

BIOGRAPHICAL SKETCH



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1. Education:

- 1991-1992 Post-doc in Animal Science, University of Hawaii, USA
- 1985-1990 PhD in Animal Physiology & Biochemistry, Nanjing Agricultural University, Nanjing, China
- 1979-1983 BS in Biochemistry, Nanjing University, Nanjing, China

2. Professional Experience:

- 2012- Professor, Dept of Food Nutrition Dietetics & Health, Kansas State Univ
- 2006-2012 Associate Professor, Dept of Human Nutrition, Kansas State Univ
- 2002-2006 Assistant Professor, Department of Human Nutrition, Kansas State University
- 1998-2002 Associate Scientist, Dept of Food Sciences & Human Nutrition, Iowa State Univ
- 1997-1998 Assistant Scientist, Dept of Food Sciences & Human Nutrition, Iowa State Univ
- 1992-1997 Junior Researcher, Cancer Research Center of Hawaii, Univ of Hawaii

3. Honors & Awards:

- 2023-2028 Member of NIH Literature Selection Technical Review Committee
- 2018 Professorial Performance Award, Provost Office of Kansas State University
- 2016-2017 Panel Manager of USDA-NIFA Grant Review
- 2016-2018 Chair of the American Society for Nutrition's Diet and Cancer Section
- 2015-2019 US Working Group on Codex General Principles of Food Hygiene, FDA Office of Food Safety
- 2013-2014 Faculty Senator, Kansas State University
- 2009 Dawley-Scholar Award for Faculty Excellence in Student Development, College of Human Ecology, Kansas State University.
- 2006-2009 Faculty Senator, Kansas State University
- 2005 Faculty Research Excellence Award, College of Human Ecology, Kansas State Univ.
- 1994 Mead Johnson Award for Outstanding Achievement in the Field of Biomedical Research, John A. Burns School of Medicine, University of Hawaii

4. Grant Review:

- 2022** Czech Science Foundation
- 2021** USDA-NIFA Grant Review Panel
- 2020** Polish National Science Center
- 2019** NIH-NCI's SEP-2 for Provocative Questions
- 2014-2018** USDA-NIFA Grant Review Panel
- 2015** Oklahoma Agricultural Experiment Station
- 2015** University of Missouri Research Board
- 2011-2012** NIH-NCI Provocative Questions Initiative Study Section

2011 Pilot Projects-Puerto Rico Clinical and Translational Research Consortium
2009 Oncology-2 OTC of NIH Recovery Act Grants
2009 USDA Agriculture and Food Research Initiative Panel
2006-2009 NIH-NCI Chemo/Dietary Prevention Study Section
2007 NIH Arthritis, Connective Tissue and Skin Sciences
2007 NIH Member Conflict for Arthritis, Connective Tissue and Skin Sciences
2007 NIH Small Business for Arthritis, Connective Tissue and Skin Sciences
2007 NIH Special Emphasis Panel
2006 Commonwealth of Virginia Jeffress Research Grant
2005-2007 Canadian Agricultural Research Funding Consortium
2004 United Kingdom's National Cancer Research Institute
2004 NIH Skin and Rheumatology Study Section
2003 USDA-ARS Program Review Panel

