

BIOGRAPHICAL SKETCH



Weiqun (George) Wang, Ph.D.

Professor and Director of Graduate Program
Department of Food Nutrition Dietetics & Health
Kansas State University

Phone: (785)532-5508; Email: wwang@ksu.edu

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:

- 2018 Professorial Performance Award, Provost Office of Kansas State University
- 2016-2017 Panel Manager of USDA-NIFA Grant Review Panel
- 2016-2018 Chair of the American Society for Nutrition's Diet and Cancer Section
- 2015-2019 US Working Group on the 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:

- 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. Selected Peer-reviewed Publications:

- 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 Chohanadisai, 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 Chohanadisai, 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.
- Carter T, Qi G, Wang W, Nguyen A, Cheng N, Yong Min JY, Lee SJ, Yoo J, Atala A, Sun X. Self-Assembling Peptide Solution Accelerates Hemostasis. *Advances in Wound Care*. 2020; (DOI: 10.1089/wound.2019.1109).
- Xu J, Zhang Y, Wang W, Li Y. Advanced Properties of Gluten-Free Cookies, Cakes, and Crackers: A Review. *Trends in Food Science & Technology*. 2020; 103:200-213.
- Zhao J, Xu Y, Wang W, Griffin J, Roozeboom K, Wang D. Bioconversion of industrial hemp biomass for bioethanol production: A review. *Fuel*. 2020; 281:118725.
- 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).
- Lee M, Xu J, Wang W, Rajashekar CB. The effect of supplemental blue, red and far-red light on the growth and the nutritional quality of red and green leaf lettuce. *American Journal of Plant Sciences*. 2019; 10:2219-2235.
- Zhou F, Ren J, Li G, Jiang Y, Li X, Wang W, Wu C. Penalized variable selection for lipid-environment interactions in the longitudinal lipidomics study. *Genes*. 2019; 10:1002.
- Xu J, Jia Z, Tao Fei, Shen J, Xu J, Griffin J, Wang W*. Characterization of anthocyanins in sweet potato leaves grown in various stages and conditions. *European Journal of Nutrition & Food Safety*. 2019; 10(4):253-262.
- Xu J, Qi G, Sui C, Wang W*, Sun X. 3D h9e peptide hydrogel: an advanced three-dimensional cell culture system for anticancer prescreening of chemopreventive phenolic agents. *Toxicology in Vitro*. 2019; 61(7):104599.
- Su X, Griffin J, Xu J, Ouyang P, Zhao Z, Wang W*. Identification and quantification of anthocyanins in purple-fleshed sweet potato leaves. *Heliyon*. 2019; 5(6):e01964.
- Xu J, Smith S, Smith G, Wang W, Li Y. Glyphosate contamination in grains and foods: an overview. *Food Control*. 2019; 106:106710.
- Xu S, Shen Y, Xu J, Qi G, Chen G, Wang W, Sun X, Li Y. Antioxidant and anticancer effects in human hepatocarcinoma (HepG2) cells of papain-hydrolyzed sorghum kafirin hydrolysates. *Journal of Functional Foods*. 2019; 58:374-382.
- Cox S, Noronha L, Herald T, Bean S, Lee SH, Perumal R, Wang W, Smolensky D. Evaluation of

ethanol-based extraction conditions of sorghum bran bioactive compounds with downstream anti-proliferative properties in human cancer cells. *Heliyon*. 2019; 5(5):e01589.

