**CURRICULUM VITAE**

**CHANGHAI TIAN, Ph.D.**

Assistant professor

Department of Toxicology and Cancer Biology

University of Kentucky College of Medicine

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**Education**

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| --- | --- | --- |
| Sep.1994–Jul1998 | B.S. | Biology Education, College of Life Science, Anhui Normal University, Wuhu, Anhui, P.R. China. |
| Sep.1998–Jul 2001 | M.S. | Cell Biology, College of Life Science, Xiamen University, Xiamen, Fujian, P.R. China. |
| Sep.2001–Mar 2006 | Ph.D. | Cell Biology, Institute of Zoology, Chinese Academy of Sciences, Beijing, P.R. China. |

**Post-degree Training**

Jun 2006 – Jul 2009 **Post-doctoral Research Associate**, Department of Pharmacology and Experimental Neuroscience, University of Nebraska Medical Center (UNMC), Omaha, NE 68198-5880, USA

Jul 2009 – Jul 2010 **Research Associate,** Department of Pharmacology and Experimental Neuroscience, University of Nebraska Medical Center (UNMC), Omaha, NE 68198-5930, USA

**Academic Appointments**

July 2010 – May 2015 **Instructor,** Department of Pharmacology and Experimental Neuroscience, University of Nebraska Medical Center (UNMC), Omaha, NE 68198-5930, USA

May 2015 – Apr.2020 **Instructor,** Department of Cellular and Integrative Physiology, University of Nebraska Medical Center (UNMC), Omaha, NE 68198-5850, USA

Apr. 2020 – June 2021 **Assistant professor** (non-tenure track), Department of Pharmacology and Experimental Neuroscience, University of Nebraska Medical Center (UNMC), Omaha, NE 68198-5930.

Feb 2020 – June 2021 **Graduate Faculty**, University of Nebraska, NE

July 2021 – Present **Assistant professor** (Tenure track), Department of Toxicology & Cancer Biology, University of Kentucky, Lexington, KY 40536.

**Grant Support**

**Active Funding*:***

**DHHS/NIH/NHLBI R01HL153176**

Title: “Nrf2 regulation of oxidative stress in heart failure and extra vesicular communication”

**Date:** 04/01/2021- 03/31/2026

**Total:** $2,552,315

**Role:** Changhai Tian, MPI (50% efforts)

**Start-up Funding (State & COM)**

**Date:** 07/01/2021-06/30/2026

**Total:** $500,000.00

**Role:** Changhai Tian (PI)

**American Heart Association Transformational Project Award (24TPA1300008)**

**Title:** “Extracellular vesicle-mediated Nrf2 protein secretion and its therapeutic application in cardiogenic dementia”

**Date:** 07/01/2024-06/30/2027

**Total:** $300,000

**Role:** Changhai Tian (PI, 20% efforts)

**Pending grant:**

**NIH 1R01CA291653-01A1 (Submitted on July 05, 2024, to NCI)**

(PI: Xiaoqi Liu)

Title “Targeting the AhR/Nrf2/GSTM2 Signaling to Enhance the Efficacy of Enzalutamide in Castration-Resistant Prostate Cancer”

Date: 07/01/2025- 06/30/2030

Efforts: 5% at year 4 & year 5.

**Co-I:** Changhai Tian

**Completed*:***

**Career Development Award (19CDA34520004)**

“Extracellular Vesicle MicroRNAs Regulate Nrf2/ARE Signaling in Heart Failure”.

American Heart Association (AHA)

04/01/2019-03/31/2022

**Total:** $231,000

**Role:** Changhai Tian, PI (50% efforts)

**Frances E. Lageschulte and Evelyn B. Weese New Frontiers in Medical Research Fund**

“Extracellular Vesicle MicroRNAs Regulate Nrf2/ARE Signaling in Heart Failure”.

Nebraska Medical Center (UNMC)

07/01/2019-06/30/2020

**Total:** $55,000

**Role:** Changhai Tian, PI (Declined due to overlap with CDA grant)

**NE DHHS-LB606 Stem Cell 2012-04**

“Proteomic Study of iPSC and NPC Induction”

07/01/2012 - 06/30/2014

**Total:** $100,000

**Role:** Changhai Tian, PI; Shijian Ding, Co-PI

**NE DHHS-LB606 Stem Cell 2010-10**

“Proteomic study of iPS and NPC cell induction.”

07/01/2010 - 06/30/2012

**Total:** $120,000

**Role:** Shijian Ding,PI; Changhai Tian, Co-I

**Honors and Awards**

2001 Excellent Graduate of Xiamen University, Xiamen, Fujian, P.R. China

2004 Excellent Student of National Key Laboratory of Biomembrane and Membrane Biotechnology, Institute of Zoology, Chinese Academy of Sciences, Beijing, P.R. China

2008 Yong Investigator Travel Award, Society for Neuroimmunopharmacology (SNIP)

2018 New Investigator Travel Award, American Heart Association (BCVS)

2022 College of Medicine Research Award of University of Kentucky (Wethington Award)

2023 College of Medicine Research Award of University of Kentucky (Wethington Award)

2024 College of Medicine Research Award of University of Kentucky (Wethington Award)

**Memberships in Professional Societies**

2008 – 2015 Society for Neuroscience

2008 – 2015 Society on NeuroImmune Pharmacology

2015 – 2021 Nebraska Physiological Society

2017 – Present American Physiological Society

2017 – Present American Heart Association/American Stroke Association

2019 – Present American Society for Exosomes and Microvesicles

2020 – Present International Society for Extracellular Vesicle

2022 – Present Society for Redox Biology and Medicine

**Committee Assignments**

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| 2015-2018 | Member | Advisory Committee for Miao He (Graduate student), Medical Sciences Interdepartmental Area Graduate Program, Physical Therapy, University of Nebraska Medical Center, Omaha, NE |
| 2022-Present | Member | Doctoral Advisory Committee for Nur, Maria (TOX Ph D program), University of Kentucky College of Medicine, Lexington, KY |
| 2025-Present | Chair | Doctoral Advisory Committee for Qingxuan Li (TOX Ph D program), University of Kentucky College of Medicine, Lexington, KY |

