Heart Circulation Physiology 2015 308(12):H1547-55.

10. 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 amygdale (CeA) involves local activation of NMDA receptors in anesthetized rats. Am J Physiol Heart Circulation Physiology 2014;307(5):H701-9.

11. 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.

12. Lin M, Hatcher JT, Wurster RD, **Chen QH**, Cheng ZJ. Characteristics of Single Large-Conductance Ca2+-Activated K+ Channels and Their Regulation of Action Potentials and Excitability in vagal Cardiac Motoneurons. Am J Physiol Cell Physiol. 2014 Jan;306(2):C152-66.

13. 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 Ca2+-activated K+-channels. Am J Physiol Heart and Circ Physiol. 2013;304(1):H118-30.

14. Gui L, LaGrange LP, Larson RA, Gu M, Zhu J, **Chen QH.** Role of small conductance calcium-activated potassium channels expressed in hypothalamic PVN in regulating sympathetic nerve activity and arterial blood pressure in rats. Am J Physiol Regul Integr Comp Physiol. 2012;303(3): R301-310.

15. Lin M, Hatcher JT, **Chen QH**, Wurster RD, Harden WS, Li L and Cheng ZX: Maternal Diabetes Increases Large Conductance Ca^{2+}-Activated K^+ (BK) Outward Currents Which Alter Action Potential (AP) Properties But Do Not Contribute to Attenuated Excitability of Parasympathetic Cardiac Motoneurons (PCMNs) In the Nucleus Ambiguus (NA) of Neonatal Mice. Am J Physiol Regul Integr Comp Physiol 2011; 300:R1070-1078.

16. 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.

17. **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. **(* corresponding author)**

18. Lin M, **Chen QH**, Wurster RD, Hatcher JT, Liu YQ, Li LH, Harden WS, and Cheng ZX: Maternal Diabetes Increases Activity of Small Conductance Ca^{2+}-activated K^+ (SK) Channels Which Alters Action Potential Properties and Excitability of Cardiac Motoneurons in the Nucleus Ambiguus. J Neurophysiol. 2010; 104(4):2125-2138.

Peer-Reviewed Journal publication before I joined in KIP Dept, MTU (31 papers):

19. **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.

20. **Chen QH*** and Toney GM: Excitability of paraventricular nucleus neurones that project to the rostral ventrolateral medulla is regulated by small-conductance Ca2+-activated K+ channels. J. Physiology, 2009; 587:4235-4247. **(* corresponding author)**
(This work has already resulted in a Journal of Physiology article that was selected for special commentary)* J. *Physiology 2009; 587:4129-4130.

21. Shi P, Martinez MA, Calderon AS, **Chen QH,** Cunningham JT, and Toney GM: Intra-Carotid Hyperosmotic Stimulation Increases Fos Staining in OVLT Neurons that Project to the Hypothalamic PVN. J. Physiology 2008; 586(Pt 21):5231-5245.

22. 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 seisures. 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).

