CURRICULUM VITAE

WEI ZHENG, Ph.D., ATS

BUSINESS ADDRESS

School of Health Sciences
College of Health and Human Sciences
Purdue University
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PERSONAL DATA

Citizenship: American Citizen
Marital Status: Married with two children

PART I: TRANING AND PROFESSIONAL EXPERIENCE

PROFESSIONAL TRAINING

1977-1981 **Bachelor of Science** in Pharmacy
College of Pharmacy, Zhejiang University, Hangzhou, PRC

1981-1984 **Master of Science** in Pharmacology
Department of Pharmacology, Zhejiang University College of Pharmacy

1986-1991 **Doctor of Philosophy** in Pharmacology and Toxicology
Department of Pharmacology and Toxicology, University of Arizona College of Pharmacy, Tucson, Arizona

1991-1992 **Postdoctoral/Research Fellow**
Mentor: Dr. I. Glenn Sipes, Head, Department of Pharmacology, School of Medicine, University of Arizona. President of the Society of Toxicology (1991-1992)

2009 Feb **Leadership Training Camp**
CIC (Committee on Institutional Cooperation) Dept. Chairs/Heads Forum, Chicago.

ACADEMIC AND PROFESSIONAL APPOINTMENT

1975-1977 **Research Technician (Analyst Assistant)**
Experimental Pharmaceutical Factory of Zhejiang University, Hangzhou, PRC

1984-1986 **Lecturer** of Pharmacology
Department of Pharmacology, Zhejiang University College of Pharmacy, Hangzhou, PRC

1986-1991 **Graduate Research Assistant**
Department of Pharmacology and Toxicology, University of Arizona, Tucson, AZ

1992-1993 **University of Arizona**, Tucson, Arizona
Research Assistant Scientist (non-tenure faculty position). Dept. of Pharmacology and Toxicology, College of Pharmacy, University of Arizona, Tucson, AZ.

1993-2003 **Columbia University**, New York, New York

- **Assistant Professor** of Public Health and Pharmacology (1993-1999) and
- **Associate Professor** (tenured, 2000-2003), a joint faculty position in Dept. of Environmental Health Sciences in School of Public Health, and Dept. of Pharmacology in College of Physicians and Surgeons, Columbia University, New York, NY.

2003-present **Purdue University**, West Lafayette, Indiana

- **Associate Professor** of Health Sciences and Toxicology (2003-2006) and
- **Professor** (2006-present), School of Health Sciences, Purdue University.
- **Head** (2008-2017), School of Health Sciences in College of Health and Human Sciences
- **Associate Dean** (2008-2010) *College of Pharmacy, Nursing and Health Sciences* (College of PNHS dissolved in 2010 as a part of University's Strategic Consolidation)

Contribution Locally to Purdue's Research and Educational Excellence in Toxicology

Purdue used to have a sound toxicology program hosted in School of Pharmacy in late 1960s and early 1970s. In late 1980s and thereafter, the tox program was significantly weakened due to pharmacy school's shifting away from the toxicology and therewith the departure of most of tox faculty members (as well as their lab spaces). When I jointed Purdue in 2003, there was only one tox faculty member (Dr. Gary Carlson) in the School of Health Sciences, and no any NIH grant-supported research. My major contribution as a faculty and later as the school head was to build the toxicology research and educational programs from scratch and cultivate it for its sustainable growth to this date. As a school head, there are a few things I felt proud of during my management: (1) consolidated the existing faculty's strengths into two pillars of research excellence, i.e., one in environmental and occupational toxicology (EOT) and one in radiological health sciences (RHS), from which to foster highly productive interdisciplinary research enterprises, from animal models to human populations and from genetic molecular approaches to advanced clinical medical imaging (MRI, PET, XFR); (2) created new faculty lines and recruited 10 new faculty members (6 in EOT and 4 in RHS); (3) acquired, renovated and expanded the wet-lab space by more than 2.5 fold; (4) efforts made to empower all faculty members (100%) being funded by extramural funds since 2011, mostly from the NIH; and (5) managed to create eight new courses during my tenure in the leadership. These efforts brought Purdue's toxicology program to the national stage of recognition in toxicological research and education.

PROFESSIONAL ORGANIZATIONS AND SOCIETIES

1994-present	Member of Society of Toxicology (USA), President of the Metals Specialty Section (2009-2010), Chair of Board of Publication (2016-2019), student/postdoc member (1987-1994)
1995-present	Member of Society for Neuroscience (USA)
2011-present	Member of International Society for Trace Elements Research in Humans. Vice President-Elect (2015), Vice President (2017), President (2019)
2004-present	Member of International Neurotoxicology Association (USA)
1990-present	founding member of American Association for Chinese in Toxicology (AACT), President (1991-1992)
1991-present	Member of American Association for the Advancement of Sciences
2005-2019	Member of Society for Experimental Biology and Medicine (USA)
1992-1995	Member of International Society for the Study of Xenobiotics
1993-1996	Member of New York Academy of Sciences

PART II: LEADERSHIP AND ENGAGEMENT CREDITS

A. AWARDS AND RECOGNITIONS

- **Fellow**, the U.S. Academy of Toxicological Sciences (**ATS**) (2016)
- **Faculty Research Achievement Award**, Purdue University/HHS (2020)
- **Landolt Teaching Excellence Award**, Purdue University (2019)
- **Seeds of Success Award**, Purdue University (2006, 2010, 2018)
- **Outstanding Graduate Faculty Mentor Award**, College of Health and Human Sciences, Purdue University (2017)

- **Career Achievement Award**, the Society of Toxicology Metals Specialty Section, San Diego (2015)
- **Distinguished Chinese Toxicologist**, American Association of Chinese in Toxicology (2010)
- **University Faculty Scholar**, Purdue University (2006)
- **2005 Best Paper Award**, Society for Experimental Biology and Medicine (2005)
- **Science and Technology Award** (3rd Place) by Beijing City Government for achievements in science and technology. Award Number: 2007Y-3-007-02 (2008)
- **Science and Technology Achievement Award** (3rd Place) by the Chinese Preventive Medicine Association for research achievement. Award Number: 200701003-3-G0806. (2007)
- **Outstanding Research Award**, Johnson & Johnson focused giving program (2002)
- **Calderone Award**, Columbia University School of Public Health (1994)
- **Honorary Citizen** of Tucson, issued by Mr. Thomas J. Volgy, Mayor of Tucson (1988)

- **President**, International Society for Trace Element Research in Humans, Vice President-elect 2015, Vice President 2017, President 2019, past President 2021.
- **Chair**, Board of Publication, Society of Toxicology 2016- 2019.
- **Keynote Speaker**, "Disrupted Neurogenesis in Adults and Environmental Metal Exposure", invited by the 18th Conference of Chinese Environmental Mutagen Society, Zunyi, China, June 2019.
- **Keynote Speaker**, "Environmental Causes of Neurodegenerative Diseases: Lessons from Lead and Manganese Toxicological Studies. Invited Speaker for the 40th Anniversary of Establishment of School of Public Health at Guangxi Medical University, Nanning, China, Nov 2016.
- **Keynote Speaker**, "Occupational Exposure to Metals: New Research Trend". Forum on Occupational and Environmental Health and Prevention in Guizhou and Surrounding Regions, Zunyi, China, July 2013
- **President**, International Neurotoxicology Conference, a joint conference of the *International Neurotoxicology Association* and the *International Commission on Occupational Health: Committee on Neurotoxicology and Psychology*, Xi'an, China, June 5-10, 2011.
- **Invited speaker**, The George Bush China-U.S. Relations Conference: Development, Energy, and Security, Washington D.C. Oct 2007 where the keynote speakers included President George W. H. Bush, Secretory of the Treasury Henry Paulson, and Chinese Ambassador Li Zhaoxing.
- **President**, Society of Toxicology Metal Specialty Section, Vice President-Elected 2008, Vice President 2009, President 2010
- **President** (founding member), American Association of Chinese in Toxicology, 1991-1992
- Marquis Who's Who in America, 2009.

B. DEPARTMENTAL AND UNIVERSITY COMMITTEES

2020-present	Member and co-chair, School of Health Sciences Awards Committee
2018-2020	Member, School of Health Sciences Undergraduate Curriculum Committee
2008-2017	Member, College of HHS Promotion and Tenure Committee
2009-2017	Member, Purdue Center for Cancer Research Liaison Committee
2015	Member of the University Search Committee for Biology Department Head
2014	Chair, School of Health Sciences (HSCI) Faculty Search Committee on Occupational and Environmental Toxicology
2009-2010	Member, Task Force for Creating College of Health and Human Sciences
2008-2011	Senator, Purdue University; member of Senate Advisory Committee to the President (surrendered in 2009 in lieu of the school's executive position)
2008-2010	Member, College Executive Committee of Pharmacy, Nursing and Health Sciences
2004-2008	Chair, Graduate Committee in School of Health Sciences
2005-2008	Member of Graduate Committee in College of Pharmacy, Nursing and Health Sciences
2007-2008	Member of Awards Committee of College of Pharmacy, Nursing and Health Sciences

2007-2008 Member of HSCI Grade Appeals Committee
2007 Chair, HSCI Committee on Establishing the Faculty Promotion and Tenure Guidelines
2006-2007 Chair, HSCI Faculty Search Committee on toxicology
2006-2007 Chair, HSCI Committee for Internal/External Graduate Program Review
2004-2008 Faculty advisor to campus-wide Caduceus Club (Pre-Med Club)
2005-2008 Faculty advisor to the Minority Student Club
2004-2008 Director and founder, Purdue University Toxicology Program
2004-2005 Member of HSCI Recognition and Awards Committee
2003-2005 Schedule Deputy of School of Health Sciences, Purdue University
1995-2002 Member of Graduate Admission Committee in School of Public Health at Columbia University
1995-2002 Chair, Graduate Committee on Master of Public Health (MPH) in Dept. of Environmental Health Sciences (Member since 1994)
1998-2002 Member of Ph.D. Qualification Examination Committee in Dept. of Environmental Health Sciences, Columbia University
1993-1995 Coordinator, DrPH and Faculty Seminars in Division of Environmental Health Sciences, Columbia University

C. STUDY SECTIONS AND EXTRAMURAL COMMITTEES

(Having served in 89 grant review panels including 74 study sections for NIH, EPA, HEI and CNSF, and 13 university review panels at Harvard, Columbia, Brown, Vanderbilt etc.)

2008-2012 Standing member of NIH Neurotoxicology and Alcohol (NAL) Study Section
2003-2007 Standing member of NIH Environmental Health Sciences Review Committee (review P30 center grants, P01 program projects, T32 training grants, and P42 Superfund grants).
2006-2007 Standing member of the Review Committee on National Emphasis Programs, National Science Foundation of China (2-year term).
2001-present Ad hoc member of NIH/NIEHS, NIOSH, and EPA Study Section peer-review groups.
2001-2003 Member of the Harbor Consortium by New York Academy of Science and New York City Health Department

Panel member in the past 10 years:

11/20/2020 Member, NIH/EHS Review Committee ZES1 VSM-S(t) for T32 training grants.
06/10/2020 Member, DOD/CDMRP (USAMRMC) Panel on the Peer Reviewed Medical Research Program: Metal Toxicology
04/15/2020 Member, NIH/NIEHS Special Emphasis Panel ZES1 VSM-K LR for NIH/NIEHS load repayment program
10/29/2019 Reviewer, the peer review panel of Oak Ridge Associated Universities for Ed & Ethel Moore Alzheimer's Disease Research Program operated by Florida Dept. of Health.
08/29/2019 Member, DOD/CDMRP (USAMRMC) Panel on the Peer Reviewed Medical Research Program: Metal Toxicology – Full Review
06/26/2019 Reviewer, Swiss National Science Foundation on biomedical research grants.
04/30/2019 Member, DOD/CDMRP (USAMRMC) Panel on the Peer Reviewed Medical Research Program: Metal Toxicology – Preliminary Review
04/12/2019 Member, NIH/NIEHS Special Emphasis Panel ZES1 VSM-S L9 for NIH/NIEHS load payment program
07/28/2018 Member, NIH/NIEHS Special Review Panel ZCA1 SRA-D (R01)
06/11/2018 Member, NIH/NIEHS Special Emphasis Panel ZES1 LKB-D (K99-R00)
04/24/2018 Member, NIH/NIEHS Special Emphasis Panel ZES1 RAM-K (LP) 1 for NIH/NIEHS load payment program

