

CURRICULUM VITAE

SHAO-YU CHEN, Ph.D.

Professor and University Scholar

University of Louisville School of Medicine

PERSONAL INFORMATION

Shao-yu Chen, Ph.D.
Professor and University Scholar
Department of Pharmacology and Toxicology
Room 518, CTRB
University of Louisville Health Sciences Center
505 S Hancock Street
Louisville, Kentucky 40292
Email: shaoyu.chen@louisville.edu

EDUCATION AND TRAINING

1993-1998 Postdoctoral Research Associate. Abnormal embryonic development and developmental toxicology, Department of Cell and Developmental Biology, Bowles Center for Alcohol Studies, University of North Carolina, Chapel Hill, North Carolina
1991 Ph.D. in Biochemistry, Fujian Agriculture and Forestry University, China
1985 M.S. in Biochemistry, Fujian Agriculture and Forestry University, China
1982 B.S. in Agriculture, Fujian Agriculture and Forestry University, China.

ACADEMIC APPOINTMENTS

2014-present	Professor with tenure and University Scholar	Department of Pharmacology and Toxicology University of Louisville Alcohol Research Center School of Medicine University of Louisville Louisville, Kentucky
2009-2014	Associate Professor with tenure	Department of Cancer Biology & Pharmacology University of Illinois College of Medicine at Peoria, Peoria, Illinois
2004-2009	Associate Professor	Department of Cell and Developmental Biology Bowles Center for Alcohol Studies University of North Carolina at Chapel Hill Chapel Hill, North Carolina
1998-2004	Assistant Professor	Department of Cell and Developmental Biology Bowles Center for Alcohol Studies University of North Carolina at Chapel Hill Chapel Hill, North Carolina

HONORS AND AWARDS

- 2019- 2023 Charter Member, NIH CSR, The Neurotoxicology and Alcohol (NAL) Study Section.
2015 Honored at the University of Louisville 14th Annual Celebration of Faculty Excellence
2014 - University Scholar, University of Louisville
2013 Outstanding Research Award, University of Illinois College of Medicine at Peoria
2012 Outstanding Teaching Award, University of Illinois College of Medicine at Peoria
2011 Outstanding Research Award, University of Illinois College of Medicine at Peoria
2003-2009 NIH Research Scientist Career Development Award
1997 Eli Lilly Young Investigator Award by American Teratology Society
1995 Young Investigator Travel Award by American Teratology Society

HONORS AND AWARDS GIVEN TO CHEN'S MENTEES

- 2019 Yihong Li (graduate student) received a Student Merit Award, the Research Society on Alcoholism.
2019 Dr. Huadong Fan (postdoc research associate) received a Junior Investigator Award, the Research Society on Alcoholism.
2018 Yihong Li (graduate student) received a Student Merit Award, the Research Society on Alcoholism.
2018 Dr. Huadong Fan (postdoc research associate) received a Junior Investigator Award, the Research Society on Alcoholism.
2016 Dr. Fuqiang Yuan (postdoc research associate) received a Junior Investigator Award, the Research Society on Alcoholism.
2015 Dr. Fuqiang Yuan (postdoc research associate) received a Junior Investigator Award, the Research Society on Alcoholism.
2014 Dr. Xiaopan Chen (postdoc research associate) received a Junior Investigator Award, the Research Society on Alcoholism.

FUNDED RESEARCH ACTIVITY

Current:

1. **R01** AA028435 NIAAA/NIH (Chen, S.-Y)
Role of exosomes in the coordinated migration of neural crest cells and placodes and ethanol-induced teratogenesis. \$ 1,953,438.00, 08/01/20 – 07/31/25
Role: PI.
2. **R01** AA021434 NIAAA/NIH (Chen, S.-Y)
Role of microRNAs in ethanol-induced apoptosis and teratogenesis. \$ 1,794,325.00, 07/01/13 – 06/30/21.
Role: PI.
3. **P50**, AA024337 NIAAA/NIH Project 3 (Chen, S.-Y.)

- Sulforaphane-mediated epigenetic modulation of ethanol-induced apoptosis and teratogenesis.
\$1,207,905.00, 05/15/16 – 04/30/21
Role: Project PI (P50 PI. McClain, CJ).
4. **T32** ES011564 NIEHS/NIH (David Hein)
UofL environmental health sciences training program. \$2,311,000.00, 2016 – 2021
Role: Mentor
 5. **R25** CA134283 NCI/NIH (Hein & Kidd)
Cancer education program for professional and undergraduate students. \$1,620,000, 2017 – 2022
Role: Mentor.
 6. **R35** ES014559 NIEHS/NIH (States)
Summer Environmental Health Sciences Training Program. \$190,000. 2016 – 2021
Role: Mentor
 7. **P30** ES030283 NIEHS/NIH (States)
University of Louisville Center for Integrated Environmental Health Sciences. \$7,700,000.
07/15/2020 – 03/31/2025
Role: Member

Completed projects:

1. **R01** AA021434 NIAAA/NIH (Chen, S.-Y)
Role of Siah1 in ethanol-induced apoptosis and teratogenesis. \$1,736,815. 07/01/12 – 06/30/19
Role: PI.
2. **R01** AR063630 NIAMS/NIH (Wu, Xiaoyang, UC)
Coordinated cytoskeletal dynamics in skin somatic stem cells. \$1,692,670.00 (\$199,375.00 for subcontract). 2013 – 2018
Role: Subcontract PI.
3. **R01** AA017446 NIAAA/NIH (Chen, S.-Y)
Role of Nrf2 signaling in modulating ethanol-induced teratogenesis. \$1,569,426.00. 2008 – 2014
Role: PI.
4. **K01** AA013908 NIAAA/NIH (Chen, S.-Y)
Molecular mechanisms of alcohol-related birth defects. \$579,341.00. 2003 – 2009
Role: PI.
5. **P50** AA11605 NIAAA/NIH (Crews, UNC)
Component 5: Pathogenesis and mechanisms of ethanol-induced teratogenicity. \$1,429,009 (component 5). 2007 – 2009
Role: Co-I
6. **R01** AA012974 NIAAA/NIH (Charness, M, Harvard)
Alcohol and cell adhesion. \$1,044,000, 2006 – 2009
Role: Co-I
7. **P50** AA 11605 NIAAA/NIH (Crews, UNC)
Component 4: Mechanisms of ethanol-induced teratogenicity. \$1,174,297 (component 4). 2002 – 2007.
Role: Co-I.

8. **R01** AA012974 NIAAA/NIH (Charness M, Harvard)
Alcohol and cell adhesion. \$801,647.00, 2001 – 2006.
Role: Co-I
9. **P50** AA 11605 NIAAA/NIH (Crews, UNC)
Component 4: Mechanisms of ethanol-induced teratogenicity. \$7,917,000. 1997 -2002
Role: Co-I.

TEACHING ACTIVITIES

University of Louisville

2020	PHTX 641 Graduate Pharmacology I
2020	BMSC 807-05 Pharmacology and Dental Therapeutics
2019	PHTX 644 Graduate Toxicology II
2019	PHTX 642 Graduate Pharmacology II
2018	PHTX 644 Graduate Toxicology II
2018	PHTX 642 Graduate Pharmacology II
2018	BMSC 807-05 Pharmacology and Dental Therapeutics
2017	BMSC 807-05 Pharmacology and Dental Therapeutics
2016	PHTX 655 Neuropharmacology
2016	PHTX 643 Graduate Toxicology I
2016	PHTX 641 Graduate Pharmacology I
2015	PHTX 655 Neuropharmacology

University of Illinois College of Medicine at Peoria

2010 – 2014: Basic and Clinical Pharmacology

University of North Carolina at Chapel Hill

1998: Vertebrate Development and Teratology

GRADUATE/POSTGRADUATE STUDENTS SUPERVISED:

Graduate Student:

Major advisor:

- Yihong Li, Ph.D. candidate, Department of Pharmacology and Toxicology 2017 – 2020
- Yihong Li received a Student Merit Award from the Research Society on Alcoholism in 2018 and 2019. Yihong received her Ph.D. degree in Spring 2020.

Committee member:

- Yuxuan Zheng, Ph.D. candidate, Department of Pharmacology and Toxicology, 2017 - 2020
Jamies Young, Ph.D. candidate, Department of Pharmacology and Toxicology, 2018 - present

Mengwei Jiang, Ph.D. candidate, Department of Pharmacology and Toxicology, 2019 - present

Postdoctoral Fellow:

University of Louisville

Lanhai Lu, Ph.D. 2017 – present

Ting Wu, Ph.D. 2016 – 2019

Huadong Fan, Ph.D. 2016 – present

- Dr. Huadong Fan received a Junior Investigator Award from the Research Society on Alcoholism in 2018 and 2019.

Yang Yun, Ph.D. 2015 – 2016

Xiaobing Tan, Ph.D. 2015 – 2016

Fuqiang Yuan, Ph.D. 2014 – present

- Dr. Fuqiang Yuan received a Junior Investigator Award from the Research Society on Alcoholism in 2015 and 2016.

Xiaopan Chen, Ph.D. 2014 – 2015

University of Illinois

Fuqiang Yuan, Ph.D. 2013 – 2014

Xiaopan Chen, Ph.D. 2010 – 2014

- Dr. Xiaopan Chen received a Junior Investigator Award from the Research Society on Alcoholism in 2014.

Liang Zheng, Ph.D. 2014

Bhavesh Ahir, Ph.D. 2010

Haijing Sun, Ph.D. 2009 – 2011

University of North Carolina at Chapel Hill

Dong Yan, Ph.D. 2008 – 2009

Jian Dong, Ph.D. 2005 – 2009

Zhong Lu, Ph.D. 2004 - 2005

Visiting Scholar

University of Louisville

Keling Wang, Ph.D., 2014 - 2015

University of Illinois

Yongda Lin, Ph.D., 2010

Medical Students

University of Illinois (Pre-clinic advisor)

Anthony Simone, 2013 – 2014
Philip Kuo, 2013 – 2014
Andrew Mills, 2012 – 2013
Bradley Johnson, 2012 – 2013
Cara O'Brien, 2011- 2012

Undergraduate Students:

University of Louisville

Yue Zhang (BS candidate, MIT), 2018

University of Illinois

Kely Mou (BS candidate), 2014
Jane Yap (BS candidate, UIC), 2012

University of North Carolina at Chapel Hill

Sharon Ellis (BS candidate, UNC), 1998 - 1999

SERVICE:

A. University Service

University of Louisville

2019 - Member, Research Committee, School of Medicine, University of Louisville
2015 - Member, Graduate Student Admission Committee, Department of Pharmacology and Toxicology.