**Presentations**

1. **Invited talks at Institutes and Universities**
   1. Reprogramming and Direct Reprogramming: Alternative Strategies for Parkinson’s disease treatment. Institute of Zoology Chinese Academy of Sciences; Beijing, China. 2014.
   2. Direct reprogramming and Stem cell-based therapy in Parkinson’s disease. Henan Agricultural University; Zhengzhou, China. 2015.
   3. Intra- and Inter-Organ Communications: New Players of Redox Homeostasis in CHF. Department of Physiology at Wayne State University, Detroit, MI, June 11, 2020.
   4. Intra- and Inter-Organ Communications: New Players of Redox Homeostasis in Chronic Heart Failure -- Extracellular Vesicles, miRNAs and Nrf2/ARE Signaling. SURGERY RESEARCH FORUM, University of Nebraska Medical Center; Omaha, NE, October 21, 2020.
   5. Intra- and Inter-Organ Cross-talks in Heart Failure: Extracellular Vesicles and Redox Homeostasis (Non-coding RNAs and Nrf2/ARE Signaling). University of Kentucky, Lexington, KY, April 01, 2021.
   6. Intra- and Inter-organ Communication by Extracellular Vesicles: New player for Cardiac-Cerebral Syndrome. DTCB Annual Retreat at University of Kentucky, August 20, 2021.
   7. Reprogramming and direct reprogramming: Alternative strategies for Parkinson’s disease treatment. Stem cell group meeting at University of Kentucky, September 14, 2021.
   8. Extracellular vesicle-mediated intra- and inter-organ communications in heart failure. Markey Research Seminar, University of Kentucky, December 08, 2021.
   9. Redox homeostasis, Heart-Brain communication and Chronic heart failure. The Saha Cardiovascular Research Center seminar series, University of Kentucky, October 21, 2022.
   10. Cardiac extracellular vesicles and brain homeostasis in heart failure. Department of Toxicology and Cancer Biology Seminar Series, University of Kentucky, April 24, 2023.
   11. Extracellular Vesicles and Heart-Brain Communication in Heart Injuries and Neurological Disorder. 2023 Fall IBS-DTCB Orientation, University of Kentucky, August 17, 2023.
   12. Heart-Brain Communication following myocardial injury and cardiogenic dementia. Department of Physiology (invited presentation by Dr. Kenneth S. Campbell), University of Kentucky, March 29, 2024.
   13. Extracellular vesicle-mediated Heart-Brain Axis Communication Following Myocardial Injury. Department of Toxicology and Cancer Biology Seminar Series, University of Kentucky, May 05, 2025.
2. **Invited presentations at regional, national, and international meetings**
   1. **Tian, CH**. Cardiac extracellular vesicles bridge heart and brain crosstalk after cardiac injury. The Bugher Foundation Collaborative Symposium 2025, Los Angles, California, February 3-4, 2025 (Oral presentation).
   2. **Tian, CH**. Cardiac extracellular vesicles and brain redox homeostasis following myocardial injury. 2024 American Physiology Society Summit, Long Beach, California, April 4-7, 2024 (Oral presentation).
   3. **Tian, CH**. Heart-Brain Communication: New Players for Sympathetic Excitation in Chronic Heart Failure. Experimental Biology, April 27-30, 2021 (Oral presentation)
   4. **Tian, CH**. Development of induced pluripotent stem (iPS) cells and iPS cells-derived neural cells from astrocytes: Potential application to Parkinson’s disease. The Regenerative Medicine Symposium, Omaha, NE, May 24, 2010 (Oral presentation).
   5. **Tian, CH**. Characterization of Induced Neural Progenitor Cells from Skin Fibroblasts by a Novel Combination of Defined Factors. CSH Asia 2012 Conference on Stem Cells and Developmental Mechanisms, Suzhou, China, Dec.03-07, 2012 (Oral presentation).
3. **Abstracts and preliminary communications**
4. Qingxuan Li, Neha Dhyani, Lie Gao, Tara L. Rudebush, Irving H. Zucker, and **Changhai Tian**. Cardiac Injury Potentially Contributes to Neuroinflammation via Extracellular Vesicles. (Abstract, International Stroke Conference, February 5-7, 2025, Los Angeles, California, USA) (Corresponding author)

**Abstract WMP13:** Cardiac Injury Potentially Contributes to Neuroinflammation via Extracellular Vesicles. Published on ***Stroke***, 2025, [Volume 56, Number Suppl\_1](https://www.ahajournals.org/toc/str/56/Suppl_1). https://doi.org/10.1161/str.56.suppl\_1.WMP13.