02/22/2018 Member, NIH/NIEHS NAL study section ZRG1 NAL-Z (07) (R01 and R21)
11/02/2017 Member, NIH/NIEHS Special Emphasis Panel ZES1 LAT-S (K8)1 for NIH/NIEHS K-type grants (K01, K02, K08, K23 and K99/R00)
08/08/2017 Review, Indiana Alzheimer's Disease Center grant applications
04/28/2017 Member, NIH/NIEHS Special Emphasis Panel ZES1 RAM-S (LR)1 for NIH loan payment program
07/12/2016 Reviewer, University of Louisville Environmental Health Science Center pilot grants
06/07/2016 Member, NIH/NIEHS Special Emphasis Panel ZES1 JAM-DR3 for R13 applications.
04/22/2016 Member, NIH/NIEHS Special Emphasis Panel ZES1 RAM-J (LR)1 for loan payment program
10/05/2015 Member (ad hoc), NIH/NAL study section review in Washington DC
04/20/2015 Member, NIH/NIEHS Special Emphasis Panel ZES1 RAM-D LR1 for loan payment program
03/30/2015 Member, NIH Special Emphasis Panel ZRG1 HDM-S (50) R. Centers of Excellence on Environmental Health Disparities Research
03/28/2015 Review, Indiana Alzheimer's Disease Center grant applications
11/12/2014 Member (ad hoc), NIH Environmental Health Sciences Review Committee (EHS-T1), T32 Training grant
09/23/2014 Reviewer, Harvard University Environmental Health Science Res Center, pilot grants
04/24/2014 Member, NIH/NIEHS Special Emphasis Panel/2014/08 ZES1 RAM-D (LP) for Loan Repayment program.
03/17/2014 Reviewer, Vanderbilt University NIEHS Center in Molecular Toxicology, pilot grants
03/12/2014 Member, NIH/NIEHS Special Emphasis Panel K99/R00 Study Section ZES1 LKB-J(KS).
02/22/2014 Member (ad hoc), NIH/Neural Oxidative Metabolism and Death (NOMD) Study Section.
02/12/2014 Reviewer, Harvard University Environmental Health Science Res Center, pilot grants
04/22/2013 Member, NIH/NIEHS Special Emphasis Panel/ZES1 RAM-D for Loan Payment.
06/14/2012 Member, NIH/NAL Study Section review in Washington DC
05/11/2012 Member, NIH/NIEHS Special Emphasis Review Panel on Loan payment grants (ZES1-RAM-D [L]1)
02/29/2012 Reviewer, Vanderbilt University NIEHS Center in Molecular Toxicology, pilot project.
02/23/2012 Member (ad hoc), NIH/NIEHS Special Emphasis Review Panel (ZES1 JAB-D) on R13 grants
01/31/2012 Member, NIH/NAL Study Section review in San Francisco, CA
10/13/2011 Member, NIH/NAL Study Section review in Washington DC
04/29/2011 Reviewer, Columbia University NIEHS Center, pilot projects.
03/16/2011 Member (ad hoc), NIH/NIEHS Special Emphasis Review Panel (ZES1 LKB-J K9) on K grants
01/31/2011 Member, NIH/NAL Study Section review in Santa Monica, CA
10/07/2010 Member, NIH/NAL Study Section review in Washington DC
08/12/2010 Member (ad hoc), NIH/NIEHS Special Emphasis Review Panel on P30 center grants
02/03/2010 Member, NIH/NAL Study Section review in San Diego, CA

D. ADVISORY BOARD AND SERVICES

Dec 2019 Member of the Scientific Advisory Board of U.S. Food and Drug Administration.
Nov 2019 Consultant and speaker on the blood-brain barrier and neurodegenerative diseases for Janssen and Johnson & Johnson Pharmaceutical Com.
Apr 2014 Reviewer of the proposal to establish the Graduate Programs in Environmental and Ecological Engineering for Indiana Commission for Higher Education.
Mar 2013 External reviewer of Department Chair and Programs in School of Public Health at University of Illinois Chicago.

Feb 2009	Member of the Advisory Board to the U.S. Department of Health & Human Services, Agency for Toxic Substances and Disease Registry (ATSDR): Toxicological Profile for Manganese.
June 2008	Consultant to Eastern Research Group, Inc. to peer review ATSDR's Toxicological Profile on Manganese (Contract: GS-10F-0036K, Task Order 200-2007-F-21565).
Oct 2006	Consultant to Grosby Saad LLC (Mobile, AL) (James H. Crosby 251-533-6425 cell) representing welders for occupational exposure
Aug 2005	Consultant, review for Treatment Options for Mercury/Metal Toxicity in Autism and Related Developmental Disabilities, by NIH/NIEHS
Oct 2003	Consultant to Bard Medical Division, Covington, Georgia
May 2003	Consultant to Davies, McFarland & Carroll, P.C. on manganese neurotoxicity among welders in Mississippi case.
2002-2003	Consultant in Neurotoxicity Scientific Advisory Committee, MetaPhore Pharmaceuticals, Inc., St. Louis, MO.
2001 – 2003	Member of the Harbor Consortium by New York Academy of Science and New York City Health Department

E. EDITORIAL AND REVIEW SERVICES:

2020-2021	Guest Editor, *NeuroToxicology*
2019-2020	Guest Editor, *J Trace Elem Med Biol*
2002-Present	Member of Editorial Board, *Fluid and Barriers of the CNS*
2007-Present	Member of Editorial Board, *Experimental Biology and Medicine*
2015-2-19	Member of the SOT Board of Publications (Chair, 2016-2019)
2004-2008	Member of Editorial Board, *Toxicology Letters*
2008-2014	Associate Editor, *Journal of Toxicology*
2012-Present	Member of Editorial Board, *Chinese Journal of Preventive Medicine*

Reviewer for:

1. Aging Cell
2. American J Physiology – Cell Physiol
3. Biochemical Pharmacology
4. Biological Trace Elem Research
5. Brain Imaging and Behavior
6. Brain Research
7. Brain Research Bulletin
8. Cerebellum
9. Fluid and Barriers of CNS
10. Chemical Research in Toxicology
11. Chemico-Biological Interactions
12. Current Alzheimer Research
13. Drug Metabolism and Disposition
14. Ecotoxicology and Environmental Safety
15. Environmental Health Perspectives
16. Environmental Pollution
17. Environmental Sci Pollution research
18. Epilepsia
19. Experimental Biology and Medicine
20. Fluids and Barrier of CNS
21. Histology and Histopathology
28. Journal of Occupational and Environmental Medicine
29. Journal of Public Health
30. Journal of Pharmacology and Experimental Therapeutics
31. Journal of Toxicology and Environmental Health
32. Journal of Toxicology
33. Journal of Trace Element Research in Medicine and Biology
34. Life Sciences
35. Molecular Brain Research
36. Molecular and Cellular Biochemistry
37. Neurochemical Research
38. Neuroscience Letters
39. Neurotoxicology
40. Neurotoxicology and Teratology
41. Physiology and Behavior
42. PLOS One
43. Proceedings of Society for Experimental Biology and Medicine

22. Human Experimental Toxicology
23. Journal of Health Sciences
24. Journal of Histochemistry and Cytochemistry
25. Journal of Nanoscience and Nanotechnology
26. Journal of Neurochemistry
27. Journal of Neuroscience Research
44. Regulatory Toxicology and Pharmacology
45. Neurotoxicology and Teratology
46. Toxicological and Environmental Chemistry
47. Toxicological Sciences
48. Toxicology and Applied Pharmacology
49. Toxicology Letters

PART III: SCHOLARLY ACCOMPLISHMENTS

A. PATENT

Immortalized rat choroidal epithelial cell line for blood-CSF barrier research, patented by Columbia University, U.S. Serial No. 60/518,590. 2002.

B. RESEARCH GRANT AND CONTRACT SUPPORT

Ongoing Active Research Support:

1. **NIH/NIEHS R01 ES027078-01** Zheng/Du(Co-PI) 07/01/2017 – 06/30/2022
   Lead Exposure and Beta-Amyloid Transport by Brain Barriers
   To study how Pb exposure alters brain barrier structure and function, leading to increased permeability of Aβ transport to brain, decreased clearance from brain and enhanced aggregation. Total cost $1,918,925. Role: PI (15%).
2. **NIH/NIEHS R21 ES030809-01** Du/Territo (MPI) 02/01/2020 – 06/30/2022
   The Pathogenic Role of Pb in Cerebral Amyloid Angiopathy and AD
   To test the hypothesis that Pb in two different APP transgenic mouse lines is able to induce inflammation-associated CAA, leading to cerebral microhemorrhages by using DCE-PET and immunohistochemistry (IHC). Total cost $446,746. Role: Co-I (0.8 month summer salary).
3. **NIH/NINDS R01 NS094607-21** Louis, ED (PI) 03/01/2016 – 02/28/2021
   Environmental Epidemiology of Essential Tremor
   To study the role of beta-carboline alkaloids in the etiology of essential tremor. Total cost $3,593,950. Total cost $519,250 to Zheng. Role: Co-Investigator (5%)
4. **CDC/NIOSH 2T03OH008615-14-00** Wells, E (PI) 07/01/2017 – 06/30/2020
   Occupational Safety and Health Training Grant
   To train undergraduate and graduate students devoted to a career in industrial hygiene or occupational safety. Role: Co-Investigator (0.18 academic months; no salary requested). Total cost $750,000 to Purdue; Awarded in the current year:
5. **NIH/NIEHS 3R01 ES027078-03S1** Zheng/Freeman (MPI) 07/17/2020 – 07/31/2022
   Establishing a Zebrafish Model of Cerebral Amyloid Angiopathy to Study Lead-induced AD
   A minority supplemental grant to R01 ES027078 aiming at establishing a novel CAA zebrafish model to study the pathoetiology of AD. Total cost $104,755. Role: Co-PI (effort as needed; no salary requested).
6. **NIH/NIEHS (GRANT#12951404**) Zheng/Du (MPI) 07/01/2020 – 06/30/2021
   Additional Fund Request for Imaging Component at IUSM
   A supplemental request to R01 ES027078 asking additional funds to accomplish the DCE CT study of the BBB after lead exposure in transgenic mice, taking into account the increased hourly rate at IUSM. Total cost $145,969. Role: PI (effort as needed; no salary requested).
7. **Yale University (GRANT#20078317)** Zheng, W (PI) 10/08/2019 – 10/31/2021
   Development of a LC-MS Method for Quantifying Harmane in Human Brain Tissues

To develop an effective method to quantify harmane in human brain tissues for clinical environmental health study of essential tremors. Total cost $31,000. Role: PI (effort as needed; no salary requested).

8. **Johnson & Johnson Corp. (2003111191)** Zheng, W (PI) Unrestricted
   Development of a High Through-Put System for Study of Transport of Drugs across Brain Barriers
   To use molecular biology method to knock in tight junction gene to a newly developed blood-CSF barrier cell line. Direct cost $255,000 for unlimited years. Role: PI.

Pending Grants:

NIH/NIEHS R01 ES031181-01 Du/Territo/Zheng (MPI) 04/01/2020 – 03/31/2022
New insights into molecular mechanism underlying Lead (Pb)-induced CAA pathology
To test the hypothesis that lead exposure causes cerebral amyloid angiopathy (CAA) by using imaging technologies. Total cost $450,000. Role: Co-PI (5%).

Completed Research Support (total 42 since 1994):

9. NIH/NIEHS R13 ES030964-01 Zheng, W (PI) 07/01/2019 – 06/30/2020
   The 13th Biennial Conference of the Int'l Society of Trace Element Research in Humans
   To support the biennial conference of the Int'l Society for Trace Element Research in Humans held in Bali, Indonesia, Sept 22-26, 2019. Total cost $18,000. Role: PI (effort as needed).
10. AgSeed Purdue University Gondhalekar A (PI) 03/01/2019 – 02/29/2020
    Defining target sites for plant essential oil constituents used in agricultural, veterinary and structural insect pest management
    A collaborative project between Entomology and Health Science to develop a highly effective organically grown product for "green" insect pest control and management in agriculture as well as in daily public life. Direct cost: $50,000. Role: Co-I.
11. NIH/NIEHS R56 ES008146 Zheng, W (PI) 12/01/2015 – 11/30/2016
    Adult Neurogenesis in Mn-Induced Neurotoxicity
    To test the hypothesis that Mn interaction with Cu underlies the altered adult neurogenesis in subventricular zone which contributes to Mn-induced parkinsonian disorder. Total cost $155,000. Role: PI (effort as needed)
12. NIH/NIOSH R21 OH010700-01 Nie, Linda (PI) 07/01/2014 – 06/30/2016
    Bone Mn as a Biomarker for Early Diagnosis of Mn Neurotoxicity in Occupationally Exposed Workers.
    Apply the neutron-based noninvasive technology to seek the association between Mn neurotoxicity and bone Mn accumulation. Total cost $401,479. Role: Co-I (5%).
13. **NIH/NIEHS R01 ES008146-18** Zheng, W (PI) 03/01/2010 – 12/31/2016
    Choroid Plexus as a Target in Metal-Induced Neurotoxicity
    A competitive renewal of RO1 grant to test the hypothesis that the brain barrier systems regulate Cu transport between the blood and CSF through the critical transporters, i.e., Ctr1, DMT1 and ATP7A; exposure to Mn alters the functions of these transporters, leading to a distorted Cu homeostasis in the CSF. Total cost $1,703,576. Role: PI (15%)
14. NIH/NINDS RO1 NS-39422-15 Louis, ED (PI) 04/01/2009 – 06/30/2015
    Environmental Epidemiology of Essential Tremor
    To study the role of beta-carboline alkaloids in the etiology of essential tremor. Total cost $3,544,189. Total cost $312,178 to Zheng. No-cost extension. Role: Co-Investigator (as needed)
15. NIH/NIOSH R21 OH010044-01 Nie, Linda (PI) 08/01/2012 – 07/31/2015
    Development and Validation of A Novel Neutron Technology for Bone Mn Assessment
    To develop a novel neutron-activated X-ray fluorescent technology for noninvasive quantification of manganese in bone. To validate in animal models and test in human subjects. Total cost $355,234. Role: Co-Investigator (5%).

16. NIH/NIEHS 3R01ES008146-14S2 Zheng, W (PI) 08/01/2011 – 07/31/2013
Research Supplements to Promote Diversity in Health-Related Research Program
A supplemental grant to support Christopher Bates, a minority doctoral student, for his research in choroid plexus and a-synuclein clearance by the brain barriers. Total $104,737. Role: PI, effort as needed.