University of Illinois

2012- 2014 Member, Institutional Chemical Safety Committee, University of Illinois College of Medicine at Peoria
2011- 2014 Faculty senator, University of Illinois at Chicago
2010- 2014 Member, Institutional Biosafety Committee, University of Illinois College of Medicine at Peoria

University of North Carolina at Chapel Hill

2005 Alternate member, Faculty Council of the University of North Carolina at Chapel Hill

B. National and International Service:

Editorial Board Memberships:

2020 - Present	Associate Editor	Journal of Hazardous Materials (Impact factor: 9.038)
2011- Present	Academic Editor	<i>Oxidative Medicine and Cellular Longevity</i> (Impact factor: 4.580)
2020 – Present	Editorial Board Member	<i>Annals of Clinical Pharmacology & Toxicology</i>
2012- 2018	Editorial Board Member	<i>Frontiers in Biology (Indexed in PubMed)</i>
2013- Present	Editorial Board Member	<i>Journal of Alcoholism and Drug Dependence</i>

National grant review panels:

2019 – 2023	Charter Member, NIH Center for Scientific Review, The Neurotoxicology and Alcohol (NAL) study section.	
2018	Ad Hoc Member, NIH, NIAAA, AA-1 study section.	
2017	Ad Hoc Member, NIH Center for Scientific Review. The Neurotoxicology and Alcohol (NAL) study section.	
2015	Ad Hoc Member, NIH Center for Scientific Review. The Neurotoxicology and Alcohol (NAL) study section.	
2009	Member, NIH, Center for Scientific Review, Special Emphasis Panel, ZRG1 IFCN-L (50) R, June 2009.	
2009	Member, NIH, Center for Scientific Review, RFA OD-09-003: Challenge Grants Panel 4, 2009/10 ZRG1 RPHB-A (58) R, July 2009	
2009	Member, NIH Center for Scientific Review, 2009/10 ZRG1 CB-L (50) R – Developmental Pharmacology Special Emphasis Panel. August 2009	
2009	Ad Hoc Member, NIH Center for Scientific Review. The Neurotoxicology and Alcohol (NAL) study section. October 2009.	
2008	Ad Hoc Member, NIH, AA-4 study section	
2008	Member, NIH/NIAAA Special Emphasis Panel/Scientific Review Group 2008/08 ZAA1 EE	

International grant review panels:

2019	Reviewer	French National Research Agency, France.
2017	Reviewer	Icelandic Research Fund, Iceland
2009-2015	Reviewer	Italian Ministry of Health, Italy
2015	Reviewer	Nature Science Foundation, China
2009	Reviewer	Israel Science Foundation (ISF), Israel
2005	Reviewer	Ontario Research Fund, Canada

Professional Society Service:

2020-2024	Member, Publication Committee, Society for Birth Defects Research and Prevention.
-----------	---

2016-2019	Member, Awards Committee, Society for Birth Defects Research and Prevention.
2018	Member, Program Committee, 2019 Annual Meeting of Reproductive and Developmental Toxicology Specialty Section of the Society of Toxicology.
2018	Member, Abstract Review Committee, 2018 Annual Meeting of Teratology Society.
2009-2010	Member, Program Committee, Research Society on Alcoholism.
2004	Panelist and Discussion Facilitator, Fetal Alcohol Syndrome and Apoptosis, Research Society of Alcoholism Annual Scientific Meeting.

Other services

2018	Member, Organizing Committee, 16 th Global Summit on Toxicology and Applied Pharmacology, Las Vegas, Nevada, USA.
2018	Member, Advisory Committee, 2018 Taishan Academic Forum: International Neuroscience and Psychiatry Summit.
2017	Member, Program Committee, the 7 th Annual World Congress of Molecular & Cell Biology.
2017	Chair, Section 102: Chromatin and Epigenetics, the 7 th Annual World Congress of Molecular & Cell Biology.
2017	Reviewer, University of Alabama at Birmingham Nutrition and Obesity Research Center Pilot & Feasibility Program.

Manuscript Reviewer for the following scientific journals:

- 1) Alcohol
- 2) Alcoholism: Clinical and Experimental Research
- 3) American Journal of Drug and Alcohol Abuse
- 4) Antioxidants
- 5) Antioxidants and Redox Signaling
- 6) Applied Physiology, Nutrition, and Metabolism
- 7) BBA – Molecular Basis of Disease
- 8) Biochemistry and Cell Biology
- 9) Biochemical Pharmacology
- 10) Bioscience Reports
- 11) Birth Defects Research Part A: Clinical and Molecular Teratology
- 12) Cell Biology and Toxicology
- 13) Cell Biology International
- 14) Developmental Biology
- 15) Drug Design, Development and Therapy
- 16) Environmental Toxicology and Pharmacology
- 17) Epigenetics & Chromatin
- 18) European Journal of Pharmacology
- 19) Food and Chemical Toxicology
- 20) Free Radical Biology and Medicine

- 21) Frontier in Biology
- 22) Frontier in Genetics
- 23) International Journal of Developmental Neuroscience
- 24) Journal of American College of Nutrition
- 25) Journal of Diabetes Research
- 26) Journal of Hazardous Materials
- 27) Journal of Membrane Biology
- 28) Journal of Neurochemistry
- 29) Journal of Nutritional Biochemistry
- 30) Journal of Pharmacology and Experimental Therapeutics
- 31) Journal of Visualized Experiments
- 32) Metabolic Brain Disease
- 33) Molecular and Cellular Biochemistry
- 34) Molecules
- 35) Neuroscience
- 36) Neuroscience & Biobehavioral Reviews
- 37) Neuroscience Letters
- 38) Neurotoxicity Research
- 39) Neurotoxicology and Teratology
- 40) Oxidative Medicine and Cellular Longevity
- 41) PLoS One
- 42) Proteome Science
- 43) Psychopharmacology
- 44) Redox Biology
- 45) Scientific Reports
- 46) The Open Biology Journal
- 47) The Scientific World Journal
- 48) Toxicology and Applied Pharmacology
- 49) Toxicological Sciences
- 50) Toxicology Letter
- 51) Tumor Biology

Professional Society Memberships:

- 1) Research Society on Alcoholism, member
- 2) Society for Developmental Biology, member
- 3) International Society for Biomedical Research on Alcoholism, member
- 4) Teratology Society
- 5) American Society for Pharmacology and Experimental Therapeutics
- 6) Society of Toxicology
- 7) American Association of Chinese in Toxicology
- 8) Ohio Valley Chapter of the Society of Toxicology
- 9) Kentucky Academy of Science

INVITED PRESENTATIONS:

1. Enhancer-mediated transcriptional dysregulation in neural crest cells and ethanol-induced teratogenesis. University of Louisville Alcohol Research Center, Louisville, KY. Feb. 2020.
2. Epigenetic mechanisms underlying Fetal Alcohol Spectrum Disorders. Department of Pharmacology and Toxicology, University of Louisville, Louisville, KY. Nov. 25, 2019.
3. Down-regulation of SDF1/CXCR4 signaling mediates ethanol-induced craniofacial and cranial nerve defects in zebrafish embryos by disrupting neural crest cell-placode interaction. IUTOX 15th International Congress of Toxicology. Honolulu, Hawaii, July 18, 2019.
4. Sulforaphane-mediated epigenetic modulation of ethanol-induced apoptosis and birth defects. Keynote Speaker, 16th Global Summit on Toxicology and Applied Pharmacology, Las Vegas, NV, USA. Oct. 15, 2018.
5. Epigenetic mechanisms underlying Fetal Alcohol Spectrum Disorders, 2018 Taishan Academic Forum: International Neuroscience and Psychiatry Summit, Taishan, China, Sept. 7, 2018
6. Role of microRNAs in ethanol-induced apoptosis and embryotoxicity. The 7th Annual World Congress of Molecular & Cell Biology, Xi'an, China, April 25, 2017.
7. Nrf2-mediated antioxidant response: Implications for the prevention of Fetal Alcohol Spectrum Disorders. The 15th International Society of Antioxidants Conference on Oxidative Stress Reduction, Redox Homeostasis and Antioxidants. Institut Pasteur, Paris, France. June 23, 2015
8. Epigenetic mechanisms underlying ethanol-induced apoptosis and birth defects. Hainan University, HaiKou, Hainan, China, September 22, 2015
9. Transcriptional and epigenetic mechanisms underlying ethanol-induced birth defects. University of Illinois, College of Medicine at Rockford, Rockford, IL, September 24, 2014
10. Epigenetic and transcriptional mechanisms in the pathogenesis of Fetal Alcohol Spectrum Disorders. University of Illinois, College of Medicine at Peoria, Peoria, IL, August 15, 2014
11. Transcriptional and epigenetic mechanisms underlying Fetal Alcohol Spectrum Disorders. University of Louisville, Louisville, KY, July 7, 2014
12. Nrf2-mediated antioxidant response: Implications for the prevention of Fetal Alcohol Spectrum Disorders. North Carolina Central University, Durham, NC, April 20, 2011
13. Cellular and molecular mechanisms underlying fetal alcohol spectrum disorders. Department of Neurology Grand Rounds, University of Illinois College of Medicine at Peoria, Peoria, Illinois. April 2, 2010
14. Reactive oxygen species signaling in ethanol-induced apoptosis and birth defects. National Institute of Environmental Health Sciences, NIH, Durham, NC, Jan. 28, 2009
15. Reactive oxygen species signaling in ethanol-induced apoptosis and birth defects. University of Illinois College of Medicine at Peoria, Peoria, IL, Dec. 9, 2008
16. Reactive oxygen species signaling in ethanol-induced apoptosis and birth defects. Department of Pharmacology, Physiology and Therapeutics, University of North Dakota, Grand Forks, ND. Oct. 26, 2008