1. Qingxuan Li and **Changhai Tian**. Nrf2 Secretion Mechanism and therapeutic Application in Cardiogenic Dementia. Department retreat at University of Kentucky, August 16, 2024. (Corresponding author)
2. **Changhai Tian**, Tristin Miller, Qian Cheng, Lei Gao, Irving H. Zucker. Cardiac extracellular vesicles regulate brain inflammation in heart failure. (Abstract, The International Society for Extracellular Vesicles (ISEV) Annual meeting, May 17-21, 2023, Seattle, Washington, USA.) J Extracell Vesicles. 2023 May;12(Suppl 1): e12329. doi: 10.1002/jev2.12329. PMCID: PMC10187017. (Corresponding author)
3. **Changhai Tian**, Lie Gao, Maria Rose Edwin, Tara L. Rudebush, Li Yu, Irving H. Zucker.Cardiac-derived extracellular vesicles contribute to sympathetic excitation by disrupting the central redox homeostasis in heart failure. (Abstract, The 29th Annual Conference of the Society for Redox Biology and Medicine, November 16-19, 2022, Orlando, FL USA) (Corresponding author)
4. **Changhai Tian**, Lie Gao and Irving Zucker. Extracellular Vesicle-mediated Heart-Brain Communication Contributes to the Pathogenesis of Chronic Heart Failure (CHF) by Targeting Nrf2/ARE Signaling. Department retreat at University of Kentucky, August 20, 2021. (Corresponding author)
5. **Tian C**, Gao L, Zucker IH. Heart-Brain Communication by Extracellular Vesicles Contributes to the Sympatho-Excitation in Chronic Heart Failure by Targeting Nrf2/ARE Signaling. The FASEB J. April 2021
6. **Changhai Tian**, Lie Gao and Irving Zucker. Cardiac-derived extracellular vesicles contribute to communication between heart and brain in chronic heart failure (CHF) and target Nrf2/ ARE signaling. (2020) ISEV2020 Abstract Book, Journal of Extracellular Vesicles, 9:sup1, 1784511, DOI: 10.1080/20013078.2020.1784511
7. **Changhai Tian**, Guoku Hu, Lie Gao, Bryan T. Hackfortand Irving H. Zucker.Extracellular Vesicular MicroRNA-27a Star Contributes to Cardiac Hypertrophy in Chronic Heart Failure. (American Society for Exosomes and Microvesicles Annual Meeting 2019, Oct 6, Pacific Grove, CA)
8. **Changhai Tian**, Lie Gao and Irving H. Zucker. Exosomal MicroRNAs Dysregulate Nrf2/ARE Signaling Pathway: Implications in the Pathogenesis of Chronic Heart Failure. (Abstract, Nebraska Physiological Society Annual Meeting 2018, Oct 20, Omaha, NE)
9. **Changhai Tian,** Lie Gao and Irving H. Zucker. Exosomal MicroRNAs Contribute To Chronic Heart Failure Through Dysregulating Nuclear Factor Erythroid 2-Related Factor 2/Antioxidant Response Element Signaling. (Abstract in Circulation Research 123 (Suppl\_1), August 2018. DOI: 10.1161/res.123.suppl\_1.555, BCVS Scientific Sessions 2018, July 30 to Aug 2, San Antonio, TX)
10. **Changhai Tian**, Lie Gao and Irving H. Zucker. Exosomal MicroRNA-27a Passenger Strand Was Upregulated in Chronic Heart Failure. The FASEB Journal. 2018, Apr 1, Volume 32, Issue 1\_supplement (Abstract in EXPERIMENTAL BIOLOGY 2018, April 21-25, San Diego, CA)
11. Zhang, A., **Tian, C.,** Gao, L., Zucker, I.H. Bardoxalone activates cardiac Nrf2, increases antioxidant expression and lowers arterial pressure in rats with heart failure. FASEB J. April 2018, 903.11
12. **Changhai Tian**, Lie Gao and Irving H. Zucker. Myocardial infarction-induced miRNA-enriched exosomes contribute to Nrf2 dysregulation in chronic heart failure. The FASEB Journal vol. 31 no. 1 Supplement 721.5 (Abstract in EXPERIMENTAL BIOLOGY 2017, April 22-26, Chicago, IL)
13. **Changhai Tian**, Kangmu Ma, Yongxiang Wang, Jialin C. Zheng. Induced Neural Progenitors from somatic cells by a Novel Combination of Defined Factors: New strategy for the treatment of neurodegenerative diseases. (Abstract, XI European Meeting on Glial Cells in Health and Disease. Berlin, July 3-6,2013)
14. Yongxiang Wang, **Changhai Tian**, Xiaobei Deng, Jialin Zheng. FoxO3a contributes to the reprogramming process and the differentiation of induced pluripotent stem cells. (Poster, 3rd International Neural Regeneration Symposium & 5th International Spinal Cord Injury Treatments and Trials Symposium. Shenyang, China, October 10-15, 2013)
15. **Changhai Tian**, Kangmu Ma, Yongxiang Wang, Jialin C. Zheng. Induced Neural Progenitors from somatic cells by a Novel Combination of Defined Factors: New strategy for the treatment of neurodegenerative diseases. (Abstract, XI European Meeting on Glial Cells in Health and Disease. Berlin, July 3-6,2013)
16. Yongxiang Wang, **Changhai Tian**, Kangmu Ma, Jialin Zheng. Generation of neural progenitor-like cells from human dermal fibroblasts. (Poster, XXVIth International Symposium on Cerebral Blood Flow, Metabolism and Function and the XIth International Conference on Quantification of Brain Function with PET. Shanghai, May 20-23, 2013)
17. **Changhai Tian**, Randall J Ambroz, Lijun Sun, Yongxiang Wang, Kangmu Ma, Qiang Chen, Bing Zhu and Jialin C. Zheng. Generation of Induced Neural Progenitor Cells (iNPCs) by Direct Conversion from Fibroblasts: Potential Strategy for the Treatment of HIV-1 Associated Dementia (HAD). (Poster presentation,18th SNIP Scientific Conference, Honolulu, Hawaii, April 25-28, 2012)
18. Zhao, L., Huang, Y., **Tian, C**., Curthoys, N., Zheng, J. STAT1 Regulates Glutaminase Promoter through Multiple Binding Sites in HIV-1 Infected Macrophages. (Poster presentation, 19th Conference on Retroviruses and Opportunistic Infections Seattle, WA, March 5 – 8, 2012)
19. **Changhai Tian**, Yongxiang Wang, Lijun Sun, Kangmu Ma and Jialin Zheng. Reprogrammed Mouse Astrocytes Retain a “Memory” of Their Tissue Origin and Possess More Potential for Neuronal Differentiation. (Poster presentation, Stochastic Events in Stem Cell Differentiation and Reprogramming, Las Vegas, Nevada, October 28-29, 2010)
20. **Changhai Tian**, Lixia Zhao, Yunlong Huang and Jialin Zheng. Oxidative Stress-mediated Mitochondrial Glutaminase Release: implication in HIV-associated dementia. (Poster presentation, Neuroscience 2009, the Society for Neuroscience's 39th annual meeting, Chicago, IL, October 17-21, 2009).
21. **Changhai Tian**, Jialin Zheng. Mitochondrial fragmentation is involved in methamphetamine (METH)-induced cell death in rat hippocampal neural progenitor cells. (Poster presentation, Neuroscience 2008, the Society for Neuroscience's 38th annual meeting, Washington, DC, Nov.15-19, 2008).
22. **Changhai Tian**, Nathan Erdmann, Jianxin Zhao, Zhijun Cao, Hui Peng and Jialin Zheng. HIV-INFECTED MACROPHAGES MEDIATE NEURONAL APOPTOSIS THROUGH MITOCHONDRIAL GLUTAMINASE. (Poster presentation, 14th SNIP CONFERENCE, Charleston, SC, March 12-15, 2008).
23. **Changhai Tian**, Chen Q. Recombinant human thioredoxin regulates mitochondrial membrane transition induced by arsenic trioxide dependent on its redox state. (Poster presentation, the 10th International Conference on Differentiation Therapy Molecular Target-based Treatment of Human Cancer. 2004, Shanghai, China).
24. **Changhai Tian** and Chen Q. Human thioredoxin interacts with mitochondrial VDAC to regulate apoptosis. (Poster presentation, the 8th National and International Symposium on Biomembrane. 2003, Beihai, Guangxi, China.)