17. NIH/NIEHS R13 ES-020094-01 Zheng, W (PI) 03/01/2011 – 02/28/2012
Xi'an International Neurotoxicology Conference
Financial support to the joint international conference of the 13th International Neurotoxicology Association Biennial Meeting (INA-13) and 11th International Symposium on Neurobehavioral Methods and Effects in Occupational and Environmental Health (NEUREOH-11) in Xi'an, China between June 5-10, 2011. Total cost $13,000. Role: PI (2%).

18. Showalter Trust Foundation Pushkar/Zheng (Co-PI) 07/01/2011 – 06/30/2012
Analysis of Molecular Mechanisms of Adult Neurogenesis and Brain Repair by Synchrotron Based Biomedical Imaging and Spectroscopy
To use XRF technique to study whether Cu-metallothionein promotes the neuronal survival and regeneration in cell culture and injured brain. $75,000. Role: Co-PI (effort as needed).

19. NIH/NIEHS R21 ES017055 Zheng, W (PI) 03/01/2009 – 02/28/2012
Beta-Amyloid Clearance by Mammalian Choroid Plexus: Effect of Lead Exposure
To explore the role of blood-CSF barrier in the choroid plexus in clearance of beta-amyloid present in the CSF and to demonstrate whether and how lead accumulation in the choroid plexus may affect this process, to contribute to etiology of Alzheimer's disease. Total $422,842. (5%) no-cost extension

20. U.S. NSF CBET 0828832 Cheng, JX (PI) 01/01/2009 – 12/31/2011
Selective Imaging and Eradication of Activated Macrophages Using Bio-conjugated Plasmon-resonant Gold Nanorods
To test the hypothesis that laser irradiation of nanorods accumulated in a plaque could induce apoptosis of macrophages with minimal systemic toxicity. Total cost $331,831. $27,330 to Zheng. Role: Co-investigator (5%)

21. Showalter Trust Foundation Freeman, JL (PI) 08/01/2010 – 07/31/2011
Fetal Origin of Adult Neurologic Disorders: Reelin
To study alteration of reelin – a nerve growth regulatory gene – by low dose lead (Pb) exposure to understand the novel mechanism of the fetal origin of neurological disorders. $75,000. Role: Co-Investigator (effort as needed).

22. NIH/NIEHS R21 ES017498 Dydak, U, (PI) 09/05/2009 – 06/30/2011
Effect of Manganese Exposure on GABA and Glutamate in Human Brains by MRS
Use MRS technique to explore the mechanism underlying Mn-induced parkinsonian syndromes. Total cost $417,730. Role: Co-Investigator (5%)

23. U.S. DoD USAMRMC W81XWH-05-1-0239 Zheng, W (PI) 04/01/2005 – 02/28/2011
Biomarkers of Manganese Neurotoxicity: MRI and MRS in Manganese-Exposed Smelting Workers and Relationship to External and Internal Exposure Indices
To use magnetic resonance imaging and spectroscopic techniques to mechanistically explore Mn-elicited neuronal damage among a well-established smelter cohort in Zunyi, China. Total cost $643,848. (15%)

24. Showalter Trust Award Dydak, U (PI) 07/01/2009 – 06/30/2010
New Therapeutic Treatment of Manganese Parkinsonism by Para-Amino Salicylic Acid: A Magnetic Resonance Imaging and Spectroscopy Study
To assess the effect of para-amino salicylic acid as treatment to manganism in rats. Total cost $50,000. Role: Co-Investigator

25. NIH/NIEHS RO1 ES-08146-12 Zheng, W (PI) 12/01/2005 – 02/28/2010
Choroid Plexus as a Target in Manganese-Induced Neurotoxicity

To test the hypothesis that that the altered expression of DMT1 and MTP1 in the choroid plexus following Mn exposure contributes to Mn-induced Fe metabolism disorder in the CSF. Total cost $1,635,049. Role: PI (25%)

26. NIH/NINDS RO1 NS-39422-09 Louis, ED (PI) 04/01/2005 – 03/31/2009
Environmental Epidemiology of Essential Tremor
To study the role of beta-carboline alkaloids in the etiology of essential tremor. Total cost $1,734,796. Total cost $112,361 to Zheng. Role: Co-Investigator (8%)

27. NIH/NIEHS R21 ES013118 Zheng, W (PI) 04/01/2005 – 03/31/2007
Creation of an In Vitro Brain Barrier Transport System
To use the molecular techniques to create a novel in vitro blood-brain/CSF barrier model for transport study of materials in and out of brain. Total cost $398,479. Role: PI (15%)

28. NIH/NINDS RO1 NS-39422-04 Louis, ED (PI) 07/01/2000 – 06/30/2004
Environmental Epidemiology of Essential Tremor
To identify environmental risk factors for ET and determine if the degree of exposure to these factors correlates with tremor severity. Total $1,629,796. Role: Co-Investigator (15%)

29. Eli Lily Pharmaceuticals, RPFA # 0GJ63 Zheng, W (PI) 06/01/2004 – 05/31/2005
Improvement of an in Vitro Model of Blood-Brain/CSF Barrier
To improve the existing blood-CSF barrier cell line for drug screen and extend the research to invent a human brain barrier cell line. Total $22,800 for unlimited years. Role: PI.

30. NIH/NIEHS R13 ES012495 Zheng, W (PI) 03/15/2003 – 04/30/2004
Choroid Plexus in Health and Diseases
Organizer of International Workshop in London, UK, April 11-14, 2003. To develop the forum for scientists to exchange idea in blood-CSF barrier research field. Direct cost $8,450. Role: PI

31. International Society for Neurochemistry Zheng , W (PI) 02/01/2003 – 06/30/2004
Metal-Induced Neurodegeneration: From Global Exposure to Individual Susceptibility
Chairman of International Symposium held in Hong Kong, China, Feb, 2004. To stimulate the intellectual exchange in metal neurotoxicology. Direct cost $5,000. Role: PI

32. NIH/NIEHS RO1 ES-08146-07 Zheng, W (PI) 12/01/2001 - 11/30/2005
Choroid Plexus as a Target in Metal-Induced Neurotoxicity
To test the hypothesis that accumulation of Mn in the choroid plexus alters Fe regulatory mechanisms in the blood-CSF barrier and disturbs Fe homeostasis in the CSF, which may contribute to Mn-induced neurodegenerative Parkinsonism. Total cost $1,134,475. Role: PI (30%)

33. National Natural Science Foundation of China (NSFC)
NSFC#30000140 Li, Guojun (PI) 01/01/2001 – 12/31/2003
Mechanism of Environmental Factor in Parkinson Disease: Mitochondria Damage Induced by Mn
To study the mitochondrial damage and apoptosis induced by manganese exposure in experiment animals and in vitro culture system. Direct cost ¥150,000 ($18,750). Role: Co-PI

34. R21AT00836 Murphy, P (PI) 09/15/2001 – 09/14/2003
NIH/NCCAM (National Center for Complementary and Alternative Medicine),
Effects of Hypericum Perforatum on Oral Contraceptives
To evaluate the effects of chronic use of St. John's Wort (Hypericum perforatum) on metabolism of contraceptive steroids and ovarian suppression. Role: Co-Investigator (15% in Y02-03)

35. NIH/NIEHS P30 ES-09089 Graziano, J (PI) 07/01/2001 – 12/31/2002
Potential Biomarker for Occupational Exposure to Mn in China (Pilot grant)
To identify and characterize the human population that is relatively stable and under accountable sources of Mn exposure. Direct cost $20,000. Role: PI of the pilot grant

36. Burrows Wellcome Fund Award #021366 Deane, R (PI) 05/01/2002 – 02/28/2003
Effect of Manganese on Iron Transport into Brain: Implications for Manganese-Induced Parkinsonism

To study if exposure to Mn alters Fe regulatory mechanisms in the BBB and BCB, thereby disturbing Fe homeostasis in the CSF and brain. Direct cost £5542. Role: Co-Investigator

37. Burrows Wellcome Fund Award #1001670 Zheng, W (PI) 05/01/2001 – 02/28/2002
Alteration of Thyroxin Transport at the Choroid Plexus by Lead
To use in situ perfused sheep choroid plexus model to investigate whether lead exposure alters the influx of thyroxin from the blood to the choroid plexus. Collaborated with Dr. Malcolm B. Segal at King's College London, UK. Direct cost $5,989. Role: PI

38. Beijing Science Committee Grant#9558102800 Li, Guojun (PI) 10/01/2000 – 09/30/2005
Influences on mtDNA, NO, NOS in Mitochondria by Environmental Factor Manganese
To study the effect of Mn on mtDNA including point mutation and reactive oxygen species and to investigate the subcellular targets of Mn cytotoxicity. Direct cost ¥420,000 ($71,250). Role: Co-PI.

39. NIH/NIEHS RO1 ES-08146-01 Zheng, W (PI) 03/01/1998 – 02/28/2001
Choroid Plexus as a Target in Lead-Induced Neurotoxicity
To test the hypothesis that environmental Pb exposure induces a depression of CP TTR production, which may impair brain development by depriving it of thyroid hormones. Total $988,728. (45%)

40. Epilepsy Foundation of America Bazil, CW (PI) 07/01/1998 – 12/31/1999
Drowsiness, Sleep, and Circadian Rhythms in Patients with Temporal Lobe Epilepsy
The major goals of this clinical project are to investigate the role of melatonin in epilepsy. Direct cost $40,000. Role: Co-investigator (5%)

41. NIEHS Center Pilot Grant Louis, ED (PI) 05/01/1998 – 04/30/1999
Techniques in Studying Environmental Epidemiology of Essential Tremor
To develop the methods to study environmental causes of essential tremor and to produce preliminary data for an RO1 grant. Direct cost $25,000 for one year. Role: Co-Investigator

42. Calderon Foundation Zhao, Q (PI) 09/01/1998 – 08/31/1999
Does Iron (Fe) Play a Role in Manganese (Mn)-Induced Parkinsonism?
To investigate if chronic Mn exposure causes cellular Fe overload in rat brain. Total $2,500. Role: Co-Investigator

43. **NIH/NIEHS RO1 ES-07042-01** Zheng, W (PI) 12/01/1994 – 11/30/1997
Biotransformation of DMSA (Succimer) in Humans
To study that the efficacy of DMSA for treatment of childhood lead poisoning is associated with the extent to which DMSA is metabolized to its active mixed disulfides. Total $532,868. Role: PI (30%)

44. NIH/NIEHS P20 ES-06831 Graziano, JH (PI) 04/01/1994 – 03/31/1997
Environmental Health in Harlem
Development of an interdisciplinary collaborative research aimed at the major environmental health problems of socio-economically disadvantaged populations in New York City. Total $525,000. Role: Co-Investigator (20%)

45. Calderon Foundation Zheng, W (PI) 06/01/1994 – 05/31/1995
Establishment of Choroid Plexus Cell Culture
To establish primary choroid plexus tissue culture to investigate the role of the blood-CSF barrier as affected by environmental exposure to toxic substances. Total $7,500. Role: PI

46. NIEHS Center Pilot Grant Zheng , W (PI) 09/01/1994 – 08/31/1995
Effect of Lead (Pb) Exposure on Normal Functions of the Choroid Plexus
To test the hypothesis that accumulation of Pb in the choroid plexus can alter the normal functions of the blood-CSF barrier. Total $25,000. Role: PI

NIH/NIEHS-NTP Sipes, G (PI) 1988 - 1993.
Chemical Disposition in Mammals
Study of salicyl-azo-sulfapyridine, indium phosphide, tetrachloroazobenzene and anthraquinone in mammals as a part of National Toxicology Program (NTP) study. ($1,434,938). Role: Project Coordinator

Private Fund of $4,000 to study Mn kinetics in dogs (2001-2003).
Private Fund of $10,500 to study health effect of aging, toxicants, and eye functions (1996-1999).

C. HONORED ACTIVITIES

Visiting and Adjunct Professorship

- Visiting Professor, The Institut national de la santé et de la recherche médicale (INSERM) (the French National Institute of Health and Medical Research), Lyon, France (1/03/2020-6/30/2020)
- Adjunct Professor, Peking University Health Science Center, Beijing, PRC (2016-2019, unpaid)
- Adjunct Professor, Zunyi Medical College School of Public Health, Zunyi, PRC (2006-2020, unpaid)
- Visiting Professor, Guangxi Medical University, Nanning, PRC (2006-2011, unpaid)
- Visiting Professor, Zhejiang University College of Pharmacy, Hangzhou, PRC (2006-2011, unpaid)
- Visiting Associate Professor, Zunyi Medical College, Zunyi, PRC (2004-2006, unpaid)
- Visiting Associate Professor, Capital University of Medical Sciences, Beijing, PRC (2002-2006, unpaid)
- Visiting Professor in the Dept. of Physiology, King's College London, St Thomas' Hospital, London, UK. Summers of 2000 and 2001
- Visiting Assistant Professor, Zhejiang University College of Pharmacy, Hangzhou, China (1995-2001)

Contribution Nationally and Internationally to Leadership in Promoting Toxicology

1) I was the founding member to establish the Association of Chinese Scholars and Students of Toxicology in America (ACSSTA) in 1989, which attracts graduate students and visiting scholars with roots in China. The organization is the basis for the current American Association of Chinese in Toxicology (AACT), a specialty section of the SOT. The AACT under the current strong leadership plays an important role in promoting toxicology research and education among professionals of Chinese ethnicity in the U.S. It also plays an important role in promoting collaborative research between the U.S. and China.
2) I served as chairman of the *International Symposium* on "Metal-Induced Neurodegeneration: From Global Exposure to Individual Susceptibility" sponsored by International Society for Neurochemistry in Hong Kong in 2004; vice chairman of the 1st *International Conference* on Nanotoxicology sponsored by Chinese Association for Science and Technology, Chinese Academy of Sciences, Chinese Society of Toxicology, and American Association of Chinese in Toxicology in Zhengzhou, China in 2008; chairman of International Organization Committee for Xi'an *International Neurotoxicology Conference* sponsored by International Association of Neurotoxicology, International Congress on Occupational Health, NIH, and EPA in Xi'an, China in 2011; and the president of the International Society for Trace Element Research in Humans and presided its 13th conference in Bali, Indonesia in 2019.
3) As the Chair of SOT Board of Publication (2016-2019), I worked closely with SOT presidents, ToxSci editor-in-chief, Oxford publisher and other BOP members to conduct the review and strategic planning of SOT publications with the goal to improve the impact of ToxSci. I also led a search, interview and successful recruitment of the new editor-in-chief of ToxSci in 2018-2019.