5. Peer-reviewed Journal Articles:

- Kaori Kobayashi, Xiaohui Wang, **Weiqun Wang***. Genetically modified rice is associated with hunger, health, and climate resilience. *Foods* 2023; 12(14):2776. <http://doi.org/10.3390/foods12142776>
- Shan Xu, Guangyan Qi, Timothy P. Durrett, Yonghui Li, Xuming Liu, Jianfa Bai, Ming-Shun Chen, Xiuzhi Susan Sun, **Weiqun Wang***. High nutritional quality of human induced pluripotent stem cells-generated proteins through advanced scalable peptide hydrogel 3D suspension system. *Foods* 2023; 12(14):2713. <http://doi.org/10.3390/foods12142713>
- Fei Zhou, Yuwen Liu, Jie Ren, **Weiqun Wang**, Cen Wu. Springer: An R Package for bi-level variable selection of high-dimensional longitudinal data. *Frontiers in Genetics* 2023; 14:1088223. <http://doi:10.3389/fgene.2023.1088223>
- Kelly M Gude, Eleni D Pliakoni, Channa B Rajashekar, **Weiqun Wang**, Kanwal Ayub, Qing Kang, Cary L Rivard. Effects of Various High Tunnel Coverings on Color and Phenolic Compounds of Red and Green Leaf Lettuce (*Lactuca Sativa*). *J Food Nutr Health* 2022; 3(1):116; <https://doi.org/10.47275/2692-5222-116>
- Jiejia Zhang, Jason Griffin, Yonghui Li, Donghai Wang, **Weiqun Wang**. Antioxidant Properties of Hemp Proteins: From Functional Food to Phytotherapy and Beyond. *Molecules* 2022, 27(22), 7924; <https://doi.org/10.3390/molecules27227924>
- Laddomada B, **Wang W**. Multiple approaches to improve the quality of cereal-based foods. *Foods* 2022, 11:1849; <https://doi.org/10.3390/foods11131849>
- Wenfei Tian, Yiqin Zhang, **Weiqun Wang**, Donghai Wang, Michael Tilley, Guorong Zhang, Zhonghu He, Yonghui Li. A comprehensive review of wheat phytochemicals: from farm to fork and beyond. *Comprehensive Reviews in Food Science and Food Safety*. 2022, 21:2274-308; <http://doi.org/10.1111/1531-4337.12960>
- Fei Zhou, Jie Ren, Yuwen Liu, Xiaoxi Li, **Weiqun Wang**, Cen Wu. Interep: an R package for high-dimensional interaction analysis of the repeated measurement data. *Genes* 2022; 13(544) <http://doi.org/10.3390/genes13030544>
- Ruijia Hu, Jingwen Xu, Guangyan Qi, **Weiqun Wang**, Xiuzhi Sun, Yonghui Li. Antioxidative hydrolysates from corn gluten meal may effectively reduce lipid oxidation and inhibit HepG2 cancer cell growth. *Journal of Agriculture and Food Research* 2022; 7(3):100252 (<https://doi.org/10.1016/j.jafr.2021.100252>)
- Myungjin Lee, Cary L. Rivard, **Weiqun Wang**, Eleni Pliakoni, Kelly Gude, Channa Rajashekar. Spectral Blocking of Solar Radiation in High Tunnels by Poly Covers: Its Impact on Nutritional

Quality Regarding Essential Nutrients and Health-promoting Phytochemicals in Lettuce and Tomato. *Horticulturae* 2021; 7(12):524 (<https://doi.org/10.3390/horticulturae7120524>)