23. **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**.**
24. **Chen QH,** Haywood JR, Toney GM: Sympathoexcitation by PVN Injected Bicuculline Requires Activation of Excitatory Amino Acid Receptors. Hypertension 2003; 42(4):725-31
25. Toney GM, **Chen QH,** Cato MJ, Stocker SD: Central osmotic regulation of sympathetic nerve activity. Acta Physiol Scand. 2003; 177(1):43-55. Review**.**
26. **Chen QH,** Toney GM: Identification of two groups of spinally-projecting neurons in the hypothalamic paraventricular nucleus with distinct functional characteristics. Neuroscience 2003; 118:797-807.
27. 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
28. **Chen QH,** Toney GM: AT1-receptor blockade in the hypothalamic PVN reduces central hyperosmolality-induced renal sympathetic nerve activity. Am J Physiol Regul Integr Comp Physiol. 2001; 281: R1844-R1853.
29. 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.
30. Nishida Y, **Chen QH,** Hiruma MT, Terada SI and Horiuch J: Neuronal nitric oxide strongly suppresses sympathetic outflow in high-salt Dahl rats. J Hypertens 2001; 19:627-634.
31. Zhou MS, Nishida Y, Yoneyama H, **Chen QH,** Kosaka H: Potassium supplementation increase sodium excretion and nitric oxide production in hypertensive Dahl rats. Clin Exper Hypertens 1999; 21(8):1397-1411**.**
32. Zhou MS, Nishida Y, **Chen QH,** Kosaka H: Endothelium-derived contracting factor in carotid artery of hypertensive Dahl rats. Hypertension 1999; 34:39-43**.**
33. 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.
34. **Chen QH,** Nishida Y, Zhou MS, Murakami H, Okada Y, Morita H, Hosomi H, Kosaka H: Organ and development related differences in tissue noradrenaline concentration in Dahl rats. J Auton Nerv Syst 1998; 71:175-182**.**
35. 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**.**
36. **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.
37. **Chen QH,** Morita H, Nishida Y, Hosomi H: Effect of high salt diet on tissue noradrenaline concentrations in Dahl salt-resistant and -sensitive rats. Clin Exper Pharmacol Physiol 1995; 22(suppl I):209-211**.**
38. 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.
39. 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**.**
40. 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*)**.**
41. Zhou MS, Chen RX, **Chen QH,** Liu XH: Comparison between oral and subglossal administration of verapamil: Acute antihypertensive effects and it's plasma concentration. Journal of Cardiovascular and Pulmonary Disease (心肺血管病杂志) 1994; 13(2):120 (*Chinese*)**.**
42. Zhou MS, Guo JL, **Chen QH,** Wang LH, Chen RX: Comparison between conventional and slow-release verapamil in hypertensive patients: The therapeutic effect and steady-state plasma concentration. Journal of Chinese Circulation (**中国循**环杂志) 1993; 8(3):136-138 (*Chinese*)**.**
43. **Chen QH,** Zhou MS, Zhang L, Chen RX: Protective effect of Clonidine on arrhythmias and fine structure impairment induced by myocardial reperfusion in anaesthetized cats. Journal of Chinese Cardiology (**中**华心血管杂志) 1993; 32(1):50-52 (*Chinese*)**.**

44. **Chen QH,** Zhou MS, Zhang L, Chen RX: Pre-treatment with Clonidine prevent arrhythmias and homodynamic disturbance evoked by acute myocardial ischemia in anaesthetized cats. Acta Pharmacology Sinica (中国药理学通报) 1992; 8(1)73-75 (*Chinese*).

45. Zhou MS, **Chen QH,** Chen RX, Wang LH: The mechanism of reperfusion induced arrhythmias in anaesthetized cats: high sympathetic outflow and endogenous opiate peptides. Chinese Journal of Pathophysiology (中国病理生理杂志) 1992; 8(4):375 (*Chinese*)**.**

46. Zhou MS, **Chen QH,** Chen RX: Effect of naloxone on hemodynamics in heart failure dogs. Jiangsu Med. Journal (江苏医药杂志) 1992; 18(5):237-239 (*Chinese*)**.**

47. Zhou MS, Chen RX, **Chen QH**: Effect of verapamial on hemodynamics in anesthetized dogs. Bulletin of Chinese Heart, Lung & Blood Vessel (心肺血管病杂志) 1991; 10(4)311-313 (*Chinese*)**.**

48. Zhou MS, Chen RX, **Chen QH**: Effect of naloxone on reperfusion arrhythmia in cats. Journal of Nanjing Railway Med. College (南京铁道医学院学报) 1991;10(4):207-209 (*Chinese*)

49. **Chen QH,** Liu GL, Wang XP, Gu JG: Clinical experiences of AAI physiological Pacing (6 cases reports) Jiangsu Med. Journal (江苏医药杂志) 1991;17(3):130-132 *(Chinese)*

https://www.ncbi.nlm.nih.gov/myncbi/browse/collection/47953384/?sort=date&direction=descending

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 and submitted since I have joined in KIP Dept, MTU:

1. **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)
2. Andrew D. Chapp, Kyle M. Driscoll, Jessica Behnke, Zhiying Shan, **Qing-Hui Chen.** Acetate, an Ethanol Metabolite Increases Neuroinflammation and Neuronal Death: Implications in Ethanol Neurodegeneration. **Experiment Biology 2017 (Chicago, USA. April 22-26, 2017).** *(A. D. Chapp and* Jessica Behnke *are graduate students in my Lab at MTU)*
3. Jessica E. Behnke, Andrew D. Chapp, Kyle M. Driscoll, Zhiying Shan, **Qing-Hui Chen**. Acetate, the Metabolite of Ethanol, Increases Cytosolic Calcium and mRNA Expression Levels of EGR1 and TNFα in Dopaminergic Like PC12 Cells. **Experiment Biology 2017 (Chicago, USA. April 22-26, 2017).** *(A. D. Chapp and* Jessica Behnke *are graduate students in my Lab at MTU)*
4. Zixi Cheng, Ming Lin, Glenn M. Toney, Qing-Hui Chen. Small-conductance Ca2+-activated K+ (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).**
5. Enshe Jiang, Michael Huber, Yuanyuan Fan, Fengli Zhu, **Qing-Hui Chen**, Zhiying 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).**
6. Andrew D. Chapp, K.M. Driscoll, M.J. Huber, Z. Shan, J.R. Carter. L. Zhang, **Q.H. Chen.** The Excitatory and Cytotoxic Actions of Acetate on Neurons. **Research Society on Alcoholism 2017 (Denver, CO, June 24-28, 2017)** *(A. D. Chapp and M.J. Huber are graduate students in my Lab at MTU)*
7. Andrew D. Chapp, K. 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)** *(A. D. Chapp and* Jessica Behnke *are graduate students in my Lab at MTU).*

8. Michael Huber, Fengli Zhu, Robert A. Larson, **Qing-Hui Chen** and Zhiying Shan. Increased Brain iNOS Contributes to Hypertension in Dahl Salt Sensitive Rats. **2016 HBPR Scientific Sessions** (New Orleans, Louisiana USA. Nov. 12-16, 2016).
9. 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^{2+} 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).
10. **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)
11. 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.** 3rd Annual Meeting of Michigan Physiology Society 2016 (Detroit, MI, USA. May 12-13, 2016). *(R. A. Larson is student in my Lab at MTU).*
12. 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. 3rd Annual Meeting of Michigan Physiology Society 2016 (Detroit, MI, USA. May 12-13, 2016). *(A. D. Chapp is student in my Lab at MTU).*
13. 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). 3rd Annual Meeting of Michigan Physiology Society 2016 (Detroit, MI, USA. May 12-13, 2016). *(A.D. Chapp is student in my Lab at MTU).*
14. 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). Experiment Biology 2016 (San Diego, USA. April 2-6, 2016). (992.8)*The FASEB Journal 30 (2016). (A.D. Chapp is graduate student in my Lab at MTU)*
15. 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). *(R.A. Larson, A. D. Chapp are graduate student in my Lab at MTU)*
16. Michael J. Huber, Fengli Zhu, Ningjun Li, **Qing-Hui Chen**, Zhiying Shan. Upregulation of Orexin in the Paraventricular Nucleus Contributes to Salt Sensitive Hypertension. Experiment Biology 2016 (San Diego, USA. April 2-6, 2016). *(M.J. Huber is graduate student in my Lab at MTU)*
17. Fengli Zhu, Robert Larson, Peng Shi, Ningjun Li, **Qinghui Chen** and Zhiying 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). *(R.A. Larson is graduate student in my Lab at MTU).*
18. Ida T. Fonkoue, Brett Gervais, **Qinghui Chen**, and Jason R. 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).
19. **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)
20. 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^{2+} ATPase. **Oral Presentation. 2015 HBPR Scientific Sessions** (Washington, DC, USA. Sep. 16-19, 2015). *(R. A. Larson; A.D. Chapp; M.J. Huber are students in my Lab at MTU).*