Leadership in National/International Conferences

June 2020 **Chairman**, Regional Conference on the Blood-Brain Interfaces: Health, Diseases, and Intervention", Neurocampus Louis Jouvet and CRNL, Bron, Lyon, France

Mar 2020 **Co-chair**, Continuing Education Course "Gateway Technologies in Metal Toxicological Research", an advanced course for Society of Toxicology annual meeting, San Antonio, TX.

Sep 2019 **Chairman**, the 13th Biennial Conference of the International Society for Trace Elements Research in Humans sponsored by Indonesia Ministry of Higher Education, NIH/NIEHS, and SOT, Bali, Indonesia, Sept 22-26. (with 167 delegates from 21 nations)

Mar 2019 **Chairperson**, Symposium "a-Synuclein: A Good Protein Turned Bad in Chronic Brain Diseases with Toxicological Implications". Society of Toxicology annual meeting, Baltimore, MD.

Mar 2018 **Co-chair**, Symposium "Toxicological Implication of Copper in Neurodegenerative Diseases". Society of Toxicology annual meeting, San Antonio, TX.

Mar 2017 **Chairperson**, Continuing Educational Course "New Concepts and Technologies in Metals Toxicology". Society of Toxicology annual meeting, Baltimore, MD.

Mar 2016 **Chairperson**, Poster session "Neurotoxicology: Metals" in the 55th Society of Toxicology annual meeting, new Orleans, LA.

Oct 2015 **Chair**, Symposium "Baseline Blood Levels of Trace Elements in Humans and Toxicities Induced by Exposure to Toxic Metals", and **Chair**, Symposium "Toxicological Implication of Metallic Nanoparticles" in Int'l Society for Trace Element Research in Humans, Dubrovnik, Croatia.

Mar 2015 **Chair**, Symposium "Adult Neurogenesis in Chemical-Induced Neurotoxicities: A New Frontier in Toxicological Mechanistic Investigations, Biomarker Research and Therapeutic Targeting" Society of Toxicology annual meeting, San Diego, CA.

Mar 2014 **Chair**, Workshop "Is Manganese-Induced Parkinsonism Mediated via Dopamine Neuron Degeneration or Dysfunction?" Society of Toxicology annual meeting, Phoenix, AZ.

Nov 2013 **Chair**, Symposium on New Insights into the Role of Manganese in Health and Disease. The 10th International Society for Trace Elements Research in Humans. Tokyo, Japan.

Nov 2013 **Chair**, Symposium on Environment Sources of Neurological and Neurobehavioral Alterations: From Diet and Chemical Exposure to Epigenetic Modification, in the 6th Chinese Society of Toxicology meeting, Guangzhou, China.

Mar 2013 Co-**Chair**, Symposium "Application of systems biology to identify molecular mechanisms and biomarkers of lead (Pb) neurotoxicity: Implications in a developmental origin of Alzheimer's disease." Society of Toxicology annual meeting, San Antonio, TX.

Jun 2011 **Chairman**, International Organization Committee, Xi'an International Neurotoxicology Conference sponsored by International Association of Neurotoxicology, International Congress on Occupational Health, NIH, and EPA, June 5-10, Xi'an, China. (with 281 delegates from 26 nations)

Mar 2011 **Chairperson**, Poster session "Metal Neurotoxicity: Manganese and Lead" the 50th Society of Toxicology annual meeting, Washington DC.

Mar 2009 **Chairperson**, Symposium "Does Metal Toxicity Play a Role in the Etiology of Alzheimer's Disease?" Society of Toxicology annual meeting, Baltimore, MD. (with Nasser Zawia)

Mar 2009 **Chairperson**, Continuing Education Course "New Frontiers in Metal Toxicology: Genetic Susceptibility, Early Diagnosis, and Related Biological Indices" Society of Toxicology annual meeting, Baltimore, MD. (with Michael Waalkes)

Sep 2008 **Vice Chairman,** The International Conference on Nanotoxicology. China Association for Science and Technology, Chinese Academy of Sciences, Chinese Society of Toxicology, and American Association of Chinese in Toxicology. Zhengzhou, China, Sep 17-19, 2008

Mar 2007 **Chairperson**, Workshop, "Advances in causation, diagnosis, and therapy of Parkinson's and Parkinson-like movement disorders: Views from toxicologists and clinicians" Society of Toxicology annual meeting, Charlotte, NC. (with Gary Miller)

Mar 2006 **Chairperson**, Continuing Education Course of Society of Toxicology, "Essentials of Metal Toxicology", San Diego, CA. (with Michael Waalkes)

Sep 2005 **Chairperson**, Sub-Symposium, "Health Effect of Manganese Exposure", the 9th International Symposium on Neurobehavioral Methods and Effects in Occupational and Environmental Health. Gyeongju, Korea.

Mar 2005 **Chairperson**, Symposium, "What makes metal neurotoxic in Neurodegenerative Disorders?" Society of Toxicology annual meeting, New Orleans, LA. (Robert Yokel, Ashley Bush, Kenneth Reuhl, Gary Isom)

Mar 2004 **Chairperson**, Session of Developmental and age-dependent neurotoxicity of metals. Society of Toxicology annual meeting, Baltimore, MD.

Feb 2004 **Chairman**, International Symposium on "Metal-Induced Neurodegeneration: From Global Exposure to Individual Susceptibility," sponsored by International Society for Neurochemistry, Hong Kong, China.

Mar 2003 **Chairperson**, Continuing Education Course of Society of Toxicology, "Unfolding the Secrets in Culturing Brain Cells: Theory, Technique, and Beyond", Salt Lake City, UT. (with Tim Shafer)

Mar 2003 **Chairperson**, Session of Metal Exposure, Transport, and Distribution. Society of Toxicology annual meeting, Salt Lake City, UT.

Apr 2003 Member of Organization Committee and **Session Leader**: CP role in brain health and disease. The 2nd International Workshop on Choroid Plexus: Blood-CSF Barrier influence on brain health and disease. King's College London, April 12-14, 2003, London UK.

Mar 2002 **Chairperson**, a special symposium of "Innovations in Toxicological Sciences" by Society of Toxicology, "Brain Barrier System: A Frontier in Neurotoxicological Research," Nashville, TN. (with Aschner, Jean-Francois Ghersi-Egea, Joe Bressler)

Mar 2001 **Chairperson**, Continuing Education Course of Society of Toxicology, "Neurotoxicology of Metals: Causes and Consequences" San Francisco, CA (with Peter Goering, Ken Reuhl, Miki Aschner, Evelyn Tiffany-Castiglioni)

Mar 1999 **Chairperson**, session of Cellular Mechanisms of Metal Neurotoxicity, Society of Toxicology annual meeting in New Orleans.

Invited Lectures and Other Honorarium Activities (listed in the past 10 years)

2/24/2020 Speaker, "Transport of b-Amyloid by Brain Barrier System: Relationship to Lead-induced Brain Amyloid Aggregation" in Neurocampus, French INSERM, Lyon, France

Sep 2019 Invited Plenary Speaker, "Role of Copper in Regulating Adult Neurogenesis: Relevance to Non-Motor Dysfunction in Manganese-induced Parkinsonism" in ISTERH-2019 in Bali, Indonesia

June 2019 Invited Keynote Speaker, "Environmental Causes of Disrupted Neurogenesis in Adults" in Chinse Society of Environmental Teratology in Zunyi, China, June 18-22.

June 2019 Invited Speaker, "Environmental Causes of Alzheimer's Disease: Relevance to Lead Exposure" by Department. of Biology, Wubei University of Chinese Medicine, Wuhan, China, June 17th.

June 2019 Invited Speaker, "Blood-Brain Barrier Transport of beta-Amyloid" by School of Medicine, Qingdao University, Qingdao, China, June 14th.

Oct 2018 Invited Speaker, "Transport of beta-Amyloid by Brain Barrier Systems: Relationship to Lead-induced Brain Amyloid Aggregation" by Int'l Conference on the Prevention of Neurodegenerative Diseases: From Basic to Clinic & the 2018 Chinese Society of Toxicology Neurotoxicology Annual Symposium, Shenzhen, China, October 12-15.

Oct 2018 Invited Speaker, "Copper in Adult Neurogenesis: Implications in Manganese-induced Parkinson's Disorder" by Regenerative Medicine Research Center at Sichuan University, Chengdu, China, October 10-11.

June 2018 Invited Speaker, "Lead neurotoxicity in newborns and Alzheimer's disease" in the Metal Workshop at Harvard University School of Public Health, Boston, MA.

May 2018 Invited Speaker, "Copper in adult neurogenesis" in the First Expert Forum on Pharmacological Research and Development, Zunyi Medical University, Zunyi, China.

May 2018 Invited Speaker, "Role of copper in neuronal repair", invited by Peking University School of Public Health, Beijing, China

May 2018 Invited Speaker, "Lead-induced developmental learning disorders", invited by School of Public Health at North China University of Science and Technology, Tangshan, China

Mar 2018 Invited Speaker, "Does Lead Exposure Cause Neurodegenerative Diseases such as Alzheimer's?", Depts of Pharmacology & Toxicology and Pediatrics, University of Louisville School of Medicine, Louisville, KY. March 26-27.

Mar 2018 Invited Speaker, "Lead-induced neurotoxicities: From maternal exposure to neurodegenerative Alzheimer's disease" in a workshop "Get the lead out" in Society of Toxicology annual meeting in San Antonio, TX (Mike Hughes and Karen Bradham)

Oct 2017 Invited Speaker, "Lead Toxicity and Alzheimer's Disease" invited by College of Life Sciences, South China Agriculture University, Guangzhou, China.

Oct 2017 Invited Speaker, "Advances in Metal Toxicology" invited by the School of Public Health, Guangzhou Medical University, Guangzhou, China.

Oct 2017 Invited Speaker, "Altered Adult Neurogenesis in Neurodegenerative Disorders" invited by the College of Veterinary Medicine, Iowa State University, Ames, IA.

Jun 2017 Invited Speaker, "Altered Adult Neurogenesis: Implications in Manganese-Induced Parkinsonian Disorder" invited by the 16th International Symposium on Trace Elements in Man and Animals, the 12th Conference of International Society for Trace Element Research in Humans, and the 13th Nordic Trace Element Society in St. Petersburg, Russia.

May 2017 Invited Speaker, "New Concepts and Technologies in Metals Toxicology", invited by School of Public Health, Qingdao Medical University, Qingdao, China

Apr 2017 Invited Speaker, "Transport of α-Synuclein at the Blood-Cerebrospinal Fluid Barrier: Implications in Manganese-Induced Parkinsonian Disorder" invited by the International Symposium on alpha-Synuclein at the Blood-Brain Barrier in Parkinson`s Disease. University of Heidelberg, Heidelberg, Germany.

Mar 2017 Speaker, "New concepts and technologies in metals toxicology" in Continuing education course in the 56th SOT annual meeting in Baltimore, MD. Toxicologist 156(1): Abstract #1005.

Nov 2016 Invited Speaker, "Perspectives on Public Health Research on Metal Exposure." School of Public Health at Peking University, Beijing, China.

Oct 2016 Invited Speaker and Section Chair, "Role of Altered Adult Neurogenesis in Manganese-Induced Parkinsonian Disorder" in the 7th Euro-Global Summit on Toxicology, Rome, Italy.

Jul 2016 Invited Speaker. "Role of altered adult neurogenesis in manganese-induced parkinsonian disorder" in the 7th Euro-Global Summit on Toxicology, Rome. J. Clin Toxicol 6:6(Suppl);63.

Apr 2016 Invited Speaker, "Metal Exposure and Neurodegeneration" in School of Public Health at Sun Yat-Sen University, Guangzhou, China.

Apr 2016 Invited Speaker, "Manganese Accumulation in Bone: Relationship to Mn Neurotoxicity". Padjadjaran University at Bandung, Indonesia.

Apr 2016 Invited Speaker, "Degree Programs at Purdue School of Health Sciences and Opportunities for Student Exchange and Faculty Collaboration" at University of Lampung, Lampung, Indonesia.

Jul 2015 Invited Speaker, "Neurogenesis in Adult Brain: Implications in Toxicological Studies of Parkinsonian Disorders" in the PLA General Hospital, Beijing, China.