**Publications**

**Articles published in scholarly journals:**

1. Qingxuan Li, Ramzi H. Hamdalla, Neha Dhyani, Lijun Sun, Lie Gao, Tara L. Rudebush, Irving H. Zucker, and **Changhai Tian#.** Cardiac injury regulates neuroinflammation through extracellular vesicle-mediated heart-brain crosstalk. *J Am Coll Cardiol Basic Trans Science*. 2025 (In press) (#Corresponding author).
2. Dhyani N, **Tian CH**, Gao L, Rudebush TL, Zucker IH. Nrf2-Keap1 in Cardiovascular Disease: Which is the Cart and Which the Horse? Physiology (Bethesda). 2024 Apr 30, https://doi: 10.1152/physiol.00015.2024.
3. 2023 MISEV Consortium. Minimal information for studies of extracellular vesicles (MISEV2023): From basic to advanced approaches. J Extracell Vesicles. 2024 Feb;13(2): e12404. doi: 10.1002/jev2.12404.
4. Ziegler JN, **Tian C#**. Engineered Extracellular Vesicles: Emerging Therapeutic Strategies for Translational Applications. International Journal of Molecular Sciences. 2023; 24 (20):15206. https://doi.org/10.3390/ijms242015206 (#Corresponding author).
5. **Tian C#**, Ziegler JN. and Zucker IH. Extracellular vesicle microRNAs in heart failure: Pathophysiological mediators and therapeutic targets. Cells. 2023, *12*(17), 2145; https://doi.org/10.3390/cells12172145 (#Corresponding author).
6. **Tian C#**,Gao L, Rudebush TL, Yu L and Zucker IH#. Extracellular vesicles regulate sympatho-excitation by Nrf2 in heart failure. Circulation Research. 2022; 131 (8): 687–700. DOI: 10.1161/CIRCRESAHA.122.320916 PMID: 36098045 (#Corresponding authors)
7. **Tian C**,Gao L and Zucker IH. Regulation of Nrf2 signaling pathway in heart failure: Role of extracellular vesicles and non-coding RNAs. Free Radic Biol Med. 2021, 167: 218-231. doi: 10.1016/j.freeradbiomed.2021.03.013. PMID: 33741451
8. Gao L, Wang H, **Tian C**, and Zucker IH. Skeletal muscle Nrf2 contributes to systemic antioxidant defense via EV communication. Exerc Sport Sci Rev. 2021 Apr 22. doi: 10.1249/JES.0000000000000257. Online ahead of print. PMID: 33927165
9. Chivero E, Liao K, Niu F, Tripathi A, **Tian C**, Buch S and Hu G. Engineered extracellular vesicles loaded with miR-124 attenuate cocaine-mediated activation of microglia. Front Cell Dev Biol. 2020 Jul 30; 8: 573. doi: 10.3389/fcell.2020.00573. PMID: 32850781.
10. **Tian C#**, Hu G, Gao L, Hackfort BT, Zucker IH. Extracellular Vesicular MicroRNA-27a\* Contributes to Cardiac Hypertrophy in Chronic Heart Failure. J Mol Cell Cardiol. 2020, 143: 120-131.doi: 10.1016/j.yjmcc.2020.04.032. PMID: 32370947 (#Corresponding author)
11. **Tian C#**, Gao L, Zhang A, Hackfort B, Zucker IH. Therapeutic effects of Nrf2 activation by Bardoxolone methyl in Chronic Heart Failure. J Pharmacol Exp Ther. 2019 Dec; 371 (3): 642-651. doi: 10.1124/jpet.119.261792. PMID: 31601682 (#Corresponding author)
12. Liao K, Niu F, Dagur RS, He M, **Tian C,** Hu G. Intranasal Delivery of lincRNA-Cox2 siRNA Loaded Extracellular Vesicles Decreases Lipopolysaccharide-Induced Microglial Proliferation in Mice. J Neuroimmune Pharmacol. 2020 Sep;15(3):390-399. doi: 10.1007/s11481-019-09864-z. Epub 2019 Jul 20. PMID: 31325121.
13. Ma Y, Wang K, Pan J, Fan Z, **Tian C**, Deng X, Ma K, Xia X, Huang Y, Zheng JC. Induced neural progenitor cells abundantly secrete extracellular vesicles and promote the proliferation of neural progenitors via extracellular signal-regulated kinase pathways. Neurobiol Dis. 2019 Apr; 124: 322-334. doi: 10.1016/j.nbd.2018.12.003.
14. He M, Zhang H, Li Y, **Tian C**, Tang B, Huang Y, Zheng J. Direct and selective lineage conversion of human fibroblasts to dopaminergic precursors. Neurosci Lett. 2019 Jan18; 699:16-23. doi: 10.1016/j.neulet.2019.01.033.
15. Kangmu Ma, Xiaobei Deng, Xiaohuan Xia, Zhaohuan Fan, Xinrui Qi, Yongxiang Wang, Yuju Li, Yizhao Ma, Qiang Chen, Hui Peng, Jianqing Ding, Chunhong Li, Yunlong Huang#, **Changhai Tian#** and Jialin C. Zheng#. Direct conversion of mouse astrocytes into neural progenitor cells and specific lineages of neuron. Translational Neurodegeneration, 2018 Nov 5; 7: 29. doi: 10.1186/s40035-018-0132-x. (#Co-Corresponding author)
16. Guoku Hu, Ke Liao, Fang Niu, Lu Yang, Blake Dallon, Shannon Callen, **Changhai Tian**, Jiang Shu, Juan Cui, Zhiqiang Sun, Yuri Lyubchenko, Minhan Ka, Xian-Ming Chen, and Shilpa Buch. Astrocyte EV-induced lincRNA-Cox2 regulates microglial phagocytosis: Implications for morphine-mediated potentiation of neurodegeneration. Mol Ther Nucleic Acids. 2018 Dec 7; 13: 450-463. doi: 10.1016/j.omtn.2018.09.019.
17. **Tian C**, Lie Gao, Matthew C. Zimmerman, Irving H. Zucker. Myocardial infarction-induced microRNA-enriched exosomes contribute to cardiac Nrf2 dysregulation in chronic heart failure. Am J Physiol Heart Circ Physiol. 2018 May 1; 314(5):H928-H939.
18. Li Y, Peer J, Zhao R, Xu Y, Wu B, Wang Y, **Tian C**, Huang Y, Zheng J. Serial deletion reveals structural basis and stability for the core enzyme activity of human glutaminase 1 isoforms: relevance to excitotoxic neurodegeneration. Transl Neurodegener. 2017 Apr 20; 6:10. doi: 10.1186/s40035-017-0080-x.
19. **Tian C,** Zucker IH. Therapeutic microRNA-based strategies in cardiovascular disease discriminate sex and age difference. J Physiol. 2016 Oct 15; 594(20):5731-5732. PMID:27739075
20. Becker BK, **Tian C**, Zucker IH, Wang H. Influence of brain-derived neurotrophic factor-TrkB signaling in the NTS on baroreflex sensitivity in rats with chronic heart failure. J Physiol. 2016 May 6. doi: 10.1113/JP272318.
21. Becker BK, Wang HJ, **Tian C**, Zucker IH. BDNF contributes to angiotensin II-mediated reductions in peak voltage-gated K+ current in cultured CATH. a cells. Physiol Rep. 2015 Nov; 3 (11). pii: e12598. doi: 10.14814/phy2.12598
22. **Changhai Tian#, \*,** Yuju Li#, Yunlong Huang#, Yongxiang Wang, Dapeng Chen, Jinxu Liu, Xiaobei Deng, Lijun Sun, Kristi Anderson, Xinrui Qi, Yulong Li, R. Lee Mosley, Xiangmei Chen, Jian Huang &Jialin C. Zheng\*. Selective Generation of Dopaminergic Precursors from Mouse Fibroblasts by Direct Lineage Conversion. Scientific Reports. 2015, 5: 12622, DOI: 10.1038/srep12622. (\*Co-Corresponding author)
23. Lai S, Zhang M, Xu D, Zhang Y, Qiu L, **Tian C\*,** Zheng JC\*. Direct reprogramming of induced neural progenitors: a new promising strategy for AD treatment. Transl Neurodegener. 2015 Apr 18; 4: 7. (\*Co-correspondence author).
24. **Changhai Tian\*,** Qiang Liu, Kangmu Ma, Yongxiang Wang, Qiang Chen, Randall Ambroz, David L. Klinkebiel, Yuju Li, Yunlong Huang, Jianqing Ding, Jie Wu, Jialin C. Zheng\*. Characterization of Induced Neural Progenitors from Skin Fibroblasts by a Novel Combination of Defined Factors. Sci Rep. 2013 Feb 26; 3: 1345. (\*Co-correspondence Author). PMCID: PMC3581826.
25. **Changhai Tian** and Jialin Zheng. Neural Progenitors by Direct Reprogramming: Strategies for the Treatment of Parkinson’s and Alzheimer’s Diseases. Science. 2013, 342 (6165 Suppl): 50–52. doi: 10.1126/science.1244943.
26. Wang Y, **Tian C\***, Zheng J**\***. FoxO3a contributes to the reprogramming process and the differentiation of induced pluripotent stem cells. Stem Cells Dev. 2013 Nov 15; 22(22):2954-63. (\*Co-correspondence author).
27. Zhao X#, **Tian C**#, Puszyk WM, Ogunwobi OO, Cao M, Wang T, Cabrera R, Nelson DR, Liu C. OPA1 down-regulation is involved in sorafenib-induced apoptosis in hepatocellular carcinoma.　Lab Invest. 2013 Jan; 93 (1):8-19. (#Co-First author).
28. **Tian, C\*,** Ambroz, R., Sun, L., Wang, Y., Ma, K., Chen, Q., Zhu, B. and Zheng, J\*. (2012). Direct conversion of dermal fibroblasts into neural progenitor cells by a novel cocktail of defined factors. Current Molecular Medicine. 2012, 12(2):126-137. NIHMS 347018 (\*Co-corresponding author). PMCID: PMC3434966.
29. **Changhai Tian,** Lijun Sun, Beibei Jia, Kangmu Ma, Norman Curthoys and Jialin Zheng. Mitochondrial glutaminase release contributes to glutamate-mediated neurotoxicity during human immunodeficiency virus -1 infection. Journal of Neuroimmune Pharmacology. 2012, 7(3):619-28.
30. Lixia Zhao, Yunlong Huang, **Changhai Tian**, Lynn Taylor, Norman Curthoys, Yi Wang, Hamilton Vernon, Jialin Zheng. Interferon-a Regulates Glutaminase 1 Promoter through STAT1 Phosphorylation: Relevance to HIV-1 Associated Neurocognitive Disorders. PLoS One. 2012; 7(3): e32995.
31. Xin Huang, **Changhai Tian**, Miao Liu, Yongxiang wang, Aleksey V Tolmachev, Seema Sharma, Yu Fang, Kai Fu, Jialin Zheng, and Shi-Jian Ding. Quantitative Proteomic Analysis of Mouse Embryonic Fibroblasts and Induced Pluripotent Stem Cells Using 16O/18O labeling. J Proteome Res. 2012 Apr 6; 11(4):2091-102.
32. **Tian, CH** and Zheng, J. Reprogrammed Astrocytes as a Potential Therapy for Neurodegenerative Disorders. Science. 2011 Dec 23; 334 (6063 Suppl): 53-54.
33. **Changhai Tian\***, Yongxiang Wang, Lijun Sun, Kangmu Ma and Jialin Zheng\*. Reprogrammed Mouse Astrocytes Retain a “Memory” of Tissue Origin and Possess More Tendencies for Neuronal Differentiation than Reprogrammed MEFs. Protein Cell. 2011, 2(2):128-40 (\*Co-correspondence author)
34. Huang X, Liu M, Nold MJ, **Tian C**, Fu K, Zheng J, Geromanos SJ, Ding SJ. Software for quantitative proteomic analysis using stable isotope labeling and data independent acquisition. Anal Chem. 2011, 15; 83(18):6971-9.
35. Cui M, Huang Y, **Tian C**, Zhao Y, Zheng J. FOXO3a inhibits TNF-α- and IL-1β-induced astrocyte proliferation: Implication for reactive astrogliosis. Glia, 2011, 59(4):641-54.
36. **Changhai Tian**, L. Charles Murrin and Jialin C. Zheng. Mitochondrial fragmentation is involved in methamphetamine-induced cell death in rat hippocampal neural progenitor cells. PLoS ONE. 2009; 4 (5): e5546.
37. Nathan Erdmann, **Changhai Tian**, Yunlong Huang, Jianxing Zhao, Shelley Herek, Norman Curthoys and Jialin Zheng. In Vitro Glutaminase regulation and mechanisms of glutamate generation in HIV-1 infected macrophage. J Neurochem. 2009,109 (2):551-61.
38. **Changhai Tian**, Nathan Erdmann, Jianxin Zhao, Zhijun Cao, Hui Peng, Takashi Tsukamoto and Jialin Zheng. HIV-infected macrophages mediate neuronal apoptosis through mitochondrial glutaminase. J Neurochem. 2008,105 (3):994-1005.
39. **Changhai Tian,** Ping Gao, Yanhua Zheng, Wen Yue, Xiaohui Wang, Haijing Jin, Quan Chen. Redox status of thioredoxin-1 (TRX1) determines the sensitivity of human liver carcinoma cells (HepG2) to arsenic trioxide-induced cell death. Cell Res. 2008, 18 (4):458-471.
40. Chunlai Nie, **Changhai Tian**, Lixia Zhao, Patrice Xavier Petit, Maryam Mehrpour and Quan Chen. Cysteine 62 of bax is critical for its conformational activation and its pro-apoptotic activity in response to H2O2-induced apoptosis. J Biol Chem. 2008, 283(22):15359-15369.
41. Hui Peng, Nicholas Whitney, Yumei Wu, **Changhai Tian**, Huanyu Dou and Jialin Zheng. HIV-1-Infected and/or Immune-Activated Macropahge-Secreted TNF-α Affects Human Fetal Cortical Neural Progenitor Cell Proliferation and Differentiation. Glia, 2008, 56(8): 903-916.
42. Nicholas P. Whitney, Hui Peng, Nathan B. Erdmann, **Changhai Tian**, Daniel T. Monaghan and Jialin C. Zheng. Activation of calcium-permeable AMPA receptors containing Q/R-unedited GluR2 directs human neural progenitor cells differentiation to neurons. FASEB J. 2008, 22(8): 2888-900.
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44. Zheng Y, Shi Y, **Tian C**, Jiang C, Jin H, Chen J, Almasan A, Tang H, Chen Q. Essential Role of the Voltage-dependent Anion Channel (VDAC) in Mitochondrial Permeability Transition Pore Opening and Cytochrome C Release Induced by Arsenic Trioxide. Oncogene. 2004, 23 (6): 1239-47.
45. Gaoling Ouyang, Qifu Li, **Changhai Tian**. Progress in studies on marine antitumor bioactive substances and their antitumor mechanisms. MARINE SCIENCES, 2003, 27 (7): 21-24.
46. **Changhai Tian**, Qifu Li and Shuigen Hong. Progress in studies on anti-gene therapy of tumors. Foreign Medical Sciences (Cancer Section), 2001, 28 (4): 274-276.