21. 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 2015** (Boyne Falls, MI, USA. April 30-May 1, 2015). *(A.D. Chapp; M.J. Huber are students in my Lab at MTU).*
22. 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 2015** (Boyne Falls, MI, USA. April 30-May 1, 2015). *(R. A. Larson; A.D. Chapp; M.J. Huber are students in my Lab at MTU).*
23. Michael J. Huber, Rupsa Basu, Cassie Cecchettini, **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 2015** (Boyne Falls, MI, USA. April 30-May 1, 2015). *(M.J. Huber is student in my Lab at MTU).*
24. 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 2015** (Boyne Falls, MI, USA. April 30-May 1, 2015).
25. Michael J. Huber, Rupsa Basu, **Qing-Hui Chen** and Zhiying Shan. Prorenin Receptor Activation in the PVN Increases Sympathetic Outflow in Anesthetized Rat. **Experiment Biology 2015** (Boston, USA. March 28-April 01, 2015). *(M.J. Huber is graduate student in my Lab at MTU)*
26. Michael J Huber, Andrew D Chapp, Le Gui, Mingjun Gu, Zhiying Shan, **Qing-Hui 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). *(M.J. Huber and A.D. Chapp are graduate student in my Lab at MTU)*
27. 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). *(A.D. Chapp and M.J. Huber are graduate student in my Lab at MTU)*
28. Ida T. Fonkoue, **Qing-Hui Chen,** Jason R. Carter. Acute alcohol consumption modulates sympathetic vascular transduction differently in Caucasians and African Americans. **Experiment Biology 2015** (Boston, USA. March 28-April 01, 2015).
29. **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. *Alcoholism – Clinical and Experimental Research*. 38:163A, 2014. **The 37th Annual Research Society on Alcoholism Scientific Meeting** (Belleve, Washington, June 21-25, 2014). *(A.D. Chapp; R. A. Larson; M.J. Huber are students in my Lab at MTU).*
30. 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** (Belleve, Washington, June 21-25, 2014).
31. 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 2014** (East Lansing, MI, USA. May 15-16, 2014). *(A.D. Chapp; R. A. Larson; M.J. Huber are students in my Lab at MTU)*
32. 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). *(A.D. Chapp; R. A. Larson; M.J. Huber are students in my Lab at MTU)*
33. 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). *(A.D. Chapp; R. A. Larson; M.J. Huber are students in my Lab at MTU)*

34. 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).
35. **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). *(A.D. Chapp; R. A. Larson; M.J. Huber are students in my Lab at MTU)*
36. 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). *(A.D. Chapp; R. A. Larson are students in my Lab at MTU)*
37. 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). *(R. A. Larson; A.D. Chapp; A.P. Keim are students in my Lab at MTU)*
38. **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 ResortGleneden Beach, OR, USA July 14-19, 2013).
39. 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.*
40. **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). *(R. A. Larson; is student in my Lab at MTU)*
41. 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).
42. 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).
43. 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).
44. 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).

Abstracts published and presented before I joined in KIP Dept, MTU:

45. 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).
46. 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).

47. **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).
48. **Chen QH**, Dong Y, Andrade MA, Calderon AS and Toney GM: Down-regulation of SK channel function among pre-sympathetic PVN neurons and sympathoexciation in salt-sensitive hypertension. **Experiment Biology 2010** (California, USA. April 24-28, 2010).
49. 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)
50. **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)
51. **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)
52. 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)
53. **Chen QH,** Andrade MA, Calderon AS, Mifflin SW, and Toney GM: Effects of normoxic and hypoxic breathing on tissue pO2 in the hypothalamic PVN: implications for hypoxic activation of sympathetic nerve activity (SNA). **Experiment Biology 2008** (San Diego, USA. April 5-9, 2008)
54. **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)
55. **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)
56. **Chen QH**, Mary Ann Andrade, Alfredo S. Calderon, Steven W. Mifflin, and Glenn M. Toney: Effects of normoxic and hypoxic breathing on tissue pO2 in the hypothalamic PVN: implications for hypoxic activation of sympathetic nerve activity (SNA). **Experiment Biology 2008** (San Diego, USA. April 5-9, 2008)
57. 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).
58. **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).
59. **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).
60. **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)
61. 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)
62. **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*
63. **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*

64. 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*
65. 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*
66. **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*
67. **Chen QH**, Bishop VS, Toney GM: Chronic infusion of angiotensin II (Ang II) and NaCl reduces baroreceptor-evoked NTS unit discharge through recruitment of a putative vasopressinergic pathway from the PVN. **2000 American Physiological Society Conference "Baroreceptor and Cardiopulmonary Receptor Reflexes"** (Iowa City, USA. August, 2000)
68. **Chen QH,** Toney GM: Discharge properties and Osmotic Responsiveness of hyperthalamic 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*
69. **Chen QH,** Toney GM: Discharge properties and Osmotic Responsiveness of hyperthalamic PVN neurons projecting to the RVLM**. 1999 FASEB Summer Research Conferences** (Vermont, USA. July 4-9, 1999)
70. 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*
71. 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*
72. 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*
73. 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*
74. **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*
75. 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*.
76. **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 Japaneses Pathophysiology 1995;4(2):10A-1415*
77. Zhou MS, **Chen QH,** Morita H, Nishida Y, Yamashida Y, Hosomi H: Effect of environment on tissue norepinephrine concentration in the Hokkaido Salmon. **The 1st China-Japan International Congress of Pathophysiology** *(Dalian, China, Oct.,1995) Journal of Japaneses Pathophysiology 1995;4(2):10B-1415*
78. **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 2nd International Congress of Pathophysiology** *(Kyoto, Japan, Nov., 1994)*
79. **Chen QH,** Morita H, Nishida Y, Hosomi H: Effect of high-salt diet on tissue noradrenaline concentration in Dahl-strain rats. **The 8th International Symposium on SHR and Related Studies** *(Osaka, Japan, Oct., 1994)*