Jul 2015 Invited Speaker, "Metal Exposure and Neurodegeneration: Human and Animal Evidences for Parkinsonian and Alzheimer's Diseases" in Chinese CDC Beijing, China

Mar 2015 Invited Speaker, "Mn Accumulation in Bone: Relationship to Mn-Induced Neurotoxicity" in a symposium "Where the Metal Meets the Bone…" in SOT annual meeting, San Diego, CA

Mar 2015 Speaker, "Manganese-copper interaction: Effect on adult neurogenesis and stem cell migration" in a Symposium at SOT in San Diego, CA.

Dec 2014 Invited Speaker, Metal Exposure and Neurodegeneration: Human and Animal Evidences for Parkinsonian and Alzheimer's Diseases. School of Public Health, Harvard University.

Oct 2014 Invited Speaker, Adult neurogenesis in manganese-induced Parkinsonian disorder. Dept of Psychology, Purdue University

Sep 2014 Invited Speaker, "Metal Levels in Normal Subjects and Exposed Workers" in the 1st International Congress on Global Environmental Contamination. Luxembourg.

May 2014 Invited Speaker, Roundtable "Manganese: The 2013 TLB and Biological Monitoring". American Industrial Hygiene Association Conference, San Antonio, TX.

Mar 2014 Speaker, "Accumulation of manganese in substantia nigra and alterations in brain neurochemistry following subchronic manganese exposure in rats" in a workshop in the SOT in Phoenix, AZ

Dec 2013 Invited Speaker, Current States of Lead Neurotoxicological Research. School of Public Health, Zhejiang University, Hangzhou, China

Nov 2013 Invited Speaker, "New directions in toxicological studies of human diseases: metal exposure" in the 6th Chinese SOT meeting in Guangzhou, China

Sep 2013 Invited Speaker, Does Lead Exposure Cause Alzheimer's Disease? School of Public Health, Guiyang Medical College, Guiyang, China

Aug 2013 Invited Speaker, Blood-Brain Barrier and Parkinson's Disease, Tech Forum at Medtronic, Inc., Minneapolis, MN.

Mar 2013 Invited Speaker, Treatment of Manganese Intoxication by Chelation Therapy, the 12th International Symposium on Neurobehavioral Methods and Effects and in Occupational and Environmental Health. Cape Town, South Africa.

Mar 2013 Invited Speaker, Continuing Educational Course "Toxic Effects of Metals". Society of Toxicology annual meeting, San Antonio, TX.

Mar 2013 Speaker, "CNS homeostasis of β–amyloid, plaque formation, and lead toxicity" in a symposium at SOT meeting, San Antonio, TX.

Nov 2012 Invited Speaker, Progress in Metal-Induced Toxicities. Neurotoxicology Specialty Section of Chinese Society of Toxicology. Beihai, Guangxi, China

Nov 2012 Invited Speaker, "CNS Homeostasis of □-Amyloids, Alzheimer's Disease and Lead (Pb) – Induced Neurotoxicities". Vanderbilt University School of Medicine, Nashville, TN.

Oct 2012 Invited Speaker, "Lead exposure and formation of amyloid plaques: In vivo and In vitro evidence of the involvement of heavy metal ions in amyloid aggregation" in nanosymposium in Society for Neuroscience annual meeting in New Orleans, LA.

Mar 2012 Invited Speaker, Current State of Biomarker Research for Manganese Exposure and Toxicity. School of Public Health, Zunyi Medical College, China (with David Chettle)

Mar 2012 Invited Speaker, Alzheimer's Disease and Lead Intoxication. School of Public Health, Shaanxi Medical University, Taiyuan, China (invited by Dr. NIU Qiao).

Oct 2011 Invited Speaker, Integrated biomarker for manganese (Mn) exposure and toxicity assessment. The 9th International Society of Trace Element Research in Humans conference, Antalya, Turkey.

Apr 2011 Invited Speaker, Biomarkers of Manganese Intoxication: Overview and Perspectives. Dept of Environmental and Occupational Health, School of Public Health, University of Washington, Seattle.

Jan 2011 Invited Speaker, Environmental Contributes of Neurodegenerative Disorders. School of Public Health, Fudan University, Shanghai, China.

Oct 2010 Invited Speaker, Parkinson's Disease Progress: Notes on Diagnosis and Treatment. Presidential Council class, Purdue University.

Jun 2010 External Examiner for PhD dissertation defense (Mr. Pergentino Balbuena), Dept of Pharmacology and Toxicology, Virginia-Maryland Regional College of Veterinary Medicine, Virginia Tech. Blacksburg, VA

Mar 2010 Invited Speaker, "Regulation of Cu Homeostasis in Brain and Cerebrospinal Fluid: Effect of Fe Deficiency and Overload" in a Symposium "Zinc, Copper and Their Metabolic Effect: Myths and Musts" (chaired by Lu Cai and Weber Karl) in SOT annual meeting in Salt Lake City, UT.

Jan 2010 Invited Speaker, Environmental Causes of Alzheimer's Disease: Myths and Musts, Colloquium Speaker for the Center on Aging and the Life Course (CALC), Purdue Univ.

PART IV: TEACHING AND MENTORING CREDITS

A. COURSES TAUGHT

At Purdue University:

- Introduction to Health Sciences (HSCI101): Created and taught the first lecture in 2003; Instructor on record 2003-2010 and 2017-present; students enrolled (310)
- Toxicology (HSCI560): Instructor on record (2011-2016), participating in teaching since 2003
- Participating in teaching: HSCI201 (Principles of Public Health), HSCI195 (Freshman Scholarship), HSCI345 (Occupational and Environmental Health), HSCI 562 (Analytic Toxicology and Pathology) and HSCI671 (Biochemical Toxicology).

At Columbia University:

- Systemic Toxicology (P8312): Instructor on record, 1994-2002
- Toxicokinetics (P8313): Created and taught the first course in 1994; Instructor on record, 1994-2002
- Principles of Systems Pharmacology (G8001): Course Co-Director 1999-2002
- Molecular Toxicology (P8306): Metal Toxicology

Recognition by Students:

- Nominated for a Favorite Faculty Award by undergraduate students and invited to the Favorite Faculty Reception hosted by the provost (March 2019)
- Nominated for Distinguished Mentor Award by Purdue Graduate School (February 2011)
- Nominated for Teaching Excellence by students in School of Public Health with Dean's acknowledge letter (May 1999)

Faculty advisor:

- Purdue Pre-medical and Pre-dental Society (Keona Lee) since Jan 2020
- Purdue Pre-physician Assistant Club (Madelyn Fortman) since April 2020

B. STUDENTS/POSTDOC/VISITING SCHOLAR TRAINED OR IN TRAINING

B1. At Purdue University (2003 – present):

Major Professor for:

1. **Luke (Luqing) Liu**: in Ph.D. program (08/15/2018 – present)
   Thesis: Adult neurogenesis in metal-induced neurotoxicity
2. **Lara (Tianyuan) Sang**: in MS program (01/03/2019 – present)
   Thesis: Presence and function of Art1 in blood-CSF barrier and metal toxicity
3. **Xinxin Liu**: in Ph.D. program (07/15/2013 – 05/11/2018)
   Thesis: Environmental effect on voice (Co-advisor: Dr. Preeti Sivasankar)
   Award: - SOT Graduate Student Travel Award 2018
4. **Stefanie O'Neal**: Ph.D. (05/15/2012 – 9/30/2015)
   Current Employer: Group Leader at Kao Corporation in Cincinnati, OH
   Thesis: Mn and Cu interaction in subventricular zone and neuro-regeneration

Awards:
- Student travel award by PULSe and Purdue's Women in Science Programs
- Committee for the Education of Teaching Assistants (CETA) Teaching Award in 2013
- Teaching Academy 2013-2014 Graduate Teaching Award in 2014
- Society of Toxicology Graduate Student Travel Award ($1,000) in 2014
- Compton Graduate Travel Award ($500) in 2014
- The Wayne V. Kessler Best Graduate Student Award by School of HSCI in 2015

5. **Christopher A. Bates**: Ph.D. (05/15/2010 – 8/18/2014)
   Current Employer: Exponent Consulting Firm, Washington DC.
   Thesis: Alpha-synuclein transport by the blood-CSF barrier in choroid plexus
   Awards:
   - Student Travel Award by PULSe (2012), by HSCI 2014
   - the 1st place award for graduate platform presentation by Ohio Valley SOT in 2012.
   - Purdue Health Sciences Graduate Student Service Award in 2013
6. **Sherleen Xue-Fu Adamson**: Ph.D. (07/20/2008 – 08/03/2013)
   Current Employer: Proctor and Gamble
   Thesis: Cu transport by brain barriers in Mn Parkinsonism
   Awards:
   - Student Travel Award for Outstanding Student Symposium Presentation Recipient in Xi'an International Neurotoxicology Conference by the International Neurotoxicology Association in 2011.
   - Graduate Student Travel Award by American College of Toxicology (2012)
   - Student Travel Award ($1000) by the Society of Toxicology (2012)
   - Recipient of the 3rd place of "Graduate Student Research Award" by the SOT Metals Specialty in 2013.
   - The "Best Platform Presentation" of Postdoctoral Scientist by Ohio Valley SOT in 2014.
   - The "Best Poster Presentation for Postdoctoral Fellow" by Ohio Valley SOT in 2015.
   - The 3rd place of "Postdoctoral Research Award" by SOT Metals SS in 2015.
   - The 1st place of "Postdoctoral Research Award" by SOT Metals SS in 2016.
7. **Andrew D. Monnot**: Ph.D. (06/2006 – 05/2011)
   Current Employer: Supervising Health Scientist at Cardno/ChemRisk San Francisco, CA
   Thesis: Brain Cu regulation and effect of Fe deficiency and Fe overload
   Award:
   - Wayne V. Kessler Best Graduate Student Award by School of Health Sciences in 2011
   - Society of Toxicology Student Travel Award Winner in 2010
8. **Shirisha Chittiboyina**: M.S. (08/15/2009 – May 2011)
   Current Employer: Post/doc at Purdue College of Veterinary Medicine
   Thesis: Aluminum transport by blood-CSF barrier in choroid plexus
9. **Samuel Peterson**: M.S. (08/2006 – 09/15/08)
   Current Employer: Postdoctoral fellow at Oregon University of Health Sciences.
   Thesis: Effect of single-walled carbon nanotubes on the structure and function of the blood-CSF barrier.
10. **Mamta Behl**: Ph.D. (08/14/06 – 09/15/09)
    Current Employer: Neurotoxicology Discipline Leader, National Toxicology Program, NIH/NIEHS, Research Triangle Park, NC.
    Thesis: Alteration of β-amyloid clearance by the blood-CSF barrier following lead exposure
    Awards:
    - Travel Award ($1000) by the American College of Toxicology in Tucson, AZ in 2008
    - Student Travel Award ($1000) from the Society of Toxicology for work on lead exposure and the causes of Alzheimer's disease in Baltimore, March 2009
    - The second place best student presentation award ($500) by the Metals Specialty Section of Society of Toxicology in March 2009.
    - The Mehendale and Singh Student/Postdoctoral Young Investigator Award from the Association of Scientists of Indian Origin of Society of Toxicology.

11. **Dallas Cowen**: Ph.D. (06/15/05 – 05/11/08)
    Current Employer: Senior Toxicologist, Center for Toxicol and Env Health LLC, San Diego, CA
    Thesis: Biomarkers for early diagnosis of Mn Parkinsonism
    Awards: - Eli Lily Industrial Hygiene Award for outstanding student research ($3,000)
12. **Shirley (Xueqian) Wang**: Ph.D. (08/15/03 – 7/30/07)
    Current Employer: Staff Scientist, ALS/MND Clinic, Ohio State University Med Center, Columbus, OH
    Thesis: Alteration of Brain Fe Homeostasis by Mn Exposure: Role of Divalent Metal Transporter
    Awards - Victor A. Drill Award for Outstanding Student Research by SOT Midwest Chapter in 2004
    - Student travel award by Society of Toxicology in 2006
    - Wayne V. Kessler Best Graduate Student Award by School of Health Sciences in 2006
13. **Lewis (Zhichang) Shi**: M.D., Ph.D. (05/20/03 – 08/31/05)
    Current employer: Associate Professor, Director of Radiobiology, University of Alabama Birmingham School of Medicine, Birmingham, AL
    Thesis: Establishment of In-Vitro Blood-Cerebrospinal Fluid Barrier (BCB) Model to Study the Mechanism of Lead Neurotoxicity.
    Awards - Victor A. Drill award for Outstanding Student Research by SOT Midwest Chapter in 2004
    - Student travel award by Society of Toxicology in 2005
    - The second-place Best Student Research award by SOT In Vitro Section in 2005
    - Graduate Travel Award for the SOT in 2005
    - Wayne V. Kessler Best Graduate Student Award by School of Health Sciences in 2005