- Xu J, Su X, Li Y, Sun X, Wang D, Wang W*. Response of bioactive phytochemicals in vegetables and fruits to environmental factors. *European Journal of Nutrition & Food Safety*. 2019; 9(3):233-247.
- Woolley A, Sumpter S, Lee M, Xu J, Barry S, Wang W, Rajashekar CB. Nutritional quality: mineral nutrients and phytochemicals in lettuce and tomato grown in high tunnel. *American Journal of Plant Sciences*. 2019; 10:125-38.
- Xu J, Wang W, Li Y. Dough properties, bread quality, and associated interactions with added phenolic compounds: A review. *Journal of Functional Foods*. 2019; 52:629-39.
- Wu L, Guo X, Lyu Y, Clarke S, Lucas E, Smith B, Hildebrand D, Wang W, Medeiros D, Shen X, Lin D. Targeted Metabolomics Reveals Abnormal Hepatic Energy Metabolism by Depletion of β -Carotene Oxygenase 2 in Mice. *Scientific Reports* 2017; 7:14624.
- Su X, Rhodes D, Xu J, Chen X, Davis H, Wang D, Herald TJ, Wang W*. Phenotypic Diversity of Anthocyanins in Sorghum Accessions with Various Pericarp Pigments. *Journal of Nutrition & Food Sciences* 2017; 7(4):1000610.
- Shen Y, Su X, Rhodes D, Herald T, Xu J, Chen X, Smith JS, Wang W*. The pigments of sorghum pericarp are associated with the contents of carotenoids and pro-vitamin A. *International Journal of Food & Nutritional Sciences* 2017; 6(3):48-56.
- Guo X, Wu L, Lyu Y, Chowanadisai W, Clarke SL, Lucas EA, Smith BJ, He H, Wang W, Medeiros DM, Lin D. Ablation of β, β -carotene -9', 10'-oxygenase 2 remodels the hypothalamic metabolome to stimulate feeding behavior in mice. *Journal of Nutritional Biochemistry* 2017; 46:74-82.
- Chen X, Du X, Shen J, Lu L, Wang W*. Effect of Various Dietary Fats on Fatty Acid Profile in Duck Liver: Efficient Conversion of Short-chain to Long-chain Omega-3 Fatty Acids. *Experimental Biology & Medicine* 2017; 242(1):80-7.
- Wu L, Guo X, Hartson S, Davis A, He H, Medeiros DM, Wang W, Clarke SL, Lucas EA, Smith BJ, von Lintig J, Lin D. Lack of β, β -carotene -9', 10'-oxygenase leads to hepatic mitochondrial dysfunction and cellular oxidative stress in mice. *Molecular Nutrition and Food Research* 2017; 61(50):1600576.
- Du X, Liu Y, Lu L, Wang W, Zeng T, Tian Y, Xu X, Shen J, Niu D, Lu Y. Effects of Dietary Fats on Egg Quality and Lipid Parameters in Serum and Yolks of Shan Partridge Duck. *Poultry Science* 2017; 96:1184-90.
- Yu M, King BS, Ewert E, Su X, Mardiyati N, Zhao Z, Wang W*. Exercise activates p53 and negatively regulates IGF-1 pathway in epidermis within a skin cancer model. *PloS One* 2016; 11(8):e0160939.
- He J, Wang W, Lu L, Tian Y, Niu D, Ren J, Dong L, Sun S, Zhao Y, Chen L, Shen J, Li X. Analysis of miRNAs and their target genes associated with lipid metabolism in duck liver. *Scientific Reports* 2016; 6:27418.
- Wu L, Guo X, Wang W, Medeiros DM, Clarke SL, Lucas EA, Smith BJ, Lin D. Molecular aspects of β, β -carotene-9', 10'-oxygenase 2 in carotenoid metabolism and diseases. *Experimental Biology & Medicine* 2016; 241(11):1879-87.
- Guo X, Wu L, Wang W, Medeiros DM, Clarke S, Lucas E, Smith B, Chowanadisai W, Lin D. Hypothalamic mitochondria in energy homeostasis and obesity. *Integrative Molecular Medicine*. 2016; 3(2):590-9.