80. **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.*

(National Conferences of Physiology and Pathophysiology Society)

81. 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 76th Japanese Physiology Conference** *(Nagazaki, Japan, Mar., 1999) Jpn. J. Physiol. 1999;49 (suppl):S109*
82. Nishida Y, **Chen QH,** Zhou MS, Yoneyama H, Kosaka H: Neural NO regulates sympathetic nerve activity in Dahl salt-sensitive and –resistant rats. **The 76th Japanese Physiology Conference** *(Nagazaki, Japan, Mar., 1999) Jpn. J. Physiol. 1999;49 (suppl):S171*
83. 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 75th Japanese Physiology Conference** *(Kanazawa, Japan, Mar., 1998) Jpn. J. Physiol. 1998;48 (suppl):S67*
84. **Chen QH,** Nishida Y, Zhou MS, Yoneyama H, Murakami H, Kosaka H: L-Arginine improved baroreflex function in prehypertensive Dahl salt-sensitive rats. **The 75th Japanese Physiology Conference** *(Kanazawa, Japan, Mar., 1998) Jpn. J. Physiol. 1998;48 (suppl):S177*
85. 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 74th Japanese Physiology Conference** *(Hamamasu, Japan, Mar., 1997) Jpn. J. Physiol. 1997;47(suppl):S77*
86. 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 74th Japanese Physiology Conference** *(Hamamasu, Japan, Mar., 1997) Jpn. J. Physiol. 1997;47(suppl):S77*
87. 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 74th Japanese Physiology Conference** *(Hamamasu, Japan, Mar., 1997) Jpn. J. Physiol. 1997;47(suppl):S77*
88. Nishida Y, Drobnik J, **Chen QH**, Zhou MS, Okada K, Murakami H: The baroreflex system causes physiol movement-induced high blood pressure by an increase in total peripheral resistance (TPR). **The 74th Japanese Physiology Conference** *(Hamamasu, Japan, Mar., 1997) Jpn. J. Physiol. 1997;47(suppl):S87*.
89. **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 it's sinoaortic denervated rats. **The 73rd Japanese Physiology Conference** *(Fukui, Japan, Apr., 1996) Jpn. J. Physiol. 1996;46(suppl):S223*
90. Morita H, Tsunook J, Sugimoto I, **Chen QH**, Zhou MS, Nishida Y, Hosomi H: Role of the hepato-portal Na+ sensitive mechanism in controlling Na+ balance and arterial pressure in Dahl rats. **The 73rd Japanese Physiology Conference** *(Fukui, Japan, Apr., 1996) Jpn. J. Physiol. 1996;46(suppl):S165*
91. Tsunook 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 73rd Japanese Physiology Conference** *(Fukui, Japan, Apr., 1996) Jpn. J. Physiol. 1996;46(Suppl):S49*
92. **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 72nd Japanese Physiology Conference** *(Nagoya, Japan, Apr., 1995) Jpn. J. Physiol. 1995;45 (suppl):763*
93. 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 4th Japanese Pathophysiology Conference** *(Japan, Jan., 1996) Jpn. J. Pathophysiology. 1996;4(3):S51*
94. **Chen QH**, Zhou MS, Morita H, Nishida Y, Yamashida Y, Hosomi H: Effect of baroreflex on sodium metabolism in hypertensive Dahl rats. **The 4th Japanese Pathophysiology Conference** *(Japan, Jan., 1996) Jpn. J. Pathophysiology. 1996;4(3) :S51*

News:

http://www.newswise.com/articles/potassium-channel-activation-linked-to-heart-disease

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: 2nd 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 ventrallateral medulla" project. (The American Physiological Society, Neuronal Control and Autonomic Regulation Section)

1994-1998 Scholarship (~$16,000.00/year) from the Ministry of Education, Science and Culture, Japan.