<u>Serve as an Advisor in Graduate Committees:</u>

1) **Alexis Webb** in PhD program (10/2019 – present) Major Advisor: Linda Nie
2) **Lilly (Li) Xia** in PhD program (05/2019 – present) Major Advisor: Jonathan Shannahan
3) **Hyunjin Kim** in PhD program (05/2019 – present) Major Advisor: Aaron Bowman
4) **Keturah Kiper** in PhD program (01/2019 – present) Major Advisor: Jennifer Freeman
5) **Ola Wasel** in MPH/MS program (09/2017 – present) Major Advisor: Jennifer Freeman
6) **Xinxin Zhang** in PhD program (08/2017 – present) Major Advisor: Dr. Linda Nie
7) **Lisa Kobos** in PhD program (08/2017 – 07/2020) Major Advisor: Dr. Jonathan Shannahan
8) **Seth A. Herr** in PULSe program (07/2017 – present) Major Advisor: Dr. Riyi Shi (Biomedical Engineering)
9) **Rachel Foguth** in PhD program (02/2017 – 07/2020) Major Advisor: Dr. Jason Cannon
10) **Sudip Gaire** in PhD program (11/2016 – 05/2020) Major Advisor: Dr. Ameya Gondhalekar (Entomology)
11) **Zainab Hasan** in PhD program (05/2016 – present): Major Advisor: Dr. Ellen Wells
12) **David Edmondson** in PhD program (08/2014 – 06/2018): Major Advisor: Dr. Ulrike Dydak
13) **Katie Horzmann** in PhD program (06/2015 – 05/2018): Major Advisor: Dr. Jennifer Freeman
14) **Johnny Wise** in PhD program (05/2014 – 05/2018); Major Advisor: Dr. Jason Cannon
15) **Danelle Rolle** in PhD program (05/2014 – 07/2018); Major Advisor: Dr. Ellen Wells
16) **Christlene Horton** in PhD program (05/2014 – 05/2016); Major Advisor: Dr. Candace Tsai
17) **Sena Agim** in PhD program (11/2013 – 05/2017); Major Advisor: Dr. Jason Cannon
18) **Xindi (Cindy) Ding** in MS program (11/2013 – 05/2016); Major Advisor: Dr. Jason Cannon
19) **Menghan Liu** in MS program (11/2013 – 05/2016); Major Advisor: Dr. Jason Cannon
20) **Brendan Sullivan** in Ph.D. program (05/2013 – 05/2015); Major Advisor: Dr. Yulia Pushkar PHYS
21) **Yinzi Liu** in Ph.D. program (08/15/2010 – 06/2016); Major Advisor: Dr. Linda Nie
22) **Sara Hargrave** in Ph.D. program (03/2012 – 08/2014); Major Advisor: Dr. Kim Kinzig PSYC
23) **Zaiyang Long** in Ph.D. program (02/2010 – 08/2013); Major Advisor: Dr. Ulrike Dydak
24) **Scott Johns** in Ph.D. program (08/2010 – 05/15/2013); Major Advisor: Dr. Ulrike Dydak
25) **Gregory Robison** in Ph.D. program (07/2010 – 12/31/2013); Major Advisor: Dr. Yulia Pushkar

26) **James Dant**: in MS program/Health Physics (01/2011 – 05/2013); Major Advisor: Dr. Linda Nie
27) **Shalmali Dharmadhikari**: in Ph.D. program (04/2010–05/15/2012); Major Advisor: Dr. Bensol Navin
28) **Samuel Peterson**: in Ph.D. program (09/2008 – 05/2012); Major Advisor: Dr. Jennifer Freeman
29) **Steven Sanchez**: in Ph.D. program (02/2009 – 05/2012); Major Advisor: Dr. Linda Nie
30) **Haijuan Gao**: in M.S. program (Sept 2009 – 05/2010); Major Advisor: Dr. Shuang Liu
31) **Mesoloras, Geraldine**: in Ph.D. program (09/2008 – 05/2010); Major advisor: Dr. Robert Stewart
32) **Scott Kanoski**: Ph.D. (09/2008 – 08/2009); Major Advisor: Dr. Terry Davidson (Dept. Psychology)
33) **Eric Pepin**: in Ph.D. program (08/2007 – 12/2010) (co-chair with Dr. Wanmei Hu)
34) **Anna Kristina Meszka-Jordan**: M.S. (Oct 2007 – May 2009); Major Advisor: Dr. Carlson
35) **Jessie Puryear**: M.S. (Jan 2007 – Dec 2008); Major Advisor: Dr. Robert Stewart
36) **Judy James**: Ph.D. (June 2005 – May 2009); Major advisor: Dr. Navin Bansal
37) **Jill Harvilchuck**: Ph.D. (May 2005 – Feb 2009); Major advisor: Dr. Gary Carlson
38) **Heather Leavesley**: Ph.D. (July 2004 – May 2009); Major advisor: Dr. Gary Isom.
39) **Xu Zhang**: Ph.D. (Aug. 2004 – Sept 2008); Major advisor: Dr. Gary Isom.
40) **Mark D. Wilson**, M.S. (Sept. 2003 – Sept 2007); Major advisor: Dr. James McGlothlin.
41) **Brent L. Yeagy**: Ph.D. (left with a M.S.) (May 2003 – May 2005); Major advisor: Dr. Frank Rosenthal
42) **Lu Zhang**: Ph.D. (Oct 2003 – May 2009); Major advisor: Dr. Gary Isom
43) **Fan Xu**, Ph.D. (May 2003 – Dec 2005); Major advisor: Dr. James McGlothlin
44) **Patrick Sheets**: M.S. (Mar. 2003 – Aug. 2004); Major advisor: Dr. Gary Carlson

Undergraduate Students:

1 **Vivian Hurn** in HSCI (09/2020 – present) in pre-med program
2 **Vincent Calhoun** in HSCI (09/2020 – present) in pre-physician program
3 **David Du** high school student interested in medicine (05/2019 – present)
4 **Maggie Chen** in pre-pharmacy (11/07-2018 – 05/2020)
5 **Sai Dwibhashyam** in HSCI (03/2018 – 05/2019) in pre-med program
6 **William Schrock** in HSCI (03/2016 – 05/2018) medical student at IU School of Medicine
7 **Erin Kay** in HSCI Honors Program (09/2014 – 05/2018) medical student in College of Osteopathic Medicine at Marian University in Indianapolis, IN.
8 **Vivien Lai** in Biology pre-med (08/2013 – 05/2018)
9 **Andrew Zeng** in summer program (08/2013 – 08/2015) medical student in Albany Medical School
10 **Stephanie Barthuly** in HSCI Honors program (10/2012 – 05/2013) studying in a dental school
11 **Amanda Beering** in Biology pre-med program (08/2012 – 05/2014) studying at Columbia University
12 **Alex Jones** in HSCI Honors program (01/2012 – 05/2015) medical student at IU Medical School in 2015. Highlighted in Journal of Purdue Undergraduate Research
13 **Emily Li**, in pharmacy program at Purdue College of Pharmacy (01/2011 – 02/2012) Li Ya's daughter
14 **Helen (Dong) Shao** in pre-pharmacy (03/2010 – 05/2015) accepted by Purdue Pharmacy School; PharmD, RPh, Short-Hills Pharmaceuticals, Raritan, NJ
15 **Nate Quinlan** in HSCI Honors program (01/2012 – 05/2012)
16 **Michelle (Yuen Sze) Chan** in Biology (08/2009 – 25/2012), registered nurse in Hong Kong, applying for the Med School in Hongkong
17 **Sanna Ho** in HSCI (05/2009 – 05/2010) PhD student at IUB
18 **Mark Ziemba** in HSCI (05/2010 – 12/2010), DDS in Fisher, IN
19 **Jillian Jackson** in HSCI (05/2009 – 12/2009)
20 **Jonathan Nixon** in HSCI (07/2007 – 05/2008)
21 **James Huffman** in Biology (07/2006 – 06/2007)
22 **Greg Allen** in HSCI (01/2005 – 05/2006)
23 **Kent Williams** in Biology (01/2005 – 08/2005)
24 **Erica Frasier** in HSCI (01/2016 – 12/2016)

25 **Maneesha Chigurupati** in HSCI (2003 – 2005); Lilly HP award 2005; first job in a nuclear power plant. DDS in Greenwood, IN
26 **Ellen L. Smith** in Neurobiology and animal physiology (05/2004 – 05/2005), J.D./Ph.D. Intellectual Property Law and Patent Law. Chicago.
27 **Jessica Shafer** in Pre-Pharmacy program (01/2004 – 08/2004) accepted by Purdue Pharmacy School
28 **Ayesha Pergadia** in HSCI program (04/2004 – 12/2004) accepted by Northwestern University MBP program. Regulatory Affairs Leader, GE Healthcare, Waukesha, WI.

B2. At Columbia University (1993 – 2003):

Major Professor for:

14. **J. Richard Pilsner**: M.S. (September 2000 – January 2003)
    Thesis: Effect of Mn on Iron Regulatory Protein-1 in Rat Brain
    Award: EPA STAR Fellowship award recipient (2001-2003).
15. **Mark G. Opler**: Ph.D. (May 1999 – September 2002)
    Thesis: Maternal Pb exposure and schizophrenia
    Award: Outstanding presentation award by SOT NTSS in Salt Lake City, UT, 2003.
16. **Ulpu Andersson**: MPH (September 2000 – May 2002)
    Thesis: beta-carboline derivatives and the causes of essential tremors
17. **Susan Lai**: MPH (September 1999 – May 2001)
    Thesis: Establishment of Primary culture of endothelial cells
18. **George Tsao**: MPH (September 1998 – May 2000)
    Thesis: Comparison of cytotoxicities induced by Mn(II) or Mn(III).
    Award: Travel Award by Society of Toxicology, annual meeting in Philadelphia, 2000.
19. **Linda Dunn**: MPH (September 1999 – May 2000)
    Current employer: United States Navy.
20. **Hyaehwan Kim**: MPH (September 1997 – May 1999)
    Thesis: Toxicokinetics of manganese chloride and methylcyclopentadienyl Mn tricarbonyl in Sprague-Dawley rats.
21. **Onpan Cheung**: MPH (January 1998 – May 1999)
    Thesis: Determination of T4 in human CSF samples
22. **Joseph Eichenbaum**, M.D.: MPH (September 1996 – May 1999)
    Thesis: Distribution of lead and transthyretin in human eyes.
23. **Sean Ren**: MPH (June 1995 – May 1998)
    Thesis: Determination of lamotrigine in biological materials by HPLC

Served as an Advisor in Doctoral Graduate Committee at Columbia Univ:

45) **Mark Maddaloni**, DrPH (1995 – 1998). U.S. EPA Branch in Manhattan, NY
46) **Bao-yun Yin**, DrPH Thesis Examination Committee, 1994

C. SENIOR/POSTDOCTORAL FELLOWS TRAINED OR IN TRAINING

Senior Research Fellows:

1 Ms. **Yundan Xu**, M.S.: Lecturer, Visiting Professor, School of Basic Medical Science, Hubei University of Chinese Medicine, Wuhan, China (10/01/2019 – 09/30/2020).
2 Dr. **Xuqin Du**, MD., Ph.D.: Assistant Professor, Department of Occupational Health and Poisoning, Beijing Chaoyang Hospital, Capital University of Medical Sciences (03/01/2019 – 02/28/2020)
3 Prof. **Gang Zhao**, Ph.D.: Visiting Professor, School of Basic Medical Science, Hubei University of Chinese Medicine, Wuhan, China (09/01/2018 – 03/31/2019).
4 Prof. **Stephen B. Hooser**, DVM, Ph.D.: Professor and Head Toxicology Section, Indiana Animal Disease Diagnostic Laboratory, Purdue University (03/20/2017 – 07/31/2017). Sabbatical research.

5 Dr. **Yuanzhong Zhou**, Ph.D.: Professor and Associate Dean, School of Public Health (06/01/2015 – 05/31/2016). Department of Occupational Toxicology, Zunyi Medical University.
6 Dr. **Xubo Shen**, Ph.D.: Associate Professor (10/01/2015 – 05/31/2016), School of Public Health, Zunyi Medical College. China
7 Prof. **Jung-Duck Park**, Ph.D.: Visiting Professor (sabbatical), Chair, Dept of Occupational Medicine, Chung-Au University School of Medicine, Seoul, South Korea (01/2012 – 08/2012)
8 Prof. **Qiyuan Fan**, M.D., Ph.D.: Visiting Professor, Dean, School of Public Health, Zunyi Medical College, China (12/30/07 – 12/24/08) and now President, Zunyi College of Medical Professionals.
9 Prof**. Kiran Kalia**, Ph.D.: Visiting Professor, Professor, Dept of Chemistry, Sardar Patel University, Gujarat, India (09/25/06 – 12/30/06)
10 Prof. **Yueming Jiang**, M.D., Ph.D.: Visiting Professor, Chair, Dept of Toxicology and Occupational Medicine, Guangxi Medical University (03/01/06 – 05/31/06)
11 Dr. **Wendy Jiang**, M.D., Ph.D.: Associate Research Scientist (12/01/2005 – present)
12 Prof. **Rashid Deane,** Ph.D.: Visiting Scholar (summer, 2001), Reader at University of Greenwich, London, UK.
13 Dr. **Qiuqu Zhao**, M.D., Ph.D.: Associate Research Scientist (1998-2001) currently as a physician in practice, Long Island Jewish Hospital, NY

Postdoctoral Fellows:

14 Dr. **Xiaoli Shen**, Ph.D.: now Associate Professor, School of Public Health, Qingdao University (02/20/2018 – 02/19/2019).
15 Dr. **Ning Li**, Ph.D.: now Associate Professor, School of Food Science and Technology, Henan Agricultural University, Zhengzhou, China (02/01/2016 – 03/31/2017)
16 Dr. **Sherleen Fu**, M.D., Ph.D. in toxicology (08/15/2013 – 12/31/2016), Currently Toxicologist in Proctor and Gamble Pharmaceuticals.
17 Dr. **Qinli Zhang**, M.D., Ph.D.: Visiting Professor, Chair, Dept. of Occupational and Environmental Sciences, Shanxi Medical University, Taiyuan (07/01/2013 – 05/31/2014)
18 Dr. **Lan Hong** (11/01/2011-06/30/2013), Ph.D. in analytic toxicology, Zhejiang University College of Pharmacy.
19 Dr. **Gang (Greg) Zheng** (11/01/2009-10/28/2011), Ph.D. Currently Associate Professor in School of Public Health, the 4th Military Medical University, Xian, China.
20 Dr. **Jun (John) Zhang** (2/15/2010-2/14/2011), Ph.D. Zhejiang University. Current position: Assistant Professor, School of Public Health, Zhejiang Univ., Hangzhou. China
21 Dr. **Yanshu Zhang** (08/12/2006-06/19/2009), Ph.D. in Occupational Medicine, Chinese Centre for Disease Control and Prevention, Beijing, China (2006). Current position: Vice Dean, School of Public Health, Northwest Union University, Tangshan, China
22 Dr. **Jaya Prasanthi** (09/05/2006-12/31/2007), Ph.D. in Molecular Biology, Sri Venkateswara University, Tirupati, India 2005. Current position: Research Associate in University of North Dakota.
23 Dr. **Janelle S. Crossgrove** (09/01/2003-06/30/06): Ph.D. in Toxicology, University of Kentucky, Lexington, KY 2003. Current position: Assistant Professor, Ohio Northern University.
24 Dr. **Byung Sun Choi** (2/10/2004-2/09/2006): Copper homeostasis in brain and its relationship to etiology of neurodegenerative diseases. Current position: Professor at Chung-An University School of Medicine, Seoul, Korea.
25 Dr. **Longlian Zhang** (Visiting scholar, 08/01/2005-10/31/2005): Current position: Head of Dept of Occupational Disease Prevention, Beijing Fengtai Branch of Chinese CDC, Beijing, China
26 Dr. **G. Jane Li**, M.D., Ph.D. (04/01/2002-6/30/2005): Molecular mechanism of manganese-induced parkinsonian disorders. Currently Director of Beijing Institute of Toxicology, Beijing CDC, China.