**Complete PubMed Bibliography:**

<https://www.ncbi.nlm.nih.gov/sites/myncbi/1vSUDiCc-Z55V/collections/59278799/public/>

**Chapters in books:**

* 1. **Tian, CH**, Chen, L and Hu, GK (2025, 2nd edition). Chapter 22: Chromatin isolation by RNA purification (ChIRP) and its applications, Editor(s): Trygve Tollefsbol, In Translational Epigenetics, Epigenetics Methods, Academic Press, Volume 19, Pages 507-521, ISSN 25425358, ISBN 9780128194140, https://doi.org/10.1016/B978-0-12-819414-0.00025-2.
  2. **Tian, CH** and HU, GK (2020). Chapter 25: Chromatin isolation by RNA purification (ChIRP) and its applications, Editor(s): Trygve Tollefsbol, In Translational Epigenetics, Epigenetics Methods, Academic Press, Volume 19, Pages 507-521, ISSN 25425358, ISBN 9780128194140, https://doi.org/10.1016/B978-0-12-819414-0.00025-2.
  3. **Tian, CH** and Hu. GK (2020). Long Noncoding RNAs in Substance Use Disorders. The Chemical Biology of Long Noncoding RNAs. (**Editors:** Stefan Jurga and Jan Barciszewski. Springer International Publishing, pages: 465-490. ISBN 978-3-030-44743-4; DOI: 10.1007/978-3-030-44743-4\_18.
  4. **Tian, CH\*** and Jialin Zheng (2014). Section 2: Isolation of mitochondria from brain tissues and cultured cells. Current Laboratory Methods in Neuroscience Research. (Editors: Huangui Xiong and Howard E. Gendelman, Springer; DOI 10.1007/978-1-4614-8794-4; Springer New York Heidelberg Dordrecht London) (\*Correspondence author).