17. Cellular and molecular mechanisms underlying ethanol-induced apoptosis and birth defects. Shanxi Medical University, Shanxi Province, China, June 24, 2008
18. Reactive oxygen species signaling in ethanol-induced apoptosis and birth defects. Department of Molecular, Cellular and Craniofacial Biology and the Birth Defects Center, University of Louisville, Louisville, KY. May 8, 2008
19. Oxidative stress in ethanol-induced apoptosis and teratogenesis. Department of Pharmacal Science Auburn University, Auburn, Alabama. April. 3, 2008
20. ROS signaling in ethanol-induced apoptosis and teratogenesis. Department of Physiology and Pharmacology, University of Georgia, Athens, GA. Jan. 17, 2008
21. Innovative approaches to study the mechanisms underlying ethanol-induced birth defects. National Institute of Environmental Health Sciences. Durham, NC. March 2, 2007
22. Reactive oxygen species signaling in ethanol-induced apoptosis and birth defects. University of North Carolina-Chapel Hill, NC, March 2008.
23. Innovative approaches to study the mechanisms underlying ethanol-induced apoptosis and teratogenesis. Interdisciplinary Faculty of Toxicology Fall 2006 Seminar Series, Texas A & M University, College Station, TX, Sept. 18, 2006
24. Molecular mechanisms underlying ethanol-induced teratogenesis. Department of Molecular Biomedical Sciences. North Carolina State University, Raleigh, NC. May 15, 2006
25. From living confocal microscopy to proteomics: Innovative approaches to study the mechanisms underlying ethanol-induced apoptosis and birth defects. Department of Pharmacology and Toxicology, East Carolina University, Greenville, NC, Dec. 8, 2005
26. Mechanisms underlying ethanol-induced apoptosis and birth defects. US Environmental Protection Agency, Research Triangle Park, NC, Sept. 28, 2005
27. Mechanisms of ethanol-induced birth defects: Clues from pharmacological interventions. University of North Carolina-Chapel Hill, NC. March 2005
28. Apoptosis and fetal alcohol spectrum disorders. 27th Annual Scientific Meeting of the Research Society on Alcoholism. Vancouver, Canada, June 26, 2004
29. Octanol antagonizes ethanol-induced apoptosis and teratogenesis. University of North Carolina-Chapel Hill, NC, May 2000.
30. Applications of laser and image technologies in cellular and molecular biology. Fujian Agricultural and Forest University, Fuzhou, Fujian, China. July 18, 2001
31. 1-Octanol antagonizes ethanol toxicity in mouse whole embryo culture. 23rd Annual Scientific Meeting of the Research Society on Alcoholism. Denver, CO, June 2000.
32. Imaging approach to evaluating mechanisms of Fetal Alcohol Syndrome. University of North Carolina-Chapel Hill, NC, March 1997.

PUBLICATIONS

PEER-REVIEWED PUBLICATIONS:

1. Yuan F, Yun Y, Fan H, Li Y, Lu L, Liu J, Feng W, **Chen SY**. MicroRNA-135a protects against ethanol-induced apoptosis in neural crest cells and craniofacial defects in zebrafish by modulating the Siah1/p38/p53 pathway. *Frontiers in Cell and Developmental Biology*. 2020 (in press).
2. Li FY, Zhao C, Shao T, Liu Y, Gu Z, Jiang M, Li H, Zhang L, Gillevet PM, Puri P, Deng Z, **Chen SY**, Barve S, Gobejishvili L, Vatsalya V, McClain CJ, Feng W. Cathelicidin-related antimicrobial peptide alleviates alcoholic liver disease through inhibiting inflammasome activation. *J. Pathology*. 2020 (in press).
3. Li Y, Yuan F, Wu T, Lu L, Liu J, Feng W, **Chen SY**. Sulforaphane protects against ethanol-induced apoptosis in neural crest cells through restoring epithelial-mesenchymal transition by epigenetically modulating the expression of Snail1. *BBA Molecular Basis of Disease*. 1865: 2586-2594, 2019, PMID: 31295528.
4. Fan H, Yuan F, Yun Y, Wu T, Lu L, Liu J, Feng W, **Chen SY**. MicroRNA-34a mediates ethanol-induced impairment of neural differentiation of neural crest cells by targeting autophagy-related gene 9a. *Experimental Neurology* 2019 PMID: 31247197.
5. Yun Y, Zhang Y, Li G, **Chen SY**, Sang N. Embryonic exposure to oxy-polycyclic aromatic hydrocarbon interferes with pancreatic β -cell development in zebrafish via altering DNA methylation and gene expression. *Science of the Total Environment* 2019, 660: 1602-1609, PMID: 30743951.
6. Kong X, Wu G, Chen S, Zhang L, Li F, Shao T, Ren L, **Chen SY**, Zhang H, McClain CJ, Feng W. Chalcone derivative L6H21 reduces EtOH-LOS-induced liver injury through inhibition of NLRP3 inflammasome activation. *Alcoholism: Clinical and Experimental Research* 2019. PMID: 31162673
7. Yuan F, Chen X, Liu J, Feng W, Cai L, Wu X, **Chen SY**. Sulforaphane restores acetyl-histone H3 binding to Bcl-2 promoter and prevents apoptosis in ethanol-exposed neural crest cells and mouse embryos. *Experimental Neurology* 2018, 300: 60-66, PMID: 29069573
8. Wang K, Chen X, Liu J, Zou P, Feng W, Cai L, Wu X, **Chen SY**. Embryonic exposure to ethanol increases the susceptibility of larval zebrafish to chemically induced seizures. *Scientific Reports* 2018, 8: 1845, PMID: 29382872.
9. Yuan and **Chen SY**. Manipulation of microRNAs in cultured mouse embryos: Applications for developmental toxicology. *Methods in Molecular Biology* 2018, 1979: 205-214, PMID: 29896694.
10. Shao T, Zhao C, Li F, Gu Z, Liu L, Zhang L, Wang Y, He L, Liu Y, Liu Q, Chen Y, Donde H, Wang R, Jala VR, Barve S, **Chen SY**, Zhang X, Chen Y, McClain CJ, Feng W. Intestinal HIF-1 α deletion exacerbates alcoholic liver disease through inducing intestinal dysbiosis and barrier dysfunction. *J Hepatol*. 2018 69: 886-895. PMID: 29803899.
11. Dou X, Menkari C, Mitsuyama R, Foroud T, Wetherill, L, Hammond P, Suttie M, Chen X, **Chen SY**, Charness M. L1 coupling to ankyrin and the spectrin-actin cytoskeleton modulates ethanol inhibition of L1 adhesion and ethanol teratogenesis. *FASED J* 2018, 32: 1364-1374, PMID: 29109170.
12. Yuan F, Chen X, Liu J, Feng W, Wu X, **Chen SY**. Up-regulation of Siah1 by ethanol triggers apoptosis in neural crest cells through p38 MAPK-mediated activation of p53 signaling pathway. *Archives of Toxicology* 2017, 91: 775-784, PMID: 27270636.

13. Ma Y, Yue J, Zhang Y, Shi C, Odenwald M, Liang W, Wei Q, Goel A, Gou X, Zhang J, **Chen SY**, Tang WJ, Turner JR, Yang F, Liang H, Qin H, Wu X. ACF7 regulates inflammatory colitis and intestinal wound response by orchestrating tight junction dynamics. *Nature Communications* 2017, 8: 15375. PMID: 28541346.
14. Lee P, Jiang S, Li Y, Yue J, Gou X, **Chen SY**, Zhao Y, Schober M, Tan M, Wu X. Phosphorylation of Pkp1 by RIPK4 regulates epidermal differentiation and skin tumorigenesis. *The EMBO Journal* 2017, 36: 1963 - 1980. PMID: 28507225.
15. Xu Z, Tong Q, Zhang Z, Wang S, Zheng Y, Liu Q, Qian L, **Chen SY**, Sun J, Cai L. Inhibition of HDAC3 prevents diabetic cardiomyopathy in OVE26 mice via epigenetic regulation of DUSP5-ERK1/2 pathway. *Clinical Science* 2017 131: 1841 - 1857 PMID: 28533215.
16. Barve S. **Chen SY**, Kirpich I, Watson WH, McClain C. Development, prevention, and treatment of alcohol-induced organ injury: The role of nutrition. *Alcohol Research Current Reviews*. 2017 38: 289 – 302.
17. Yue J, Zhang Y, Liang WG, Gou X, Lee P, Liu H, Lyu W, Tang WJ, **Chen SY**, Yang F, Liang H, Wu X. In vivo epidermal migration requires focal adhesion targeting of ACF7. *Nature Communications* 2016, 7:11692, PMID: 27216888.
18. Liu Y, Zhao C, Xiao J, Liu L, Zhang M, Wang C, Wu G, Zheng MH, Xu LM, Chen YP, Mohammadi M, **Chen SY**, Cave M, McClain C, Li X, Feng W. Fibroblast growth factor 21 deficiency exacerbates chronic alcohol-induced hepatic steatosis and injury. *Scientific Report* 2016, 6: 31026, PMID: 27498701.
19. Chen X, Liu J, Feng W, Wu X, **Chen SY**. MiR-125b protects against ethanol-induced apoptosis in neural crest cells and mouse embryos by targeting Bak 1 and PUMA. *Experimental Neurology* 2015, 271: 104-111. PMID: 26024858. PMCID: PMC 4586365 (**This paper was highlighted in the NIAAA director's report in 2015 to represent the quality of research supported by NIAAA**).
20. Liu H, Yue J, Huang H, Gou X, **Chen SY**, Zhao Y, Wu X. Regulation of focal adhesion dynamics and cell motility by EB2 and Hax1 complex. *J Biol Chem*. 2015, 290: 30771-30782 PMID: 26527684.
21. Zhao C, Liu Y, Xiao J, Liu L, **Chen SY**, Mohammadi M, McClain CJ, Li X, Feng W. FGF21 mediates alcohol-induced adipose tissue lipolysis by activation of systemic release of catecholamine in mice. *J Lipid Res*. 2015 56: 1481 -1491. PMID: 26092866. PMCID: PMC 4513989.
22. Liu H, Yue J, Lei Q, Gou X, He Y-Y, **Chen SY**, Wu X Ultraviolet B (UVB) inhibits skin wound healing by affecting focal adhesion dynamics. *Photochemistry and Photobiology* 2015 91: 909-916. PMID: 25918970. PMCID: PMC 4513668.
23. Chang HW, **Chen SY**, Chuang LY, Guleria S. Toxicology and disease/cancer therapy in reactive oxygen species-mediated drugs and treatments. *Scientific World Journal*. 2015;2015:860563. doi: 10.1155/2015/860563. PMID: 25861684; PMCID: PMC4377479.
24. Sun HJ, Chen XP, Yuan FQ, Zhao YM, **Chen S-Y**. Involvement of seven in absentia homolog-1 protein in ethanol-induced apoptosis in neural crest cells. *Neurotoxicol Teratol*. 2014, 46: 26-31. PMID: 25193017 PMCID: PMC: 4250320
25. Chen XP, Liu Jie, **Chen S-Y**. Sulforaphane protects against ethanol-induced oxidative stress and apoptosis in neural crest cells by the induction of Nrf2-mediated antioxidant response. *British Journal of Pharmacology* 2013, 169: 437-448. (**This paper was highlighted in the NIAAA director's report in 2013 to represent the quality of research supported by NIAAA**).