27 Dr. **Ramon Rosal**, Ph.D. (2001-2002): Ph.D. Obtained NIH/NIEHS minority supplemental award to my NIH RO1 grant. Currently Research Scientist at Columbia University School of Public Health

28 Dr. **Minjie Gu**, Ph.D. (07-12/2002): Ph.D. in Molecular Biology & Biochemistry, Chinese Academy of Medical Sciences & Peking Union Medical College, Beijing, China. Currently Research Scientist, Dept of Pathology, Columbia Univ College of P&S

29 Dr. **Ling Lu**, M.D. (Visiting Scholar, 07-11/2002): M.D. Currently Principle, Chinese CDC Futai Branch, Beijing, China

30 Dr. **Jingyuan Chen**, M.D. (01/01/2000-12/31/2001): M.D. Second Military Medical University, Shanghai, 1985; Ph.D. in Neuroendocrinology, Fourth Military Medical University, Xi'an, 1996.

31 Dr. **Bill (Yongbiao) Guan**, M.D., Ph.D. (1999-2000): M.D. Currently Deputy Director, Toxicology Testing Center, Institute of Pharmacology & Toxicology of Beijing, Beijing, PRC

32 Dr. **Susan (Shunzhen) Wang**, M.D. (1998-1999): M.D. Currently Deputy Director of Beijing Bureau of Science and Technology (local government funding agency)

33 Tehilla Rieser: Lead toxicity on transthyretin in the choroid plexus. NYC Higher School Science Teacher for summer training (1997, 1998).

PART V: PUBLICATIONS

A. BOOK PUBLISHED

Zheng W and Chodobski A (Editors). The Blood-Cerebrospinal Fluid Barrier. CRC Press, New York. 2005.

B. ORIGINAL, PEER REVIEWED ARTICLES (192):

(Google Scholar: https://scholar.google.com/citations?user=OK6RNdcAAAAJ&hl=en; h-index:59)

1. **Zheng** W* and Ghersi-Egea, JF (2020). Brain barrier systems play no small roles in toxicant-induced brain diseases and disorders. *Toxicol Sci* 175(2):147-148. (PMCID: PMC7253204).
2. **Zheng** W (2020). Systemic impact of trace elements on human health and disease: Nutrition, toxicity, and beyond (Editorial). *J Trace Elem Med Biol* 62:126634. doi.org/10.1016/j.jtemb.2020.126634. PMID: 32827865
3. Shen XL, Xia L, Liu L, Jiang W, Shannahan J, Du Y, and **Zheng** W* (2020). Altered clearance of beta-amyloid from the cerebrospinal fluid following subchronic lead exposure in rats: Roles of RAGE and LRP1 in the choroid plexus. *J Trace Elem Med Biol* 61: 126520. (PMCID: PMC7541561).
4. Li XL, Zhan RQ, **Zheng** W, Jiang H, Zhang DF, and Shen XL, (2020). Positive association between soil arsenic concentration and mortality from Alzheimer's disease in mainland China. *J Trace Elem Med Biol* 59:126452. DOI: 10.1016/j.jtemb.2020.126452. (PMCID: PMC7350902)
5. Ding HW, Wang F, Su LY, Zhao L, Hu BL, **Zheng** W, Yao ST, and Li Y (2020). Involvement of MEK5/ERK5 signaling pathway in manganese-induced cell injury in dopaminergic MN9D cells. *J Trace Elem Med Biol* 61:126546. (DOI: 10.1016/j.jtemb.2020.126546. PMID: 32480051)
6. Hasan Z, Rolle-McFarland D, Liu Y, Zhou JQ, Mostafaei F, Li Y, Fan QY, Zhou YZ, **Zheng** W, Nie LH, and Wells EM (2020). Characterization of bone aluminum, a potential biomarker of cumulative exposure, within an occupational population from Zunyi, China. *J Trace Elem Med Biol* 59:126469 (PMCID: PMC7112220)
7. Gu HY, Territo PR, Persohn SA, Bedwell MM, Eldridge K, Speedy R, Chen Z, **Zheng** W and Du YS (2020). Evaluation of chronic lead effects in the blood brain barrier system by DCE-CT. *J Trace Elem Med Biol* 62:126648. (PMID: 32980769)
8. Du XQ, **Zheng** W, and Ye Q (2020). Comparison of a rare case of severe life-threatening lead poisoning due to accidental exposure with a case of chronic lead poisoning due to occupational exposure. *Toxicol Ind Health* (in press, online) DOI: 10.1177/0748233720958969.

9. Louis ED, Eliasen EH, Ferrer M, Hernandez DI, Gaini S, Jiang W, **Zheng** W, Nielsen F, and Petersen MS (2020). Blood harmane (1-methyl-9H-pyrido[3,4-b]indole) and mercury in essential tremor: A population-based, environmental epidemiology study in the Faroe Islands. *Neuroepidemiology* 54:272-280. DOI: 10.1159/000505874. (PMCID: PMC7210050)
10. Ferrer M, Eliasen EH, Petersen MS, Jiang W, **Zheng** W, and Louis ED (2020). Meat Consumption and Meat Cooking Practices in Essential Tremor: A Population-Based Study in the Faroe Islands. *Tremor & Other Hyperkinetic Movements* 10(1):30,pp1-7 (https://doi.org/10.5334/tohm.236).
11. Gaire S, Lewis CD, Booth W, Scharf ME, **Zheng** W, Ginzel MD and Gondhalekar AD (2020). Bed bugs, Cimex lectularius L., exhibiting metabolic and target site deltamethrin resistance are susceptible to plant essential oils. *Pesticide Biochem Physiol* 169 (2020) 104667. DOI: 10.1016/j.pestbp.2020.104667 (collaboration with Purdue College of Agriculture)

12. **Zheng** W* and Miller GW (2019). Editorial: 2018 Toxicological Sciences Paper of the Year. *Toxicol Sci* 168(2):285-286 (PMCID: PMC6804410)
13. Rolle-McFarland D, Liu YZ, Mostafaei F, Zauber E, Zhou Y, Li Y, Fan QY, **Zheng** W, Nie LH and Wells W (2019). The association of bone, fingernail and blood manganese with cognitive and olfactory function in Chinese workers. *Sci Total Env* 666:1003-1010. (IF:4.98) (PMCID: PMC6461352)
14. Liu XX, Durkes AC, Schrock WP, **Zheng** W and Sivasankar MP (2019). Subacute acrolein exposure to rat larynx in vivo. *Laryngoscope* 129:E313-E317 (doi:10.1002/lary.27687) (PMCID: PMC6591102)
15. Liu XX, Mustonen A, **Zheng** W, Sivasankar MP, and Durkes A (2019). Cigarette smoking exposure to pig larynx in an inhalation chamber. *J Voice* 33(6):846-850. (PMCID: PMC6320720)

16. Adamson SF, Shen X, Jiang W, Lai V, Wang X, Shannahan JH, Cannon JR, Chen J, and **Zheng** W (2018). Subchronic manganese exposure impairs neurogenesis in the adult rat hippocampus. *Toxicol Sci* 163(2):592-608. (PMCID: PMC5974792)
17. Wells EM, Liu YZ, Rolle-McFarland D, Mostafaei F, **Zheng** W, Nie LH (2018). In vivo measurement of bone manganese and association with manual dexterity: a pilot study. *Env Res* 160:35-38 IF:4.315. PMID:28961467 (PMCID: PMC5962822)
18. Liu YZ, Rolle-McFarland D, Mostafaei F, Zhou YZ, Li Y, **Zheng** W, Wells E, and Nie L (2018). In vivo neutron activation analysis of bone manganese in workers. *Phys. Measurement* 39(3):035003. (PMID: 29328060) (PMCID: PMC6595486)
19. Rolle-McFarland D, Liu Y, Zhou J, Mostafaei F, Zhou Y, Li Y, Fan Q, **Zheng** W, Nie LH and Wells W (2018). Development of a cumulative exposure index (CEI) for manganese and comparison with bone and other biomarker of manganese exposure. *Int J Env Res Pub Health* 15(7):1341. (doi:10.3390/ijerph15071341) (PMCID: PMC6068959)

20. Ding HW, **Zheng** W, Han H, Hu XY, Hu BL, Wang F, Su LY, Li H, and Li Y (2017). Reproductive toxicity of linuron following gestational exposure in rats and underlying mechanisms. *Toxicol Lett* 266:49-55. IF:3.858 (PMCID: PMC5697898)
21. Sun LP, Li Y, Wang KY, Li Y, Fan QY, **Zheng** W, and Li H (2017). Vanadium exposure-induced striatal learning and memory alterations in rats. *Neurotoxicology* 62:124–129 (PMCID: PMC5623646)
22. Bai JW, Han H, Wang F, Su L, Ding HW, Hu X, Hu BL, Li H, **Zheng** W, and Li Y (2017). Maternal linuron exposure alters testicular development in male offspring rats at the whole genome. *Toxicology* 389:13-20. IF:3.943 (PMCID:PMC5584558)
23. Fan XM, Luo Y, Fan QY*, and **Zheng** W* (2017). Reduced expression of PARK2 in manganese-exposed smelting workers. *Neurotoxicology* 62:258-264 (PMCID: PMC5676304)

24. Liu XX, Walimbe T, **Zheng** W, and Sivasankar MP (2017). Acute nanoparticle exposure on vocal folds: a laboratory study. *J Voice* 31(6):662-668. (PMCID:PMC5650956)
25. Wang YF, Specht A, Liu YZ, Finney L, Maxey E, **Zheng** W, Weisskopf M, and Nie LH (2017). Microdistribution of lead in human teeth using microbeam synchrotron radiation X-ray fluorescence (μ-SRXRF). *X-Ray Spectrometry* 46(1):19-26. DOI 10.1002/xrs.2720 (PMCID: PMC7451221)
26. Liu YZ, Mostafaei F, Sowers D, Blake S, Hsieh M, **Zheng** W and Nie LH (2017). Customized portable neutron activation analysis system to quantify manganese (Mn) in bone in vivo. *Physiol Meas* 38(3):452-465. (PMCID: PMC5992599)

27. Fu S, Jiang W, Gao X, Zeng A, Cholger D, Cannon J, Chen J, and **Zheng** W* (2016). Aberrant adult Neurogenesis in the subventricular zone-rostral migratory stream-olfactory bulb system following subchronic manganese exposure. *Toxicol Sci* 150(2):347-368. IF4.307 (doi:10.1093/toxsci/kfw007) (PMCID:PMC5009483)
28. Hargrave SL, Davidson TL, **Zheng** W, and Kinzig KP (2016). Western diets induce blood-brain barrier leakage and alter spatial strategies in rats. *Behavioral Neurosci* 130(1):123-135. IF:2.728. (PMCID:PMC4795941)
29. Fu S, Cholger D, and **Zheng** W* (2016). Approaches in evaluating in vivo Mn effect on adult Neurogenesis. *Toxicol Sci* 152(2):260-261. (doi:10.1093/toxsci/kfw095)
30. Fan QY, Zou Y, Yu CY, Chen J, Shi XJ, Zhang YS and **Zheng** W (2016). Cross-sectional study of expression of divalent metal transporter-1, transferrin, and hepcidin in blood of smelters who are occupationally exposed to manganese. *PeerJ* 4:e2413 IF:2.183 (DOI 10.7717/peerj.2413) (PMCID:PMC5012280)
31. Liu XX, **Zheng** W, and Sivasankar P (2016). Acute acrolein exposure induces impairment of vocal fold epithelial barrier function. *PLOS One* 11(9): e0163237. (PMCID:PMC5028054)