**Patents:**

US Patent App. 17/578,059. “Methods and Compositions for Selective Generation of Dopaminergic Precursors”. Inventors: Jialin Zhengand **Changhai Tian**. Issued July 07, 2022

**Teaching and mentoring Activities**

2010-2014 Lecturer, Induced pluripotent stem cells (iPSCs) and Cell therapy (PEN/PAMM 930), UNMC, Omaha, NE

2014 Lecturer, Stem cells and Neural stem cells (PEN/PAMM 930), UNMC, Omaha, NE

2011 Supervisor of Michael E Price (summer student of The Laboratory of Neuroimmunology and Regenerative Therapy at the Department of Pharmacology & Experimental Neuroscience)

2010-2014 Supervisor of Yongxiang Wang (Ph.D. student), thesis title “The Application of Cell Reprogramming in Parkinson's Disease” defensed on Aug 1st, 2014

2013-2014 Supervisor of Dapeng Chen (Visiting Ph.D. student from Department of Nephrology, Chinese PLA Nephrology of Institute & Key Lab, Chinese PLA General Hospital, Fuxing Road 28, Beijing, 100853 Medical College, NanKai University, Tianjin, People’s Republic of China)

2017-2018 Supervisor of Andi zhang (Summer student from University of Nebraska at Omaha and awarded by a summer fellowship from the American Physiological Society).

2018 Supervisor of Sulagna Sensarma (Summer student from University of Minnesota).

2021 (Fall) TOX680: Molecular Toxicology and Carcinogenesis, Department of Toxicology and Cancer Biology, University of Kentucky, December 10, 2021.

2022 (Spring) Supervisor of Tristin M. Miller (Rotation student from Department of Toxicology and Cancer Biology, University of Kentucky).

2022 (Spring) Supervisor of Fatemeh Seilani (Rotation student from Department of Toxicology and Cancer Biology, University of Kentucky).

2002 Supervisor of Xiao Chen (Lab technician starting in the department of Toxicology and Cancer Biology from Feb 23, 2022, University of Kentucky.

2022 (Summer) Supervisor of Maria Rose Edwin (Rotation student from Department of Toxicology and Cancer Biology, University of Kentucky.

2022 (Fall) Supervisor of Tristin M. Miller (Rotation student from Department of Toxicology and Cancer Biology, University of Kentucky).

2022 (Fall) TOX680: Molecular Toxicology and Carcinogenesis, Department of Toxicology and Cancer Biology, University of Kentucky, December 07, 2022.

2023 (Spring) Supervisor of Tristin M. Miller (1st and 3rd Rotation student from Department of Toxicology and Cancer Biology, University of Kentucky).

2023 (Spring) Supervisor of Elham Zokaei (Rotation student from Department of Toxicology and Cancer Biology, University of Kentucky).

2023 (Summer) Supervisor of Jessica Ziegler (a rising senior at Xavier University in Cincinnati with a 3.97 GPA majoring in Chemistry with minors in Biomedical Sciences and English).

2023 Supervisor of Hammou Oubrahim (Research Associate starting in the department of Toxicology and Cancer Biology from July 1st, 2023, University of Kentucky.

2023 (Fall) TOX 663: DRUG METABOLISM AND DISPOSITION (Blood toxicity I), Department of Toxicology and Cancer Biology, University of Kentucky, September 05, 2023.

2023 (Fall) TOX 663: DRUG METABOLISM AND DISPOSITION (Blood toxicity II), Department of Toxicology and Cancer Biology, University of Kentucky, September 07, 2023.

2023 (Fall) IBS 602: Molecular Biology & Genetics (RNA Processing I), Department of Toxicology and Cancer Biology, University of Kentucky, September 18, 2023.

2023 (Fall) IBS 602: Molecular Biology & Genetics (RNA Processing II), Department of Toxicology and Cancer Biology, University of Kentucky, September 20, 2023.

2023 (Fall) IBS 602: Molecular Biology & Genetics (Small RNA processing and clinical applications), Department of Toxicology and Cancer Biology, University of Kentucky, September 22, 2023.

2023 (Fall) IBS 602: Molecular Biology & Genetics (RNA Methods or RNAi technology and applications), Department of Toxicology and Cancer Biology, University of Kentucky, November 10, 2023.

2023 (Fall) TOX 680: Molecular Toxicology and Carcinogenesis (Cardiovascular Toxicity I & II), Department of Toxicology and Cancer Biology, University of Kentucky, November 28, 2021.

2023 (Fall) TOX 680: Molecular Toxicology and Carcinogenesis (Cardiovascular Toxicity III), Department of Toxicology and Cancer Biology, University of Kentucky, December 07, 2021.

2023 Supervisor of Guogen Mao (Scientist II in the department of Toxicology and Cancer Biology starting from September 15, 2023, University of Kentucky).

2023 Mentor of Qiangxuan Li (1st year Ph.D. student from Department of Toxicology and Cancer Biology starting from Oct 21, 2023, University of Kentucky).

2024 Supervisor of Ramzi H. Hamdalla (M.S. Research Analyst in the Department of Toxicology & Cancer Biology starting from Aug 21, 2024, University of Kentucky).

2024 (Fall) TOX 663: DRUG METABOLISM AND DISPOSITION (Blood toxicity I), Department of Toxicology and Cancer Biology, University of Kentucky, September 10, 2024.

2024 (Fall) TOX 663: DRUG METABOLISM AND DISPOSITION (Blood toxicity II), Department of Toxicology and Cancer Biology, University of Kentucky, September 12, 2024.

2024 (Fall) IBS 602: Molecular Biology & Genetics (RNA Processing I), Department of Toxicology and Cancer Biology, University of Kentucky, September 18, 2024.

2024 (Fall) IBS 602: Molecular Biology & Genetics (RNA Processing II), Department of Toxicology and Cancer Biology, University of Kentucky, September 23, 2024.

2024 (Fall) IBS 602: Molecular Biology & Genetics (Small RNA processing and clinical applications), Department of Toxicology and Cancer Biology, University of Kentucky, September 27, 2024.