26. Chen, XP, Liu J. **Chen S-Y.** Over-expression of Nrf2 diminishes ethanol-induced oxidative stress and apoptosis in neural crest cells by inducing an antioxidant response. *Reproductive Toxicology* 2013, 42: 102-109.
27. **Chen S-Y.** Analysis of Nrf2-mediated transcriptional induction of antioxidant response in early embryos. *Methods Molecular Biology* 2012, 889:277-900.
28. Zhang Q, Ma Y, Cheng Y-F, Li W-J, Zhang ZZ, **Chen S-Y.** Involvement of reactive oxygen species in 2- methoxyestradiol-induced apoptosis in human neuroblastoma cells. *Cancer Letters* 2011, 313: 201 - 210.
29. Dong J, Yan D, **Chen S-Y.** Stabilization of Nrf2 Protein by D3T Provides Protection against ethanol- induced Apoptosis in PC12 Cells. *PloS One.* 2011, 6(2):e16845. doi:10.1371/ journal.pone.0016845.
30. Yan D, Dong J, Sulik KK, and **Chen S-Y.** Induction of the Nrf2-driven antioxidant response by ter-butylhydroquinone prevents ethanol-induced apoptosis in cranial neural crest cells. *Biochemical Pharmacology*, 2010, 80:144-149. (**This paper was highlighted in the NIAAA director's report in 2010 to represent the quality of research supported by NIAAA**).
31. Parnell SE, Dehart DE, Sulik KK, and **Chen S-Y.** Reduction of ethanol-induced ocular abnormalities in mice via dietary administration of N-acetylcysteine. *Alcohol* 2010, 44:699-705.
32. Dong J, Sulik KK, and **Chen S-Y.** Role of NOX enzymes in ethanol-induced oxidative stress and apoptosis in mouse embryos. *Toxicology Letters* 2010, 193:94-100.
33. Dong J, Sulik KK, **Chen S-Y.** Nrf2-mediated transcriptional induction of antioxidant response in mouse embryos exposed to ethanol *in vivo*: Implications for the prevention of fetal alcohol spectrum disorders. *Antioxidants & Redox Signaling* 2008 10: 2023-2033.
34. Parnell, S.E.; **Chen, S.-Y.**; Charness, M.E.; Hodge, C.W.; Dehart, D.B.; Sulik, K.K. Concurrent dietary administration of D-SAL and ethanol diminishes ethanol's teratogenesis. *Alcohol Clin Exp Res* 2007 31:2059-2064.
35. Parnell SE, Dehart DB, Will TA, **Chen S-Y**, Hodge CW, Besheer J, Waage-Baudet HG, Charness MD, Sulik KK. A maternal oral intake mouse model for fetal alcohol spectrum disorders: Ocular defects as a measure of effect. *Alcohol Clin Exp Res* 2006 30; 1791-1798
36. **Chen S-Y**, Charness ME, Wilkemeyer MF, Sulik KK, Peptide-mediated protection from ethanol-induced neural tube defects. *Dev Neurosci* 2005, 27:13-19
37. **Chen, S-Y**, Dehart DB and Sulik KK. Protection from ethanol-induced limb malformations by the superoxide dismutase/catalase mimetic, EUK-134. *FASEB J.* 2004, 18: 1234-1236 (**This paper was featured by the University of North Carolina at Chapel Hill news release**).
38. Wilkemeyer MF, **Chen S-Y**, Menkari CE, Sulik KK, Charness ME Ethanol antagonist peptides: structural specificity without stereospecificity. *J Pharmacol Exp Ther.* 2004, 309:1183-1189
39. Wilkemeyer MF**, **Chen S-Y**** (**co-first author), Carrie E. Menkari CE, Brenneman DE, Sulik KK, Charness ME. Differential effects of ethanol antagonism and neuroprotection in peptide fragment NAPVSIPQ prevention of ethanol-induced developmental toxicity. *Proc Natl Acad Sci U S A.* 2003; 100: 8543-8548 (**This paper was featured by NIH news release**)
40. **Chen S-Y**, Wilkemeyer M, Sulik KK, Charness M. Octanol antagonism of ethanol teratogenesis. *FASEB J.* 2001; 15:1649-1651 (**This paper was featured by NIH news release**).
41. Sulik KK, Dehart DB, Johnson CS, Ellis SL, **Chen S-Y**, Dunty WC Jr, Zucker RM. Programmed cell death in extraocular muscle tendon/sclera precursors. *Molecular Vision* 2001; 7:184-91

42. Dunty Jr. WC, **Chen S-Y**, Zucker RM, Dehart DB, Sulik KK. Selective vulnerability of embryonic cell populations to ethanol-induced apoptosis: implications for alcohol-related birth defects and neurodevelopmental disorder. *Alcohol Clin Exp Res*, 2001; 25:1523-1535
43. **Chen S-Y**, Sulik KK. Iron-mediated free radical injury in ethanol-exposed mouse neural crest cells. *J Pharmacol Exp Ther*. 2000; 294: 134-140
44. **Chen S-Y**, Periasamy A, Yang B, Herman B, Jacobson K, Sulik KK. Differential sensitivity of mouse neural crest cells to ethanol-induced toxicity. *Alcohol* 2000; 20:75- 81
45. **Chen S-Y**, Yang B, Jacobson K, Sulik KK. The membrane disordering effect of ethanol on neural crest cells in vitro and the protective role of GM1 ganglioside. *Alcohol* 1996;13:589-595
46. **Chen S-Y**, Sulik KK. Free radicals and ethanol-induced cytotoxicity in neural crest cells. *Alcohol Clin Exp Res*. 1996; 20:1071-1076
47. Kotch LE, **Chen S-Y**, Sulik KK. Ethanol-induced teratogenesis: Free radical damage as a possible mechanism. *Teratology*. 1995; 52:128-136
48. **Chen S-Y**, Chen R-K, Chen Q-F, Zhou K-Y. Protective effects of free radical scavengers and drought resistance in sugarcane. *Acta Agronomica Sinica*, 1994; 20:149-155
49. **Chen S-Y**. The physiological roles of glutathione in the plant. *Plant Physiology Communications*. 1993; 29:210-214
50. **Chen S-Y**. Effect of water stress on the chloroplast membrane fluidity of sugarcane leaves and its relation to membrane lipid peroxidation. *Journal of Fujian Agricultural College*, 1993; 22: 13-18
51. **Chen S-Y**, Liu J. Biotechnology and the heredity improvement of trees. *Progress in Biotechnology*. 1993;14: 35-38
52. **Chen S-Y**. Low-temperature stress and membrane lipid peroxidation in sugarcane. *Journal of Fujian Agricultural College*, 1992; 21: 22-26
53. **Chen S-Y**. Sugarcane leaf senescence and membrane lipid peroxidation. *Acta Agronomica Sinica*, 1992; 18: 111-115
54. **Chen S-Y**, The present status and prospect of the research on the mechanisms of drought resistance in sugarcane. *Journal of Fujian Agricultural College*, 1991; 20: 12-17
55. **Chen S-Y**, Membrane lipid peroxidation and plant cell injury. *Plant Physiology Communications*. 1991; 27:84-90
56. **Chen S-Y**, Liu J. Effects of water stress on the mitochondrial membrane fluidity of sugarcane leaves and its relation to membrane lipid peroxidation. *Acta Phytobiologica Sinica*. 1991;17: 285-287
57. **Chen S-Y**. Effects of water stress on the growth and development of sugarcane. *Fujian Sugarcane*. 1991; (3): 7-10
58. Lin S-Z, **Chen S-Y**, Lin Y-Y, Miu B-H. Physiological and biochemical mechanisms of leaf senescence in isolated leaves of officinal Magnolia. *Journal Zhejiang Forestry College*, 1991; 8: 174-179
59. Liu J, Lin S-Z, **Chen S-Y**, Tan S-M. Plasmic membrane injury and the deterioration of China Fir seeds. *Journal of Fujian College of Forestry*. 1990; 10:388-394
60. **Chen S-Y**. Membrane lipid peroxidation and plant stress. *Chinese Bulletin of Botany*. 1989; 6:211-217
61. **Chen S-Y**. Effects of indoleacetic acid oxidase on the growing and degradedness of bamboo

- shoots of *Phyllostachy pubescens*. *Journal of Bamboo Research*. 1987; 6:1-9
62. **Chen S-Y**, He Y-Z, The role of respiration and terminal oxidase in the growth and degradedness of bamboo shoots of *Phyllostachy pubescens*. *Journal of Fujian College of Forestry*. 1986; 6: 11-18
63. Chen Y-Q, Li M-R, **Chen S-Y**, Hu Z-S, He Y-Z. A preliminary study on the identification of male and female plant of Tung trees in an early stage. *Forestry Science and Technology Communication*. 1984; 2: 18- 21

NON-REFEREED PUBLICATIONS

1. **Chen S-Y**. Invited Expert Article: Unraveling the molecular mechanisms of fetal alcohol spectrum disorders: Novel insights and emerging molecular targets for prevention. *Fetal Alcohol Forum* (Published by the National Organisation for Fetal Alcohol Syndrome – UK) 8: 30-35, 2012 (<http://www.nofas-uk.org/PDF/FetalAlcoholForumIssue8December2012.pdf>).