- Jingwen Xu, Weiqun Wang, Yong Zhao. Phenolic compounds in whole grain sorghum and their health benefits. *Foods* 2021; 10:1921 (<https://doi.org/10.3390/foods10081921>)
- Wenfei Tian, Ruijia Hu, Gengjun Chen, Yiqin Zhang, Weiqun Wang, Yonghui Li. Potential bioaccessibility of phenolic acids in whole wheat products during in vitro gastrointestinal digestion and probiotic fermentation. *Food Chemistry* 2021; 362:130135.
- Xi Chen, Jiamin Shen, Jingwen Xu, Thomas Herald, Dmitriy Smolensky, Ramasamy Perumal, Weiqun Wang. Sorghum phenolic compounds are associated with cell growth inhibition through cell cycle arrest and apoptosis in human hepatocarcinoma and colorectal adenocarcinoma cells. *Foods* 2021; 10(5):993 (<https://doi.org/10.3390/foods10050993>)
- Jingwen Xu, Guangyan Qi, Weiqun Wang, Xiuzhi Sun. Advances in 3D Peptide Hydrogel Models in Cancer Research. *Science of Food*. 2021; 5:14 (<https://doi.org/10/1038/s41538-021-00096-1>)
- Jingwen Xu, Yonghui Li, Yong Zhao, Donghai Wang, Weiqun Wang. Influence of Antioxidant Dietary Fiber on Dough Products and Bread Qualities: A Review. *Journal of Functional Foods*. 2021; 80:104434.
- Youjie Xu, Jikai Zhao, Ruijia Hu, Weiqun Wang, Jason Griffin, Yonghui Li, Xiuzhi Sun, Donghai Wang. Effect of genotype on the physicochemical, nutritional, and antioxidant properties of hempseed. *Journal of Agriculture and Food Research*. 2021; 3:100119.
- Myungjin Lee, Cary Rivard, Eleni Pliakoni, Weiqun Wang, C.B. Rajashekar. Supplemental UV-A and UV-B Affect the Nutritional Quality of Lettuce and Tomato: Health-promoting Phytochemicals and Essential Nutrients. *American Journal of Plant Sciences*. 2021; 12:104-26.
- Lei Wu, Peiran Lu, Xin Guo, Kun Song, Yi Lyu, James Bothwell, Jinglong Wu, Olivia Hawkins, Stephen L. Clarke, Edralin A. Lucas, Brenda J. Smith, Winyoo Chowanadisai, Steve D. Hartson, Jerry Ritchey, Weiqun Wang, Denis Medeiros, Shitao Li, Dingbo Lin. 2021. β -carotene oxygenase 2 deficiency-triggered mitochondrial oxidative stress promotes low-grade inflammation and metabolic dysfunction. *Free Radical Biology Medicine*. 2021; 164:271-84.
- Lei Wu, Xin Guo, Siau Yen Wong, Peiran Lu, Steven D. Hartson, Denis M. Medeiros, Weiqun Wang, Stephen L. Clarke, Edralin A. Lucas, Brenda J. Smith, Winyoo Chowanadisai, Dingbi Lin. Deficiency of b-carotene oxygenase 2 induces mitochondrial fragmentation and activates the STING-IRF3 pathway in the mouse hypothalamus. *Journal of Nutritional Biochemistry*. 2021; 88:108542
- Xu Y, Li J, Zhao J, Wang W, Griffin J, Li Y, Bean S, Tilley M, Wang D. Hempseed as A Nutritious and Healthy Food Source: A Review. *International Journal of Food Science and Technology*. 2021; 56:530-43.
- Kelly Gude, Channa B. Rajashekar, Brianna Cunningham, Qing Kang, Weiqun Wang, Myungjin Lee, Cary Rivard, Eleni Pliakoni. Effect of high tunnel coverings on antioxidants of breaker and light red tomatoes at harvest and during ripening. *Agronomy*. 2020; 10:1639.
- Zhao J, Xu Y, Wang W, Griffin J, Wang D. Bioethanol conversion of liquid hot water, acid and alkali pretreated industrial hemp biomass: Physicochemical and morphological properties, delignification, sugar recoveries, enzymatic hydrolysis, and bioethanol fermentation. *Bioresource Technology*. 2020; 309:123383.
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- Zhao J, Xu Y, Wang W, Griffin J, Wang D. High ethanol concentration (77 g/L) of industrial hemp biomass achieved through optimizing the relationship between ethanol yield/concentration and solid loading. *ACS Omega*. 2020; (DOI: 10.1021/acsomega.0c03135).
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6. Editorial & Book Chapters:

- Functional Cereal Foods for Health Benefits: genetic and/or Processing Strategies to Enhance the Quali-Quantitative Composition of Biactive Compounds. (Editors Laddomada B and **Wang W.**) MDPI, 2022; Basel.
- Laddomada B, **Wang W.** Multiple approaches to improve the quality of cereal-based foods. *Foods* 2022; 11:1849. doi.org/10.3390/foods11131849
- Zhao J, **Wang W.**, Li Y, Sun X, Wang D. Nutritional and chemical composition of industrial hemp seeds. *Industrial Hemp: Food and Nutraceutical Applications* (Editor Milica Pojic and Brijesh Tiwari) Elsevier Academic Press, 2022; pp 73-93. doi.org/10.1016/B978-0-323-90910-5.00013-0.

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7. Synergistic Activities:

Grant Support: A total of 29 research grants, amounting to over \$4.4 million, have been successfully funded. These grants include prestigious awards as principal investigator such as NIH R01, NIH R15, NIH-COBRE, NIH-INBRE, USDA-NIFA, USDA Cooperative Projects, and American Heart Association Award, etc.

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