2024 (Fall) IBS 602: Molecular Biology & Genetics (RNA Methods or RNAi technology and applications), Department of Toxicology and Cancer Biology, University of Kentucky, November 13, 2024.

2024 (Fall) TOX 680: Molecular Toxicology and Carcinogenesis (Cardiovascular Toxicity I & II), Department of Toxicology and Cancer Biology, University of Kentucky, November 23, 2024.

2024 (Fall) TOX 680: Molecular Toxicology and Carcinogenesis (Cardiovascular Toxicity III), Department of Toxicology and Cancer Biology, University of Kentucky, November 25, 2024.

2025 Supervisor of Vibha Bhaskar (Summer student from Wake Forest University – STAMPS Foundation Scholar, GPA 3.84 majoring in Biology (BS) with minor in Statistics.

**Community Service/Outreach**

**Service to College & Department:**

1. 2011-2015 Proctor, M2/P2 Pharmacology Mini Quiz, University of Nebraska Medical Center, Omaha, NE.
2. 2016 Judge of scientific posters, Nebraska Physiological Society 19th Annual Meeting, October 15, 2016, Omaha, NE
3. 2017 Judge of scientific posters, Nebraska Physiological Society 20th Annual Meeting, October 28, 2017, Omaha, NE
4. 2018 Judge of scientific posters, Nebraska Physiological Society 21st Annual Meeting, October 20, 2018, Omaha, NE
5. 2021 Judge of student scientific posters, DTCB Annual Retreat at University of Kentucky, August 20, 2021.
6. 2022 Ad hoc interviewer for IBS Graduate Program, University of Kentucky, Feb 11 & 25, 2022.
7. 2022 Ad hoc interviewer for DTCB graduate program, University of Kentucky, Feb 18 & March 11, 2022.
8. 2022 Judge for the 13th Annual COM Trainee Poster Session, University of Kentucky, April 27, 2022.
9. 2022 Judge for the 12th Annual Barnstable Brown Diabetes and Obesity Research Day, University of Kentucky, August 25, 2022.
10. 2023 Ad hoc interviewer for IBS Graduate Program, University of Kentucky, March 03, 2023.
11. 2023 Judge for the 14th Annual Trainee Research Day, Gatton Student Center Grand Ballrooms. April 10, 2023,
12. 2023 Judge for the 13th Markey Cancer Center Research Day. May 12, 2023.
13. 2023 Judge for poster session of the DTCB Retreat, September 30, 2023.
14. 2023 Member of the DTCB Retreat organization committee and the Award and Fellowship Committee. September 30, 2023.
15. 2023-2024 Serve as DTCB Ph.D. Admission Committee
16. 2024 Ad hoc interviewer for IBS Graduate Program, University of Kentucky, Jan 12, 2024.
17. 2024 Judge for the 14th annual Markey Cancer Center Research Day (MCCRD). May 10, 2024.
18. 2025 Ad hoc interviewer for IBS Graduate Program, University of Kentucky, January 17, 2025.
19. 2025 Judge for the 16th Annual COM Trainee Research Day (postdoc poster session), University of Kentucky, March 24, 2025.
20. 2025 Judge for the 15th Annual Markey Cancer Center Research Day, University of Kentucky, May 13, 2025.

**Service to University, UK HealthCare and Community:**

1. 2022 University of Kentucky Markey Cancer Center Cancer Center Support Grant Pilot Program review committee (Meeting date: June 2, 2022).
2. 2023 University of Kentucky Markey Cancer Center Cancer Center Support Grant Pilot Program review committee, April 12th, 2023.

**Service to Profession (Regional/National):**

1. American Heart Association (AHA) Transformational Project Award Population Sciences Committee, Feb 15, 2022.
2. American Heart Association (AHA) Transformational Projects Award Brain Sciences Peer Review Committee Meeting May 12, 2022.
3. Conference Abstract Reviewer for 29th Annual Conference of the Society for Redox Biology and Medicine (SfRBM), September 19 - October 3, 2022
4. American Heart Association (AHA) Regenerative Cell Biology - 2023 Fellowship Basic Science 5 Committee, November 15, 2022.
5. Serve as a judge for 2022 annual SfRBM's Young Investigator Award Committee, November 16-19, 2022.
6. The AHA Innovative Project Award (IPA) Basic Sciences #1 LOI review committee, December 12, 2022.
7. The AHA Innovative Project Award (IPA) Basic Sciences #1 committee, May 11th, 2023.
8. The AHA Transformational Brain Committee, April 15th to May 15th, 2023
9. Serve as an Ad hoc reviewer of AHA Basic Cell RCB Committee (2024 Fellowship Basic Science 5), November 20, 2023.
10. Serve as an Ad hoc reviewer of AHA 2024 IPA Basic Sciences 1 LOI (2024.IPA.LOI.BS), January 17, 2024.
11. Serve as an Ad hoc reviewer of 2024 Second Century Early Faculty Independence Award (SCEFIA) review Committee, February 27, 2024.
12. Serve as an Ad hoc reviewer of 2024 ORAU Ralph E Powe Junior Faculty Enhancement Awards. February 29, 2024.
13. Serve as Chair of one of APS Summit 2024 - CNS Symposium, held in in Long Beach, California, April 4-7, 2024.
14. Serve as an Ad hoc reviewer of 2024 Transformational Projects Award Brain Sciences Peer Review Committee, May 03, 2024.
15. Serve as a Conference Abstract Reviewer for the Society for Redox Biology and Medicine (SfRBM) held November 20-23, 2024, in Savannah, Georgia. September 27, 2024.
16. Serve as an Ad hoc reviewer of NIH ZRG1 EMS-Y 58 R, RFA Panel: Understanding Chronic Conditions Understudied Among Women--Special Emphasis Panel (SEP), and attend the review meeting, held virtually on October 30-31, 2024.
17. Serve as an Ad hoc reviewer of the UKRI (United Kingdom Research and Innovation) opportunity, October 24, 2024.
18. American Heart Association (AHA) Regenerative Cell Biology - 2024 Fellowship Basic Science 5 Committee, November 21, 2024.
19. Serve as an Ad hoc reviewer of 2025 Transformational Projects (TPA) Award Brain Sciences Peer Review Committee, May 8, 2025.