PUBLISHED ABSTRACTS:

1. Yuan F, Fan H, Li Y, Lu L, Liu J, **Chen S-Y**. Dysregulation of enhancers and aberrant expression of their cognated genes contribute to ethanol-induced craniofacial defects in zebrafish embryos. *Alcohol Clin Exp Res* 44: S1, 54A, 2020.
2. Li Y, Wu T, Yuan F, Lu L, Liu J, Fahey JW, **Chen S-Y**. Maternal dietary administration of broccoli sprout extract diminished ethanol-induced apoptosis and teratogenesis in mouse embryos by modulating anti-apoptotic genes. *Alcohol Clin Exp Res* 44: S1, 55A, 2020.
3. Lu L, Yuan F, Fan H, Li Y, Liu J, Wilkey DW, Merchant ML, **Chen S-Y**. Modeling microcephaly with human forebrain organoids reveals ethanol-induced alterations in the expression of proteins associated with cortical development. *Alcohol Clin Exp Res* 44: S1, 54A, 2020.
4. Fan H, Yuan F, Lu L, Liu J, **Chen S-Y**. Ethanol-induced disruption of coordinated migration of neural crest cells and placode cells is mediated by exosomes derived from neural crest cells. *Alcohol Clin Exp Res* 44: S1, 53A, 2020.
5. Li YH, Yuan FQ, Wu T, Lu LH, Liu J, **Chen S-Y**. Sulforaphane protects against ethanol-induced apoptosis in human neural crest cells through epigenetically modulating the expression of anti-apoptotic genes. *Alcohol Clin Exp Res* 43: S1: 161A, 2019.
6. Fan H, Yuan FQ, Wu T, Lu LH, Liu J, **Chen S-Y**. Exosomal shuttling of miR-126 from human neural crest cells mediates ethanol-induced repression of SDF1/CXCR4 and disruption of neural crest cell-placode interaction. *Alcohol Clin Exp Res* 43: S1: 161A, 2019.
7. Yuan FQ, Yun Y, Fan H, Lu L, Wu T, Li Y, Liu J, **Chen S-Y**. Prenatal ethanol exposure induced global remodeling of the enhancer landscape in a zebrafish model of fetal alcohol spectrum disorders. *Alcohol Clin Exp Res* 43: S1: 163A, 2019.
8. Wu T, Yuan F, Li Y, Fan HD, Lu LH, Liu J, **Chen S-Y**. Disruption of maternal folate-producing gut microbiota is associated with ethanol-induced folate deficiency and teratogenesis. *Alcohol Clin Exp Res* 43: S1: 221A, 2019.

9. Wu T, Yuan F, Li Y, Fan HD, Lu LH, Liu J, **Chen S-Y**. Disruption of folate-producing gut microbiota contributes to ethanol-induced folate deficiency and teratogenesis. *Alcohol Clin Exp Res* 42: S2: 36A, 2018.
10. Li YH, Yuan FQ, Wu T, Lu LH, Liu J, **Chen S-Y**, Sulforaphane protects against ethanol-induced apoptosis in neural crest cells through epigenetically modulating the expression of Snail1 and restoring EMT. *The Toxicologist: Supplement to Toxicological Sciences* 162 (1), Society of Toxicology, 2018, Abstract no 1930.
11. Chen S-Y, Epigenetic mechanisms underlying fetal alcohol spectrum disorders. *Acta Neuropharmacologica*, 2018, 8 (4):38-39.
12. Fan HD, Yuan FQ, Liu J, **Chen S-Y**. Disruption of neural crest cell-placode interaction by down-regulating SDF1/CXCR4 signaling mediates ethanol-induced craniofacial anomalies and cranial nerve defects. *Alcohol Clin Exp Res* 42: S1: 40A, 2018.
13. Li YH, Yuan FQ, Wu T, Lu LH, Liu J, **Chen S-Y**. Up-regulation of lysine-specific histone demethylase KDM5A contributes to ethanol-induced apoptosis in neural crest cells and zebrafish embryos. *Alcohol Clin Exp Res* 42: S1: 40A, 2018.
14. Li YH, Yuan FQ, Wu T, Lu LH, Liu J, **Chen S-Y**. Sulforaphane protects against ethanol-induced apoptosis in neural crest cells and zebrafish embryos through epigenetically modulating the expression of Snail1 and restoring EMT. *FASEB J.* 32,1_supplement: 821.12. 2018.
15. Fan HD, Liu J, Yun Y, Yuan FQ, **Chen S-Y**. Ethanol-induced inhibition of neural differentiation of neural crest cells is mediated by microRNA-34a through targeting autophagy-related genes. In: *The Toxicologist: Supplement to Toxicological Sciences*, 156, Society of Toxicology, 2017. Abstract no. 1240
16. Yuan FQ, Fan HD, Liu J, **Chen S-Y**. Down-regulation of microRNA-135a mediates ethanol-induced apoptosis in neural crest cells through Siah1-mediated activation of p38 MAPK/p53 pathway. *Alcohol Clin Exp Res* 41: S1: 213A, 2017.
17. Fan HD, Yuan FQ, Wu T, Liu J, **Chen S-Y**. Up-regulation of microRNA-34a mediates ethanol-induced impairment of neural crest cell migration through modulating the epithelial-mesenchymal transition by targeting snail1. *Alcohol Clin Exp Res* 41: S1: 213A, 2017.
18. Fan HD, Yun Y, Yuan FQ, Liu J, **Chen S-Y**. MicroRNA-34a is involved in ethanol-induced inhibition of neural differentiation of neural crest cells by targeting autophagy-related genes. *Alcohol Clin Exp Res* 41: S1: 213A, 2017.
19. Yuan FQ, Yun Y, Fan HD, Liu J, **Chen S-Y**. Microinjection of microRNA-135a mimics protects against ethanol-induced apoptosis and dysmorphology in zebrafish by targeting Siah1. *Alcohol Clin Exp Res* 41: S1: 214A, 2017.
20. Yuan FQ, Liu J, **Chen S-Y**. Up-regulation of Siah1 by ethanol induces apoptosis in neural crest cells by CBP/P300-mediated acetylation of p53. *Alcohol Clin Exp Res.* 40: 90A, 2016.
21. Yuan FQ, Liu J, **Chen S-Y**. MicroRNA-135a modulates ethanol-induced apoptosis in neural crest cells by targeting Siah1. *Alcohol Clin Exp Res.* 40: 90A, 2016.
22. Yuan Y, Yuan FQ, Liu J, **Chen S-Y**. Embryonic exposure to low-dose ethanol impairs early β -cell differentiation in zebrafish by altering DNA methylation and gene expression. *Alcohol Clin Exp Res.* 40: 91A, 2016.

23. **Chen, S-Y.** Nrf2-mediated antioxidant response: Implications for the prevention of fetal alcohol spectrum disorders. *Journal of International Society of Antioxidants in Nutrition & Health*, 1 (1): 2015.
24. Wang KL, Chen XP, Zheng L, Liu J, **Chen S-Y.** Embryonic exposure to ethanol increases the susceptibility of larval zebrafish to chemically induced seizures. *Alcohol Clin Exp Res.* 39: 218A, 2015.
25. Chen XP, Yuan FQ, Liu J, **Chen S-Y.** Sulforaphane protects against ethanol-induced apoptosis in neural crest cells by epigenetic modulation of Bcl2 gene expression. *Alcohol Clin Exp Res.* 39: 219A, 2015.
26. Yuan FQ, Liu J, **Chen S-Y.** Up-regulation of Siah1 by ethanol triggers apoptosis in neural crest cells through p38 MAPK-mediated activation of p53 signaling pathway. *Alcohol Clin. Exp. Res.* 39: 219A, 2015.
27. Chen XP, Liu J, **Chen S-Y.** Up-regulation of miR-200a suppresses ethanol-induced apoptosis in neural crest cells by down-regulation of p38 MAPK signaling. *Alcohol Clin Exp Res.* 38: 29A, 2014.
28. Chen XP, Liu J, **Chen S-Y.** Over-expression of miR-200c protects against ethanol-induced apoptosis in neural crest cells by targeting MAPK kinase 6. *Alcohol Clin Exp Res.* 38: 28A, 2014.
29. Dou, X, Chen, XP, **Chen S-Y**, Charness ME. Identification of candidate FASD susceptibility genes in L1 transfected fibroblasts and mouse embryos. *Alcohol Clin Exp Res.* 38: 28A, 2014.
30. Dou, X, Chen, XP, **Chen S-Y**, Charness ME. SRC family kinase phosphorylation of Y1176 in the L1 cytoplasmic domain is required for ethanol inhibition of L1 adhesion. *Alcohol Clin Exp Res.* 38: 357A, 2014.
31. Chen, XP, Liu J. **Chen S-Y.** Over-expression of Nrf2 diminishes ethanol-induced oxidative stress and apoptosis in neural crest cells by inducing an antioxidant response. *Alcohol Clin Exp Res.* 37: 162A, 2013
32. Chen, XP, Liu J. **Chen S-Y.** Down-regulation of microRNA-34a confers protection against ethanol-induced apoptosis in neural crest cells. *Alcohol Clin Exp Res.* 37, 161A, 2013
33. Chen, XP, Liu J, **Chen S-Y.** Nrf2-mediated antioxidant response is a major determinant of susceptibility of neural crest cells to ethanol-induced apoptosis. *Alcohol Clin Exp Res.* 36: 124A, 2012
34. Chen, XP, Liu J, **Chen S-Y.** Microinjection of microRNA-125b mimic into cultured mouse embryos prevents ethanol-induced apoptosis and embryotoxicity. *Alcohol Clin Exp Res.* 36: 124A, 2012
35. Liu J, Sun HJ, **Chen S-Y.** Down-regulation of foxhead box protein D3 contributes to ethanol-induced apoptosis in neural crest cells. *Alcohol Clin Exp. Res.* 35: 35A, 2011.
36. Sun HJ, Liu J, **Chen S-Y.** Siah1 mediates ethanol-induced apoptosis in neural crest cells by activating the p53 pathway. *Alcohol Clin Exp Res.* 35: 36A, 2011.
37. Sun HJ, **Chen, S-Y.** Involvement of seven in absentia homolog-1 protein in ethanol-induced apoptosis in neural crest stem cells. *Alcohol Clin. Exp. Res.* 34: 208A, 2010.
38. Lu Z, Sulik KK, **Chen S-Y.** Acute ethanol exposure results in reduced Fgf8 expression in the developing mouse forebrain. *Alcohol Clin. Exp. Res.* 34: 208A, 2010.
39. Yan D, Dong J, Sulik KK, **Chen S-Y.** The Nrf2 inducer, tert-butylhydroquinone, prevents ethanol-induced apoptosis in culture cranial neural crest cells. *Alcohol Clin Exp Res.* 33:205A,