32. Fu X, O'Neal S, Hong L, Jiang W and **Zheng** W* (2015). Elevated adult neurogenesis in brain subventricular zone following in vivo manganese exposure: Roles of copper and DMT1. *Toxicol Sci* 143(2):482-498. IF:3.845 (doi:10.1093/toxsci/kfu249) (PMCID: PMC4306725)
33. O'Neal S and **Zheng** W* (2015). Manganese toxicity upon overexposure: A decade in review. *Current Environmental Health Reports* 2:315-328. IF:3.98 (PMCID: PMC4545267)
34. Zhang LL, Lu L, Pan YJ, Ding CG, Xu DY, Huang CF, Pan XF and **Zheng** W* (2015). Baseline blood levels of manganese, lead, cadmium, copper, and zinc in residents of Beijing suburb. *Environ Res* 140:10-17. IF:4.033 (PMCID: PMC4492836)
35. Bates CA, Fu S, Ysselstein D, Rochet JC and **Zheng** W* (2015). Expression and transport of a-synuclein at the blood-cerebrospinal fluid barrier and effects of manganese exposure. *ADMET & DMPK* 3(1):15-33. (PMCID: PMC4669215)
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C. ABSTRACTS AND CONFERENCE PROCEEDINGS (FROM TOTAL 251; LAST 5 YEARS PRESENTED):

1. Liu L, Jiang W, and **Zheng** W (2020). Adverse effect of manganese exposure on adult neurogenesis: Evidence from the subventricular zone (SVZ)-derived neurosphere assay in vitro. Accepted abstract for 2020 SOT annual meeting.
2. Du D, Liu L, Jiang W, and **Zheng** W (2020). Expression of copper transport protein-2 (CTR2) in the blood-CSF barrier: Effect of lead exposure in vitro. Accepted abstract for 2020 SOT annual meeting.
3. Sang TY, Liu L, and **Zheng**, W (2020). Expression of ADP-ribosylation Factor 1 (Arf1) in the Blood-CSF Barrier: Effect of Lead Exposure In Vitro. Accepted abstract for 2020 SOT annual meeting.
4. Gu HY, Territo PR, Persohn SA, Bedwell AA, Chen Z, **Zheng** W, and Du YS (2020). Pb plays a role in AD pathogenesis by impairing the function of the Brain Barrier System. Accepted abstract for 2020-SOT annual meeting.
5. Gaire S, **Zheng W**, Scharf M, and Gondhalekar A (2020). Plant essential oil constituents synergize deltamethrin toxicity in resistant bed bugs (Cimex lectularius L.) by inhibiting cytochrome P450 enzymes. 2020 Joint North Central Branch and Southwestern Branch Meeting of Entomological Society of America. Presentation #149944.

6. Liu L, Du D, and **Zheng** W (2019). Expression of copper transport protein-2 (CTR2) in the blood-CSF barrier: Effect of lead exposure in vitro. Poster presentation in OV-SOT in Cincinnati Oct 18.
7. **Zheng** W (2019). Role of copper in regulating adult neurogenesis: Relevance to non-motor dysfunction in manganese-induced Parkinsonism". Oral presentation in 13th conference of Int'l Society for Trace Element Research in Humans in Bali, Indonesia, Sept 22-26.
8. **Zheng** W (2019). Environmental causes of disrupted neurogenesis in adults. Invited Keynote Speaker in Chinse Society of Environmental Teratology in Zunyi, China, June 18-22.
9. **Zheng**, W (2019) Involvement of copper in regulation of adult neurogenesis in rodent brain. Oral presentation in Neurology conference in Barcelona, Spain, May 15-17.
10. **Zheng** W (2019). Alpha-synuclein: A good protein turned bad in chronic brain diseases with toxicological implications. (symposium presentation, Chair) Toxicologist 168(1):1021. Baltimore March 10-14, 2019.
11. **Zheng** W (2019). Toxicity of manganese exposure on neural progenitors and adult neurogenesis. (symposium presentation) Toxicologist 168(1):1679.

12. Xu Y, Wu X, Liu Q, **Zheng** W, and Zhao G (2019). Beneficial effect of resveratrol in combined treatment with cisplatin on growth inhibition and apoptosis induction in gastric cancer SGC-7901 cells. Toxicologist 168(1):1204.
13. Gu H-Y, Territo P, Persohn S, Bedwell A, Chen Z, **Zheng** W, and Du Y (2019). Pb-induced neurotoxicology of the brain barrier system: New implications. Toxicologist 168(1):1405.
14. Shen X-L, Xia L, Jiang W, Du Y, and **Zheng** W (2019). Lead(Pb) exposure stimulates RAGE relocation and expression in choroid plexus: Implication in amyloidal aggregation in brain. Toxicologist 168(1):1406.
15. Xia L, Shen X-L, and **Zheng** W (2019). LRP-1 expressions and distribution across BBB and BCB following subchronic lead exposure. Toxicologist 168(1):1408.
16. Du X-Q, **Zheng** W, and Ye Q (2019). A rare case of severe life-threatening lead poisoning due to accidental exposure: Diagnosis, treatment, and prognosis. Toxicologist 168(1):2344.

17. **Zheng** W, Fan XM, Jiang W, and Fan QY (2018). Reduction of PARK2 expression among smelting workers exposed to manganese (Mn). Abstracted accepted by IUTOX-the 10th Congress of Toxicology in Developing Countries. Belgrade, Serbia April 18-21
18. **Zheng** W, Jiang W, and Adamson S (2018). Regulation of adult neurogenesis by copper in subventricular zone and relationship with manganese-induced parkinsonia disorder. Abstract accepted by the 11th Int'l Copper Meeting: Bridging Clinical and Fundamental Research in Copper Biology. Serrento, Italy September 23-28.
19. **Zheng** W, Li N, Territo P, and Du Y (2018). Lead-induced neurotoxicities: From maternal exposure to neurodegenerative Alzheimer's disease (workshop presentation in the 57th SOT annual meeting in San Antonio, TX). Toxicologist 162(1):1748.
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21. Liu XX, Durkes AC, Sivasankar P and **Zheng** W (2018). Subacute acrolein exposure-induced inflammation in the larynx. Toxicologist 162(1):2796.

22. Rolle D, Liu Y, Mostafaei F, Zhou Y, **Zheng** W, Nie LH, and Wells EM (2017). Association between manganese biomarkers and olfactory test scores. Presented in the American Public Health Association (APHA) conference.
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25. **Zheng** W (2017). Transport of α-synuclein at the blood-cerebrospinal fluid barrier: Implications in manganese-induced Parkinsonian disorder. Hengstberger Symposium on a-Synuclein Transport. University of Heidelberg, Heidelberg, Germany. April 5-6, 2017.
26. **Zheng** W (2017). New concepts and technologies in metals toxicology. Continuing education course in the 56th SOT annual meeting in Baltimore, MD. Toxicologist 156(1): Abstract #1005.
27. Fu X, Shen X, Jiang W, Lai V, Wang X, Cannon J, Chen J, and **Zheng** W (2017). Subchronic manganese (Mn) exposure impairs hippocampal neurogenesis in adult rats. A poster presentation in the 56th SOT annual meeting in Baltimore, MD. Toxicologist 156(1): Abstract #1400.
28. Li N, and **Zheng** W (2017). Involvement of calsyntenin-2 and calsyntenin-3 in hippocampus and cerebral cortex in lead (Pb)-induced neurotoxicity in mouse pups after maternal exposure. A

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29. Nie L, Liu Y, Byrne P, Mostafaei F, Rolle D, Hsieh M, **Zheng** W, and Wells E (2017). Customized compact neutron activation analysis system to quantify manganese (Mn) and aluminum (Al) in bone in vivo. A poster presentation in the 56th SOT annual meeting in Baltimore, MD. Toxicologist 156(1): Abstract #2132.

30. **Zheng** W (2016). Role of altered adult neurogenesis in manganese-induced parkinsonian disorder. J. Clin Toxicol 6:6(Suppl);63. Invited talk in the 7th Euro-Global Summit on Toxicology, Rome.
31. Rolle D, Liu Y, Mostafaei F, Zhou Y, **Zheng** W, Nie LH, and Wells EM (2016). Bone Manganese (BnMn) as a Biomarker of Occupational Mn Exposure. Mn meeting in NYC.
32. Rolle D, Nie LH, **Zheng** W, Zhou YZ, and Wells EM (2016). Bone manganese (BnMn) as a biomarker of cumulative Mn exposure and indicator of neurological deficit: A pilot study. Poster presentation in the International Society of Environmental Epidemiology, Rome, Italy Sept 1-4.
33. Cholger D, Fu X, and **Zheng** W (2016). Interactive Toxic Mechanisms on the Blood-CSF-Barrier Following Co-Exposure to Manganese (Mn) and Lead (Pb), In Vitro. Platform presentation in OVSOT.
34. Lai V, Fu X, and **Zheng** W (2016), Copper (Cu) Distributions in different Organs of Cu-overload and Cu-deficient Rats. Poster presentation in the OVSOT.
35. Rolle D, Liu Y, Mostafaei F, Zhou Y, **Zheng** W, Nie LH, Wells EM (2016) "Bone manganese (BnMn) as a biomarker of cumulative Mn exposure and correlation with manual dexterity: a pilot study. Poster presented at the 2016 Indiana Public Health Week Conference, Indiana University – Bloomington.
36. O'Neal SL, Fu S and **Zheng** W (2016). Intranasal manganese exposure: Implications for adult neurogenesis and copper concentrations in subventricular zone. The 55th SOT annual meeting in New Orleans, LA. Toxicologist 150(1): Abstract #1551.
37. Liu Y, Mostafaei F, Rolle D, **Zheng** W, Wells E and Nie L (2016). Bone manganese as biomarker for manganese exposure – an in vivo pilot study. SOT annual meeting in New Orleans, LA. Toxicologist 150(1): Abstract #1552.
38. Du Y, Territo P and **Zheng** W (2016). Roles of lead exposure in Alzheimer's disease: Relationship to brain amyloid aggregation. SOT annual meeting in New Orleans, LA. Toxicologist 150(1): Abstract #1587.
39. Liu X, **Zheng** W and Sivasankar MP (2016). Acrolein toxicity on larynx: Damage on vocal fold epithelial barrier function. SOT annual meeting in New Orleans, LA. Toxicologist 150(1): Abstract #2132.
40. Cholger D, Fu X and **Zheng** W (2016). Increased interactive toxicities on the blood-CSF barrier (BCB) following co-exposure to manganese and lead, in vitro. SOT annual meeting in New Orleans, LA. Toxicologist 150(1): Abstract #2363.
41. Fu X, Jiang W, Gao X, Zeng A, Cholger D, Cannon J, Chen J, and **Zheng** W (2016). Aberrant adult neurogenesis in the subventricular zone (SVZ) – rostral migratory stream (RMS) – olfactory bulb (OB) system following subchronic manganese exposure. SOT annual meeting in New Orleans, LA. Toxicologist 150(1): Abstract #2366.

42. **Zheng** W and Zheng YX (2015). Baseline blood concentrations of trace elements (Mn, Zn, Cu, Pb, and Cd) among general Chinese populations. J Trace Elem Med Biol 32S1:41. Abstract to the 11th International Society of Trace Element Research in Humans. Dubrovnik, Croatia Oct 18-22, 2015.

43. Fu X, Jiang W and **Zheng** W (2015). Age-dependent high copper contents and expressions of copper regulatory proteins in the subventricular zone and choroid plexus: Implications to adult neurogenesis. Abstract to the annual meeting of Society for Neuroscience Chicago Oct17-23.
44. Lai V, O'Neal S. and **Zheng** W (2015). Effect of Intranasal Manganese Exposure on Adult Neurogenesis in the Subventricular Zone (SVZ). Abstract to the annual meeting of Society for Neuroscience Chicago Oct17-23.
45. Rolle D, Wells EM, Nie L, and **Zheng** W (2015). Blood lead, blood manganese, and grip strength in older U.S. adults: NHANES 2011-2012. Abstract to the 143rd American Public Health Association. Chicago, Oct 31-Nov 4.
46. **Zheng** W, Fu S, O'Neal SL, Jiang W and Chen JH (2015). Adult neurogenesis in manganese (Mn) – induced Parkinsonian disorder. Adult Neurogenesis: Evolution, regulation and function. Center for Regenerative Therapies. Dresden, Germany May 6-8, 2015.
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48. O'Neal S, Fu S and **Zheng** W (2015). Adult neurogenesis is activated in the subventricular zone following intranasal manganese exposure in rats. SOT annual meeting in San Diego, CA. Toxicologist 144(1):962.
49. Fu S, Jiang J, and **Zheng** W (2015). Age-dependent increase of brain copper levels and expressions of Cu regulatory genes in the subventricular zone and choroid plexus. SOT annual meeting in San Diego, CA. Toxicologist 144(1):980.
50. **Zheng** W (2015). Manganese accumulation in bone: Relationship to Mn-induced neurotoxicity. Toxicologist 144(1):1612.
51. **Zheng** W and Bowman AB (2015). Adult neurogenesis in chemical induced neurotoxicities: A new frontier in toxicological mechanistic investigations, biomarker research and therapeutic targeting. Toxicologist 144(1):2367.
52. **Zheng** W, Fu X and O'Neal SL (2015). Manganese-copper interaction: Effect on adult neurogenesis and stem cell migration. Toxicologist 144(1):2369.
53. Rolle D, **Zheng** W, Nie LH and Wells E (2015). Blood lead, blood manganese, and grip strength in older U.S. adults: NHANES 2011-2012. American Public Health Association. Chicago, IL.