1995 Honor for outstanding work for the organization of the 1st International China-Japan Pathophysiology Conference. (The China Pathophysiological Society)

ORAL PRESENTATION AT SCIENTIFIC MEETING/CONFERENCE

2017 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. 10-13, 2017)
Title: "Integrative Physiology---Exercise and Autonomic Control of Cardiovascular Function"

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 at Experimental Biology meeting (Chicago, USA. April 22-26, 2017).
Title: "Small-conductance Ca2+-activated K+ (SK) channels regulate pre-sympathetic neurons in the hypothalamic paraventricular nucleus (PVN) and parasympathetic cardiomotor neurons (CMN) in the nucleus ambiguus (NA): Pathological changes".

2016 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. 11-14, 2016)
Title: "Exercise and Autonomic Control of Cardiovascular Function"

2016 Selected oral presentation at 3rd Annual Meeting of Michigan Physiology Society (Detroit, MI, Wayne State University School of Medicine, USA. May 12-13, 2016) (Presented by **M.J. Huber** who is graduate student in my Lab at MTU)

Title: “Increased Brain Proinflammatory Cytokines Contribute to Augmented Neuronal Activity in Salt Sensitive Hypertension”.

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 is 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^{2+} ATPase”**.**

2015 Selected oral presentation at 2nd Annual Meeting of Michigan Physiology Society 2015 (Boyne Falls, MI at the Boyne Mountain Resort, USA. April 30-May 01, 2015)
(Presented by **A.D. Chapp** who is 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 2nd Annual Meeting of Michigan Physiology Society (Boyne Falls, MI at the Boyne Mountain Resort, USA. April 30-May 01, 2015)
(Presented by **R. A. Larson** who is 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)”**.**

2015 Selected oral presentation at 2nd Annual Meeting of Michigan Physiology Society 2015 (Boyne Falls, MI at the Boyne Mountain Resort, USA. April 30-May 01, 2015)
(Presented by **M.J. Huber** who is graduate student in my Lab at MTU)
Title: “ Sympathoexcitation by PVN (pro)renin receptor activation may involve reactive oxygen species and iNOs”.

2014 Selected oral presentation in 1st Annual Meeting of Michigan Physiology Society 2014 (East Lansing, MI, USA. May 15-16, 2014)
(Presented by **A.D. Chapp** who is 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 ResortGleneden 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 ventrallateral medulla".

STUDENTS HONORS/AWARDS

2017 Student Merit Award to graduate student, **Andrew D. Chapp**, PhD candidate in my Lab, Research Society on Alcoholism (RSA), 2017 RSA meeting (Denver, CO, June 24-28, 2017).

2016 Caroline tum Suden/Frances Hellebrandt Professional Opportunity Awards to graduate student, **Michael J. Huber**, Master candidate in my Lab, American Physiological Society, 2016 EB meeting (San Diego, CA, USA).

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).

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, 2nd 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^{2+} ATPase". (Sep. 24-25, 2015, 1st Life Science and Technology Institute (LSTI) Research Forum of Michigan Tech. Univ., MI).

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, 1st Annual Meeting of Michigan Physiology Society).

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 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 Department (2013 Graduated)
(2) Christopher Schwartz, Ph.D in Biological Sciences Department (2011 Graduated)
(3) Andrew Chapp, MS in Chemistry Department (2012 Graduated)
(4) Sarah Stream, MS in KIP Department (2012 Graduated)
(5) Srinivas Rao Mandalapu, MS in Chemistry Department (2012 Graduated)
(6) Robert Larson, MS in KIP Department (2012 Graduated)
(7) Xin Yan Ph.D. candidate in Chemistry Department (in Progress 2015)
(8) Shanshan Hou Ph.D. candidate in Chemistry Department (in Progress 2015)
(9) Weixiang Liu MS in Biological Sciences Department (2016 Graduated)
(10) Mu Yang, Ph.D. Chemistry Department (2016 Graduated)
(11) Ida Fonkoue, Ph.D. Biological Science Department (2016 Graduated)
(12) Christina Welch, Ph.D. Chemistry Department (in Progress 2016)

MENTORING EXPERIENCE:

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

Name	Type	Training Period	Employer
M Gu	Research Associate	2011-	KIP Dept. MTU
AD Chapp	Ph.D. Candidate	2014 Spring-	Bio. Sci. MTU
J. Behnke	MS Candidate	2016 Fall-	Bio. Sci. Dept. MTU
Zoe' LaLonde	Under-Grad Student	2016 Fall-	Bio. Sci. Dept. MTU
K. Juras	Under-Grad Student	2016 Fall-	BioMed Engineering Dept. MTU
E. Hoban	Under-Grad Student	2016 Spring-	Bio. Sci. Dept. MTU (pre-med)

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

Name	Type	Training Period	Employer
L Gui	Post-Doc	2011-2012	KIP Dept. MTU
AP Keim	Under-Grad Student	2012 Summer Research	Bio. Med. Dept. MTU
S Sitdamlong	Under-Grad Student	2012 Fall	Bio. Sci. Dept. MTU
C Matchinski	Under-Grad Student	2012 Fall	Bio. Sci. Dept. MTU
MJ Huber	Under-Grad Student	2013 Summer Research	Bio. Sci. Dept. MTU
AD Chapp	Research Associate	2012-2013	KIP Dept. MTU
J. Pecore	Under-Grad Student	2014 Fall	Bio. Sci. Dept. MTU

D. Schreifels	Under-Grad Student	2014 Fall	Cognitive & Learning Sciences, MTU
Yonas Araya	Under-Grad Student (MiCUP program)	2016 Summer-track A (May 9-June 24)	MiCUP program (MTU) (Grand Rapids Community College)
Tao Liu	Visiting Scholar	2015.10-2016.09	KIP Dept. MTU
MJ Huber	MS Candidate	2014 Spring-2016 Fall	Bio. Sci. Dept. MTU
RA Larson	Ph.D. Candidate	2013 Spring-2016 Summer	Bio. Sci. Dept. MTU

Students, post-doc and research associate mentoring at UTHSCSA (past):

Name	Type	Training Period	Employer
Angelo Yu	Medical Student	1998 Summer Research	UT College of Med., Galveston, TX
Peng Shi	Graduate Student	2003 Student Rotation	Physiology Dept. UTHSCSA
Wei Liu	Graduate Student	2007 Student Rotation	Physiology Dept. UTHSCSA
Ying Dong	Post-Doc	2006-2008	Physiology Dept. UTHSCSA
MA Andrade	Research Associate	2008-2011	Physiology Dept. UTHSCSA

PROFESSIONAL SERVICE

Michigan physiological society (MPS):

1. 2014 Inaugural MPS Meeting Planning Committee Member
2. Chair of Abstract Review Committee for 2014 Inaugural MPS Meeting
3. 2015 MPS Meeting Membership/Fundraising and Abstract Awards Subcommittee
4. 2016 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
- Hypertension
- Journal of Neurological Sciences
- Journal of Neurophysiology
- Journal of Applied Physiology
- Journal of Molecular and Cellular Cardiology
- PLos One
- The Journal of Physiology (London)
- Brain Research
- Brain Research Bulletin
- Frontiers in Neuroscience
- The Journal of Physiological Science
- Journal of the American Heart Association

Journal editorial board:

- Frontiers in Autonomic Neuroscience (2015-present)
- Cardiovascular Pathology (2015-present)
- Chinese Journal of Hypertension (Foreign Editor) (2008-present)

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

UNIVERSITY SERVICE (MTU)

2011 KIP Department Charter Committee
2011-present KIP Department Council Committee
2011 KIP Department SFHI Cognate Reviewer
2011-present KIP Department Graduate Proposal Committee
2011-present Member of Biotechnology Research Center (BRC/LSTI) in MTU
2011-present Biological Science Dept. Graduate Candidates Review
2012 Biological Science Dept. Faculty Search Committee
2012, 2014 KIP Assessment Committee
2013-present MTU Senate Representative
2013-2014 MTU Academic Policy Committee (APC)
2012-2015 KIP Department, Chair of Faculty Search Committee
2014-2015 MTU Research Policy Committee (RPC)
2014-present MTU Internal Research Excellence Fund (REF) Seed Grant Review Committee
2014-present KIP Dept. Graduate Candidates Review
2014-present MTU Graduate Faculty Council (GFC)
2016 MTU CSA Dean Review Committee
2016-present General Education and Assessment 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
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