2009.

40. Dong J, Yan D, Sulik KK, **Chen S-Y**. Stabilization of Nrf2 protein by D3T confers protection against ethanol-induced apoptosis in PC12 cells. *Alcohol Clin Exp Res*. 33:206A, 2009.
41. Dong J, Sulik KK, **Chen S-Y**. Induction of an antioxidant response in mouse embryos by ethanol and D3T is mediated by the activation of the Nrf2 transcription factor. *Alcohol Clin Exp Res*. 32:22A, 2008.
42. Parnell SE, Dehart DB, Sulik KK, **Chen S-Y**. Dose-dependent reduction of ethanol-induced ocular abnormalities in mice through the dietary administration of N-acetylcysteine. *Alcohol Clin Exp Res*. 32:138A, 2008.
43. Dong J, Chen YK, Sulik KK, **Chen S-Y**. Overexpression and nuclear translocation of glyceraldehyde-3-phosphate dehydrogenase: A role in ethanol-induced apoptosis in PC12 cells. *Alcohol Clin Exp Res*. 31:12A, 2007.
44. Dong J, Sulik KK, **Chen S-Y**. Inhibition of NADPH oxidase by diphenyliodonium prevents the activation of caspase-3 in ethanol-exposed mouse embryos. *Alcohol Clin Exp Res*. 31:11A, 2007.
45. Sulik KK, Dong J, Myers EA, Parnell SE, Dehart DB, **Chen S-Y**. 2007. Imaging and mechanism studies in a FASD mouse model. *Birth Defects Research Part A – Clinical and Molecular Teratology* 79: 386.
46. **Chen S-Y**, Hanes RM, Sulik KK. Expression of patterning genes in the hindbrains of ethanol-exposed mouse embryos. *Alcohol Clin Exp Res*. 29:53A, 2005.
47. Lu Z, Sulik KK, **Chen S-Y**. Proteomic analyses of ethanol sensitive versus non-sensitive regions of ethanol-exposed and control embryonic mouse brains. *Alcohol Clin Exp Res*. 29:91A, 2005.
48. Parnell SE, **Chen S-Y**, Charness ME, Hodge CW, Dehart DB, Sulik KK. Concurrent dietary administration of D-SAL and ethanol diminishes ethanol's teratogenesis. *Alcohol Clin Exp Res*. 30:64, 2006.
49. Dong J, Sulik KK, **Chen S-Y**. NOX/DUOX Family of NADPH oxidases is the major source of reactive oxygen species in ethanol-exposed mouse embryos. *Alcohol Clin Exp Res*. 30:69A, 2006.
50. Dong J, Sulik KK, **Chen S-Y**. Nrf2 signaling in transcriptional activation of genes encoding antioxidant proteins and phase 2 detoxifying enzymes in ethanol-exposed mouse embryos. *Alcohol Clin Exp Res*. 30:69A, 2006.
51. **Chen S-Y**, Hanes RN, Sulik KK. A role for endothelin-1-mediated signaling in ethanol-induced visceral arch abnormalities. *Alcohol Clin Exp Res*. 28:86A, 2004.
52. **Chen S-Y**, Wilkemeyer MF, Charness ME, Sulik KK. Activity-dependent neuroprotective peptide (NAP) prevents ethanol-induced developmental delay in cultured whole mouse embryos. *Alcohol Clin Exp Res*. 27:127 A, 2003.
53. **Chen S-Y**, Dehart DB, Charness ME, Sulik KK. Vasoactive intestinal peptide protects mouse embryos from ethanol-induced limb malformations in vivo. *Alcohol Clin Exp Res*. 26 (5):176A, 2002.
54. **Chen S-Y**, Dehart DB, Sulik KK. Hypoxia and ethanol-induced apoptosis and teratogenesis in cultured mouse embryos. *Alcohol Clin Exp Res*. 25: 124A, 2001.
55. Sulik KK, Dunty WC, **Chen S-Y**. Alcohol-induced birth defects – Pathogenesis to prevention. *Genes and Gene Delivery for Diseases of Alcoholism Proceedings*, 2001.
56. **Chen S-Y**, Wilkemeyer MF, Sulik KK, Charness ME. 1-Octanol antagonizes ethanol toxicity in

- mouse whole embryo culture. *Alcohol Clin Exp Res.* 24: 34A, 2000.
57. **Chen S-Y**, Sulik KK. Iron-mediated free radical generation and ethanol-induced neural crest cell toxicity. *Alcohol Clin Exp Res.* 23(Suppl.): 65, 1999.
 58. Dunty WC, **Chen S-Y**, Dehart DB, Sulik KK. Ethanol-induced apoptosis during mouse embryogenesis. *Dev. Biol.* 210:237, 1999.
 59. **Chen S-Y**, Periasamy A, Yang, B, Sulik, KK. Correlation of inherent plasma membrane ganglioside GM1 with membrane fluidity and sensitivity of mouse neural crest cells to ethanol-induced toxicity. *Teratology.* 53:107-108, 1996.
 60. **Chen S-Y**, Sulik KK. Amelioration of ethanol-induced developmental toxicity with GM1 ganglioside. *Proceedings of the Greenwood Genetics Center* 15: 129, 1996.
 61. **Chen S-Y**, Yang B, Jacobson K, Sulik KK. Ethanol-induced neural crest cell death: Changes in membrane fluidity and the protective role of ganglioside GM1. *Teratology.* 51:157, 1995.
 62. **Chen S-Y**, Sulik, KK. The role of free radicals in ethanol-induced neural crest cell death. *Teratology.* 51:181, 1995.

POSTER PRESENTATIONS:

1. Li YH, Yuan FQ, Wu T, Lu LH, Liu J, **Chen S-Y**. Sulforaphane protects against ethanol-induced apoptosis in human neural crest cells through epigenetically modulating the expression of anti-apoptotic genes. 42th Annual Scientific Meeting of the Research Society on Alcoholism. Minneapolis, Minnesota, June 22-26, 2019.
2. Fan H, Yuan FQ, Wu T, Lu LH, Liu J, **Chen S-Y**. Exosomal shuttling of miR-126 from human neural crest cells mediates ethanol-induced repression of SDF1/CXCR4 and disruption of neural crest cell-placode interaction. 42th Annual Scientific Meeting of the Research Society on Alcoholism. Minneapolis, Minnesota, June 22-26, 2019.
3. Yuan FQ, Yun Y, Fan H, Lu L, Wu T, Li Y, Liu J, **Chen S-Y**. Prenatal ethanol exposure induced global remodeling of the enhancer landscape in a zebrafish model of fetal alcohol spectrum disorders. 42th Annual Scientific Meeting of the Research Society on Alcoholism. Minneapolis, Minnesota, June 22-26, 2019.
4. Wu T, Yuan F, Li Y, Fan HD, Lu LH, Liu J, **Chen S-Y**. Disruption of maternal folate-producing gut microbiota is associated with ethanol-induced folate deficiency and teratogenesis. 42th Annual Scientific Meeting of the Research Society on Alcoholism. Minneapolis, Minnesota, June 22-26, 2019.
5. Li YH, Yuan F, Wu T, Lu L, Liu L, **Chen S-Y**. Epigenetically modulating the expression of anti-apoptotic genes by sulforaphane prevented ethanol-induced apoptosis in human neural crest cells. Research! Louisville, 2019, University of Louisville.
6. Yuan F, Yun Y, Fan H, Lu L, Wu T, Li YH, Liu J, and **Chen S-Y**. Embryonic exposure to ethanol resulted in a global remodeling of the enhancer landscape in a zebrafish model of Fetal Alcohol Spectrum Disorders. Research! Louisville, 2019, University of Louisville.
7. Fan H, Yuan F, Wu T, Lu L, Liu J and **Chen S-Y**. Ethanol-induced disruption of neural crest cell-placode interaction is mediated through the repression of SDF1/CXCR4 signaling by miR-126 shuttled from the exosomes derived from human neural crest cells. Research! Louisville, 2019, University of Louisville.