**Editorship and editorial boards:**

Editorial Board member, *Journal of Pharmaceutical Interventions*  2021-present

Editorial Board member, American Journal of Biomedical Science & Research 2021-present

Associate Editor, Frontiers in Cell Signaling- Cell Signaling in Stress Responses 2023-present

Serve as a member of the Volunteer Reviewer Board for Antioxidants,  
Cells, International Journal of Molecular Sciences. 2023-present

Serve as a member of the Editorial Board of *EVCNA* 2024-present

**Peer reviewer for the scientific journals:**

*Journal of Nanotechnology; Biomedicine & Pharmacotherapy; Extracellular Vesicles; Journal of Biochemical and Molecular Toxicology; Cardiovascular Diagnosis and Therapy; Cell Biology & Toxicology; Frontiers in Genetics; Free Radic Biol Med; BMC Neuroscience; iScience; Advanced Science; Advanced Healthcare Materials; Biosafety and Health; eBioMedicine; Trends in Endocrinology and Metabolism; Experimental Physiology; American Journal of Physiology - Heart and Circulatory Physiology; Journal of Physiology; Physiology; Theranostics; Biomaterials; Redox Biology; Heart Failure Review; Journal of Neuroimmune Pharmacology; Journal of Inflammation Research; Acta Physiologica; European Journal of Neuroscience; Journal of Neurochemistry; Oxidative Medicine and Cellular Longevity; PLOS one; Stem Cells and Development; Current Molecular Medicine; Current Molecular Chemistry; Molecular Medicine; Laboratory Investigation; Neuroscience Bulletin; Brain Research; Cellular and Molecular Neurobiology; Cell Transplantation; Bioscience Reports; Neurobiology of Disease; Neurotoxicity Research, Experimental Cell Research; International Immunopharmacology; Chemistry Research Chinese University; Neural Regeneration Research; CNS Neuroscience & Therapeutics; Innate Immunity; The Open Neurology Journal; Metabolic Brain Disease; Biomed Research International; Chinese Journal of Tissue Engineering Research; Artificial Cells, Blood Substitutes, and Biotechnology; Evidence-based Complementary Alternative Medicine*

**Professional Development**

**Training class/Workshops:**

* 1. UKCOM Mentor training Curriculum for new faculty, June 03 to July 22, 2021.
  2. UK College of Medicine New Faculty Orientation Session, August 13, 2021.
  3. The DLAR Investigator Orientation scheduled on September 14th, 2021
  4. The College of Medicine’s Office of Faculty & Professional Development session on Promotion & Tenure Dossier Preparation, Presenter: Dr. Lisa Tannock, Senior Associate Dean, Faculty Affairs & Faculty Development, September 29, 2021.
  5. AHA Transformational Project Award Peer Reviewer Training. February 16, 2022
  6. Junior Faculty Town Hall with Dr. Tannock and Dr. Dutch. Wed 5/18/2022
  7. AHA Peer Reviewer Training Sessions, August 30, 2022
  8. OBE Career and Professional Development Series workshop: Science communication skills with Katie Everson, PhD. October 11th, 2022
  9. Responsible Conduct of Research (RCR) In-Person Training session, held at MN263 on December 19, 2022.
  10. The mandatory Safety Web-based training (WBTs). May 31, 2023 (myUK Learning online)
  11. The 2nd Annual Force-Based Manipulation Investigator Meeting by National Center for Complementary and Integrative Health (NCCIH), June 29, 2023 (Virtual attendance).
  12. The webinar for Handling manuscripts and the review process - Frontiers Editors. December 06, 2023.
  13. A webinar “Liposomal Nanoparticle-based Drug Delivery to Overcome Fibrinolytic Resistance In Vitro”. Jan 23, 2024, Dr. Dante Disharoon (Case Western Reserve University).
  14. ISEV Workshop "Large Extracellular Vesicles" in-person workshop held at The Ohio State University’s Blackwell Inn and Conference Center, Columbus, Ohio (USA) from March 4-5, 2024.
  15. Responsible Conduct of Research (RCR) In-Person Training/Discussion Session, held at Gatton Student Center, December 5, 2024.
  16. 2025 Bugher Foundation Collaborative Symposium (Mentor/Mentee (1:1) panel serving as Mentor), Los Angeles, California, USA, February 4, 2025.
  17. 2025 IBS Course Directors and Teachers Meeting with IBS External Review Committee, March 11, 2025.

**Conference/Symposium:**

* 1. University of Kentucky Grill Heart & Vascular Institute Cardiovascular Research Day, September 10, 2021
  2. Engineering Extracellular Vesicles for Heart, Lung, Blood and Sleep (HLBS) Diseases, September 16-17, 2021.
  3. 11th Annual Barnstable Brown Diabetes and Research “Series” Day, Virtual Seminar Series, November 2021
  4. International Society for Extracellular Vesicles “Inaugural Virtual Symposium on Urinary Extracellular Vesicles”, February 15-16, 2022
  5. Society for Redox Biology and Medicine (SfRBM) Redox Biology Virtual, Feb 23, 2022.
  6. REDOX BIOLOGY VIRTUAL SEMINAR (SfRBM Virtual Seminar): Ion Channels and Mitochondria: A Nexus to Unveil Cancer Vulnerability. (Speaker: Saverio Gentile, PhD University of Illinois at Chicago), Wednesday, April 20, 2022.
  7. 2022 Experimental Biology (International conference, American Physiological Society (APS)), 2022, April 2-5, Philadelphia, PA).
  8. 2022 12th Annual Barnstable Brown Diabetes and Obesity Research Day, University of Kentucky, August 25, 2022.
  9. 2022, the Society for Redox Biology and Medicine's 29th Annual Conference, November 16-19, 2022, Orlando, Florida, USA.
  10. 2023, The International Society for Extracellular Vesicles (ISEV) Annual meeting, May 17-21, 2023, Seattle, Washington, USA.
  11. REDOX BIOLOGY VIRTUAL SEMINAR (SfRBM Virtual Seminar) “Mitochondrial Calcium Transport: A Central Regulatory Node in Energy Metabolism”. (Speaker: Alicia Kowaltowski, PhD, University of São Paulo, Brazil). April 19, 2023
  12. REDOX BIOLOGY VIRTUAL SEMINAR (SfRBM Virtual Seminar) “Antioxidant and Redox Signaling Adaptations During Tumor Metastasis”. Speaker: Nadine Hempel, PhD University of Pittsburgh, May 17, 2023
  13. REDOX BIOLOGY VIRTUAL SEMINAR (SfRBM Virtual Seminar) “Understanding Environmental Chemical Effects on Mitochondrial Bioenergetics in Cell Models of Neurodegeneration”. Speaker: Christopher Martyniuk, PhD., University of Florida. September 20, 2023.
  14. The Genitourinary Systems EVs (GUSEV) Inaugural Seminar held by the International Society for Extracellular Vesicles. September 21, 2023
  15. REDOX BIOLOGY VIRTUAL SEMINAR (SfRBM Virtual Seminar) “Metabolism, Cellular Decisions and the Language That Unites Them” Speaker: Jared Rutter, PhD., University of Utah. October 18, 2023
  16. REDOX BIOLOGY VIRTUAL SEMINAR (SfRBM Virtual Seminar) “Mitochondria as Signaling Organelles”. Speaker: Navdeep Chandel, PhD. Northwestern University, January 22, 2024.
  17. American Physiology Society 2024 Summit held in Long Beach, California (USA) from on April 4–7, 2024.
  18. REDOX BIOLOGY VIRTUAL SEMINAR (SfRBM Virtual Seminar) “Mapping Mitochondrial ROS Dynamics with Optogenetics” Speaker: Andrew Wojtovich, PhD. University of Rochester, Monday, May 22, 2024.
  19. 2025 Bugher Foundation Collaborative Symposium (AHA Awardee invited), Los Angeles, California, USA, February 2-4, 2025.
  20. International Stroke Conference 2025, February 5-7, 2025, Los Angeles, California, USA