8. Wu T, Yuan F, Li Y, Fan HD, Lu LH, Liu J, **Chen S-Y**. Disruption of folate-producing gut microbiota contributes to ethanol-induced folate deficiency and teratogenesis. 19th Congress of International Society for Biomedical Research on Alcoholism. Kyoto, Japan, Sept. 9-13, 2018.
9. Li YH, Yuan FQ, Wu T, Lu LH, Liu J, **Chen S-Y**, Sulforaphane protects against ethanol-induced apoptosis in neural crest cells through epigenetically modulating the expression of Snail1 and restoring EMT. SOT 57th Annual Meeting and ToxExpo, San Antonio, TX, March 11-15, 2018.
10. Fan HD, Yuan FQ, Liu J, **Chen S-Y**. Disruption of neural crest cell-placode interaction by down-regulating SDF1/CXCR4 signaling mediates ethanol-induced craniofacial anomalies and cranial nerve defects. 41th Annual Scientific Meeting of the Research Society on Alcoholism. San Diego, California, June 16-20, 2018.
11. Li YH, Yuan FQ, Wu T, Lu LH, Liu J, **Chen S-Y**. Up-regulation of lysine-specific histone demethylase KDM5A contributes to ethanol-induced apoptosis in neural crest cells and zebrafish embryos. 41th Annual Scientific Meeting of the Research Society on Alcoholism. San Diego, California, June 16-20, 2018.
12. Li YH, Yuan FQ, Wu T, Lu LH, Liu J, **Chen S-Y**. Sulforaphane protects against ethanol-induced apoptosis in neural crest cells and zebrafish embryos through epigenetically modulating the expression of Snail1 and restoring EMT. Experimental Biology 2018, San Diego, California, April 21-25, 2018.
13. Wu T, Yuan F, Li Y, Fan H, Lu L, Liu J, **Chen S-Y**. Supplementation of *Lactobacillus rhamnosus* GG and tributyrates prevents ethanol-induced teratogenesis by restoring folate-producing gut microbiota and attenuating maternal folate deficiency. Research! Louisville, 2018, University of Louisville
14. Li Y, Yuan F, Wu T, Lu L, Liu J, **Chen S-Y**. Down-regulation of Snail1 by lysine-specific histone demethylase KDM5A contributes to ethanol-induced apoptosis in neural crest cells and zebrafish embryos. Research! Louisville, 2018, University of Louisville.
15. Fan H, Yuan F, Lu L, Wu T, Liu J, **Chen S-Y**. SDF1/CXCR4 signaling mediates ethanol-induced craniofacial anomalies and cranial nerve defects in zebrafish embryos by disrupting neural crest cell-placode interaction. Research! Louisville, 2018, University of Louisville.
16. Yuan F, Wu T, Young J, Fan H, Li Y, Lu L, Liu J, Cai L, **Chen S-Y**. Maternal preconception exposure to cadmium induces apoptosis in mouse embryos by decreasing DNA methylation at the promoter regions of the pro-apoptotic genes. Research! Louisville, 2018, University of Louisville.
17. Fan HD, Liu J, Yun Y, Yuan FQ, **Chen S-Y**. Ethanol-induced inhibition of neural differentiation of neural crest cells is mediated by microRNA-34a through targeting autophagy-related genes. 56th Society of Toxicology Annual Meeting and ToxExpo, Baltimore, Maryland, March 12 – 16, 2017.
18. Yuan FQ, Fan HD, Liu J, **Chen S-Y**. Down-regulation of microRNA-135a mediates ethanol-induced apoptosis in neural crest cells through Siah1-mediated activation of p38 MAPK/p53 pathway. 40th Annual Scientific Meeting of the Research Society on Alcoholism. Denver, Colorado, June 24-28, 2017.
19. Fan HD, Yuan FQ, Wu T, Liu J, **Chen S-Y**. Up-regulation of microRNA-34a mediates ethanol-induced impairment of neural crest cell migration through modulating the epithelial-mesenchymal transition by targeting snail1. 40th Annual Scientific Meeting of the Research Society on Alcoholism. Denver, Colorado, June 24-28, 2017.

20. Fan HD, Yun Y, Yuan FQ, Liu J, **Chen S-Y**. MicroRNA-34a is involved in ethanol-induced inhibition of neural differentiation of neural crest cells by targeting autophagy-related genes. 40th Annual Scientific Meeting of the Research Society on Alcoholism. Denver, Colorado, June 24-28, 2017.
21. Yuan FQ, Yun Y, Fan HD, Liu J, **Chen S-Y**. Microinjection of microRNA-135a mimics protects against ethanol-induced apoptosis and dysmorphology in zebrafish by targeting Siah1. 40th Annual Scientific Meeting of the Research Society on Alcoholism. Denver, Colorado, June 24-28, 2017.
22. Chen XP, Yuan FQ, Fan HD, Liu J, **Chen S-Y**. Disruption of primary cilia-mediated Sonic hedgehog signaling contributes to ethanol-induced apoptosis and teratogenesis. 57th Teratology Society Annual Meeting, Denver, Colorado, June 24 – 28, 2017
23. Li Y, Yuan FQ, Wu T, Lu LH, Liu J, **Chen S-Y**. Sulforaphane protects against ethanol-induced apoptosis in neural crest cells through restoring EMT by epigenetically modulating the expression of Snail1. Research! Louisville, 2017, University of Louisville
24. Yuan FQ, Fan HD, Liu J, **Chen S-Y**. MicroRNA-135a mediates ethanol-induced apoptosis in neural crest cells through Siah1-mediated activation of p38 MAPK/P53 pathway. Research! Louisville, 2017, University of Louisville
25. Fan HD, Yuan FQ, Wu T, Liu J, **Chen S-Y**. MicroRNA-34a mediates ethanol-induced impairment of neural crest cell migration through modulating the EMT by targeting Snail1. Research! Louisville, 2017, University of Louisville
26. Yuan FQ, Yun Y, Fan HD, Liu J and **Chen S-Y**. Overexpression of microRNA-135a protects against ethanol-induced apoptosis and dysmorphology in zebrafish by targeting Siah1. Ohio Valley Society of Toxicology Student/Post-doc Summer Meeting, July 14th, 2017
27. Yuan FQ, Fan FD, Liu J and **Chen S-Y**. Ethanol-induced down-regulation of microRNA-135a mediates apoptosis in neural crest cells through Siah1-mediated activation of p38 MAPK/p53 pathway. Ohio Valley Society of Toxicology Student/Post-doc Summer Meeting, July 14th, 2017
28. Fan HD, Yuan FQ, Wu T, Liu J and **Chen S-Y**. MicroRNA-34a mediates ethanol-induced impairment of neural crest cell migration by targeting Snail1 and modulating the EMT. Ohio Valley Society of Toxicology Student/Post-doc Summer Meeting, July 14th, 2017
29. Yuan FQ, Liu J, **Chen S-Y**. Up-regulation of Siah1 by ethanol induces apoptosis in neural crest cells by CBP/P300-mediated acetylation of p53. 39th Annual Scientific Meeting of the Research Society on Alcoholism. New Orleans, Louisiana, June 25-29, 2016.
30. Yuan FQ, Liu J, **Chen S-Y**. MicroRNA-135a modulates ethanol-induced apoptosis in neural crest cells by targeting Siah1. 39th Annual Scientific Meeting of the Research Society on Alcoholism. New Orleans, Louisiana, June 25-29, 2016.
31. Yuan Y, Yuan FQ, Liu J, **Chen S-Y**. Embryonic exposure to low-dose ethanol impairs early β -cell differentiation in zebrafish by altering DNA methylation and gene expression. 39th Annual Scientific Meeting of the Research Society on Alcoholism. New Orleans, Louisiana, June 25-29, 2016.
32. Yun Y, Yuan FQ, Liu J, **Chen S-Y**. Exposure to low-dose ethanol in the early stage of development impairs early β -cell differentiation in zebrafish by altering DNA methylation. Research! Louisville 2016, University of Louisville

33. Fan HD, Liu J, Yun Y, Yuan FQ, **Chen S-Y**. Ethanol-induced inhibition of neural differentiation of neural crest cells is mediated by microRNA-34a through targeting autophagy-related genes. Research! Louisville, 2016, University of Louisville
34. Yuan FQ, Liu J, **Chen S-Y**. Modulation of ethanol-induced apoptosis in neural crest cells by microRNA-135a through targeting Siah1. Research! Louisville, 2016, University of Louisville
35. Wang KL, Chen XP, Zheng L, Liu J, **Chen S-Y**. Embryonic exposure to ethanol increases the susceptibility of larval zebrafish to chemically induced seizures. 38th Annual Scientific Meeting of the Research Society on Alcoholism. San Antonio, Texas, June 20-24, 2015.
36. Chen XP, Yuan FQ, Liu J, **Chen S-Y**. Sulforaphane protects against ethanol-induced apoptosis in neural crest cells by epigenetic modulation of Bcl2 gene expression. 38th Annual Scientific Meeting of the Research Society on Alcoholism. San Antonio, Texas, June 20-24, 2015.
37. Yuan FQ, Liu J, **Chen S-Y**. Up-regulation of Siah1 by ethanol triggers apoptosis in neural crest cells through p38 MAPK-mediated activation of p53 signaling pathway. 38th Annual Scientific Meeting of the Research Society on Alcoholism. San Antonio, Texas, June 20-24, 2015.
38. Yuan FQ, Liu J, **Chen S-Y**. Sulforaphane prevents ethanol-induced apoptosis in neural crest cells by increasing histone acetylation at the Bcl2 promoter. Research! Louisville. 2015.
39. Yuan FQ, Liu J, **Chen S-Y**. Modulation of histone acetylation at the Bcl2 promoter by sulforaphane reduced ethanol-induced apoptosis in neural crest cells. Society for Developmental Biology. 2015
40. Chen XP, Liu J, **Chen S-Y**. Up-regulation of miR-200a suppresses ethanol-induced apoptosis in neural crest cells by down-regulation of p38 MAPK signaling. 37th Annual Scientific Meeting of the Research Society on Alcoholism. Bellevue, WA, June 21-25, 2014.
41. Chen XP, Liu J, **Chen S-Y**. Over-expression of miR-200c protects against ethanol-induced apoptosis in neural crest cells by targeting MAPK kinase 6. 37th Annual Scientific Meeting of the Research Society on Alcoholism. Bellevue, WA, June 21-25, 2014.
42. Dou, X, Chen, XP, **Chen S-Y**, Charness ME. Identification of candidate FASD susceptibility genes in L1 transfected fibroblasts and mouse embryos. 37th Annual Scientific Meeting of the Research Society on Alcoholism. Bellevue, WA, June 21-25, 2014.
43. Dou, X, Chen, XP, **Chen S-Y**, Charness ME. SRC family kinase phosphorylation of Y1176 in the L1 cytoplasmic domain is required for ethanol inhibition of L1 adhesion. 37th Annual Scientific Meeting of the Research Society on Alcoholism. Bellevue, WA, June 21-25, 2014.
44. Chen, XP, Liu J. **Chen S-Y**. Over-expression of Nrf2 diminishes ethanol-induced oxidative stress and apoptosis in neural crest cells by inducing an antioxidant response. 36th Annual Scientific Meeting of the Research Society on Alcoholism. Orlando, FL, June 22-26, 2013.
45. Chen, XP, Liu J. **Chen S-Y**. Down-regulation of microRNA-34a confers protection against ethanol-induced apoptosis in neural crest cells. 36th Annual Scientific Meeting of the Research Society on Alcoholism. Orlando, FL, June 22-26, 2013.
46. Chen, XP, Liu J, **Chen S-Y**. Nrf2-mediated antioxidant response is a major determinant of susceptibility of neural crest cells to ethanol-induced apoptosis. 35th Annual Scientific Meeting of the Research Society on Alcoholism. San Francisco, CA, June 23-28, 2012.
47. Chen, XP, Liu J, **Chen S-Y**. Microinjection of microRNA-125b mimic into cultured mouse embryos prevents ethanol-induced apoptosis and embryotoxicity. 35th Annual Scientific Meeting of the Research Society on Alcoholism. San Francisco, CA, June 23-28, 2012.

48. Liu J, Sun HJ, **Chen S-Y**. Down-regulation of foxhead box protein D3 contributes to ethanol-induced apoptosis in neural crest cells. *Alcohol Clin Exp. Res.* 35: 35A, 2011. 34th Annual Scientific Meeting of the Research Society on Alcoholism. Atlanta, Georgia, June 25-29, 2011
49. Sun HJ, Liu J, **Chen S-Y**. Siah1 mediates ethanol-induced apoptosis in neural crest cells by activating the p53 pathway. 34th Annual Scientific Meeting of the Research Society on Alcoholism. Atlanta, Georgia, June 25-29, 2011
50. Sun HJ, **Chen, S-Y**. Involvement of seven in absentia homolog-1 protein in ethanol-induced apoptosis in neural crest stem cells. 33rd Annual Scientific Meeting of the Research Society on Alcoholism. San Antonio Texas, June 26-30, 2010.
51. Lu Z, Sulik KK, **Chen S-Y**. Acute ethanol exposure results in reduced Fgf8 expression in the developing mouse forebrain. 33rd Annual Scientific Meeting of the Research Society on Alcoholism. San Antonio Texas, June 26-30, 2010.
52. Yan D, Dong J, Sulik KK, **Chen S-Y**. The Nrf2 inducer, tert-butylhydroquinone, prevents ethanol-induced apoptosis in culture cranial neural crest cells. 32nd Annual Scientific Meeting of the Research Society on Alcoholism. San Diego, California, June 20-24, 2009
53. Dong J, Yan D, Sulik KK, **Chen S-Y**. Stabilization of Nrf2 protein by D3T confers protection against ethanol-induced apoptosis in PC12 cells. 32nd Annual Scientific Meeting of the Research Society on Alcoholism. San Diego, California, June 20-24, 2009.
54. Dong J, Sulik KK, **Chen S-Y**. Induction of an antioxidant response in mouse embryos by ethanol and D3T is mediated by the activation of the Nrf2 transcription factor. 31st Annual Scientific Meeting of the Research Society on Alcoholism. Washington DC, June 28 – July 2, 2008
55. Parnell SE, Dehart DB, Sulik KK, **Chen S-Y**. Dose-dependent reduction of ethanol-induced ocular abnormalities in mice through the dietary administration of N-acetylcysteine. 31st Annual Scientific Meeting of the Research Society on Alcoholism. Washington DC, June 28 – July 2, 2008
56. Dong J, Chen YK, Sulik KK, **Chen S-Y**. Overexpression and nuclear translocation of glyceraldehyde-3-phosphate dehydrogenase: A role in ethanol-induced apoptosis in PC12 cells. 30th Annual Scientific Meeting of the Research Society on Alcoholism. Chicago, Illinois, July 2007.
57. Dong J, Sulik KK, **Chen S-Y**. Inhibition of NADPH oxidase by diphenyleiodonium prevents the activation of caspase-3 in ethanol-exposed mouse embryos. 30th Annual Scientific Meeting of the Research Society on Alcoholism. Chicago, Illinois, July 2007
58. Parnell SE, **Chen S-Y**, Charness ME, Hodge CW, Dehart DB, Sulik KK. Concurrent dietary administration of D-SAL and ethanol diminishes ethanol's teratogenesis. 29th Annual Scientific Meeting of the Research Society on Alcoholism. Baltimore, Maryland, June 23-29, 2006
59. Dong J, Sulik KK, **Chen S-Y**. NOX/DUOX Family of NADPH oxidases is the major source of reactive oxygen species in ethanol-exposed mouse embryos. 29th Annual Scientific Meeting of the Research Society on Alcoholism. Baltimore, Maryland, June 23-29, 2006.
60. Dong J, Sulik KK, **Chen S-Y**. Nrf2 signaling in transcriptional activation of genes encoding antioxidant proteins and phase 2 detoxifying enzymes in ethanol-exposed mouse embryos. 29th Annual Scientific Meeting of the Research Society on Alcoholism. Baltimore, Maryland, June 23-29, 2006.
61. **Chen S-Y**, Hanes RM, Sulik KK. Expression of patterning genes in the hindbrains of ethanol-exposed mouse embryos. 28th Annual Scientific Meeting of the Research Society on Alcoholism. Santa Barbara, California, June 25-30, 2005.

62. Lu Z, Sulik KK, **Chen S-Y**. Proteomic analyses of ethanol sensitive versus non-sensitive regions of ethanol-exposed and control embryonic mouse brains. 28th Annual Scientific Meeting of the Research Society on Alcoholism. Santa Barbara, California, June 25-30, 2005.
63. **Chen S-Y**, Hanes RN, Sulik KK. A role for endothelin-1-mediated signaling in ethanol-induced visceral arch abnormalities. *Alcohol Clin Exp Res.* 28:86A, 2004. 27th Annual Scientific Meeting of the Research Society on Alcoholism. Vancouver, Canada, 2004
64. **Chen S-Y**, Wilkemeyer MF, Charness ME, Sulik KK. Activity-dependent neuroprotective peptide (NAP) prevents ethanol-induced developmental delay in cultured whole mouse embryos. 26th Annual Scientific Meeting of the Research Society on Alcoholism. Fort Lauderdale, Florida, 2003.
65. **Chen S-Y**, Dehart DB, Charness ME, Sulik KK. Vasoactive intestinal peptide protects mouse embryos from ethanol-induced limb malformations in vivo. 25th Annual Scientific Meeting of the Research Society on Alcoholism. San Francisco, California, 2002.
66. **Chen S-Y**, Dehart DB, Sulik KK. Hypoxia and ethanol-induced apoptosis and teratogenesis in cultured mouse embryos. 24th Annual Scientific Meeting of the Research Society on Alcoholism. Montreal, Canada, 2001.
67. Sulik KK, Dunty WC, **Chen S-Y**. Alcohol-induced birth defects – Pathogenesis to prevention. Genes and Gene Delivery for Diseases of Alcoholism Proceedings, 2001.
68. **Chen S-Y**, Wilkemeyer MF, Sulik KK, Charness ME. 1-Octanol antagonizes ethanol toxicity in mouse whole embryo culture. 23th Annual Scientific Meeting of the Research Society on Alcoholism. Denver, Colorado, 2000.
69. **Chen S-Y**, Sulik KK. Iron-mediated free radical generation and ethanol-induced neural crest cell toxicity. 22nd Annual Scientific Meeting of the Research Society on Alcoholism, Santa Barbara, California, 1999
70. **Chen S-Y**, Sulik KK. Visualization of hydrogen peroxide generation and cell death in ethanol-exposed living neural crest cells using laser scanning confocal microscopy. Gordon Conference Proceedings, Henniker, New Hampshire, 1998.
71. **Chen S-Y**, Sulik KK. Laser scanning confocal microscopic visualization of free radical generation and cell death in ethanol-exposed living neural crest cells. 37th Annual Meeting of the American Teratology Society. West Palm Beach, Florida, 1997.
72. **Chen S-Y**, Periasamy A, Yang, B, Sulik, KK. Correlation of inherent plasma membrane ganglioside GM1 with membrane fluidity and sensitivity of mouse neural crest cells to ethanol-induced toxicity. 36th Annual Meeting of the American Teratology Society. Keystone, Colorado, 1996.
73. **Chen S-Y**, Sulik KK. Amelioration of ethanol-induced developmental toxicity with GM1 ganglioside. Proceedings of the Greenwood Genetics Center 15: 129, 1996.
74. **Chen S-Y**, Yang B, Jacobson K, Sulik KK. Ethanol-induced neural crest cell death: Changes in membrane fluidity and the protective role of ganglioside GM1. 35th Annual Meeting of the American Teratology Society. Newport Beach, California, 1995.
75. **Chen S-Y**, Sulik, KK. The role of free radicals in ethanol-induced neural crest cell death. 35th Annual Meeting of the American Teratology Society. Newport Beach, California, 1995.