- Su X, Xu J, Rhodes D, Shen Y, Song W, Katz B, Tomich J, Wang W*. Identification and quantification of anthocyanins in transgenic purple tomato. *Food Chemistry* 2016; 202:184-8.
- Xue Y, Harris ED, Wang W, Baybutt R. Vitamin A depletion induced by cigarette smoke is associated with an increase in lung cancer-related markers in rats. *Journal of Biomedical Science* 2015; 22:84.
- Chen L, Vadlani P, Madl R, Wang W, Shi YC, William R. The investigation of virginiamycin-added fungal fermentation on the size and immunoreactivity of heat-sensitive soy protein. *International Journal of Polymer Science* 2015; 682596.
- Xu J, Su X, Lim S, Griffin J, Carey E, Katz B, Tomich J, Smith JS, Wang W*. Characterization and stability of anthocyanins in purple-fleshed sweet potato P40. *Food Chemistry* 2015; 186(11):90-6.
- King BS, Lu L, Yu M, Jiang Y, Standard J, Su X, Zhao Z, Wang W*. Lipidomics profiling of di- and tri-acylglycerol species in weight-controlled mice. *PLoS One* 2015; 10(2):e0116398.
- Standard J, Jiang Y, Yu M, Su X, Zhao Z, Xu J, Chen J, King B, Lu L, Tomich J, Baybutt B, Wang W*. Reduced signaling of PI3K-Akt and RAS-MAPK pathways are the key targets for weight loss-induced cancer prevention by dietary restriction and/or physical activity. *Journal of Nutritional Biochemistry* 2014; 25(12):1317-23.
- King B, Jiang Y, Su X, Xu J, Xie L, Standard J, Wang W*. Weight control, endocrine hormones and cancer prevention. *Experimental Biology and Medicine* 2013; 238(5):502-8.
- Lim S, Xu J, Kim, J, Chen TY, Su X, Standard J, Carey E, Griffin J, Herndon B, Katz B, Tomich J, Wang W*. Role of anthocyanin-enriched purple-fleshed Sweetpotato P40 in colorectal cancer prevention. *Molecular Nutrition and Food Research* 2013; 57(11):1908-17.
- Xie L, Wang W*. Weight control and cancer prevention: role of IGF1-mediated signaling pathways. *Experimental Biology and Medicine* 2013; 238(2):127-32.
- Jiang Y, Ma H, Su X, Chen J, Xu J, Standard J, Lin D, Wang W*. IGF-1 mediates exercise-induced phospholipid alteration in the murine skin tissues. *Journal of Nutrition and Food Science* 2012; S2-003.
- Xue Y, Edward P, Meadors EP, Wang W, Baybutt BC. Customized Microarray Analysis Identifies Cancer-Related Genes Suppressed by Dietary Retinoic Acid in the Lungs of Cigarette Smoke-Treated Rats. *Journal of Nutrition and Food Science* 2012; S2-005.
- Jiang Y, Zhang Y, Wark L, Ortiz E, Lim S, He H, Wang W, Medeiros D, Lin D. Wolfberry water soluble phytochemicals down-regulate ER stress biomarkers and modulate multiple signaling pathways leading to inhibition of proliferation and induction of apoptosis in Jurkat cells. *Journal of Nutrition and Food Science* 2011; S2-001.
- Ayella A, Lim S, Jiang Y, Iwamoto T, Lin D, Tomich J, Wang W*. Cytostatic inhibition of cancer cell growth by lignan secoisolariciresinol diglucoside. *Nutrition Research* 2010; 30(11):762-9.
- Ouyang P, Yu J, Doan HM, Xie L, Vasquez D, Welti R, Su X, Lu N, Herndon B, Yang SS, Jeannotte R, Wang W*. Effects of exercise on phospholipid profile in the skin of mice. *Cancer Prevention Research* 2010; 3(4):466-77.
- Przybyszewski J, Wang W, Au A, Perry C, Guetzko M, Koehler K, Birt DF. Dietary energy restriction, in part through glucocorticoid hormones, mediates the impact of 12-O-tetradecanoylphorbol-13-acetate on jun D and fra-1 in senear mouse epidermis. *Molecular Carcinogenesis* 2010; 49(6):592-602.

- Baybutt RC, Smith BW, Donskaya EV, Hu L, Li T, Wang W. The Proliferative effects of retinoic acid on primary cultures of adult rat type II pneumocytes depend upon cell density. *In Vitro Cellular & Developmental Biology* 2010; 46(1):20-7.
- Zhao X, Nechols JR, Williams KA, Wang W, Carey EE. Comparison of phenolics in organically and conventionally grown Pac Choi (*Brassica rapa* L. Chinensis group). *Journal of the Science of Food and Agriculture* 2009; 89(6):940-6.
- Jiang Y, Wang W*. Potential mechanisms of cancer prevention by weight control. *Biophysical Reviews and Letters* 2008; 3(3):421-37.
- Xie L, Jiang Y, Ouyang P, Chen J, Doan H, Herndon B, Sylvester JE, Zhang K, Molteni A, Reichle M, Zhang R, Haub MD, Baybutt RC, Wang W*. Effects of dietary calorie restriction or exercise on the PI3K and Ras signaling pathways in the skin of mice. *Journal of Biological Chemistry* 2007; 282(38):28025-35.
- Ayella AK, Trick HN, Wang W*. Enhanced lignan biosynthesis by over-expressing pinoresinol lariciresinol reductase in transgenic wheat. *Molecular Nutrition and Food Research* 2007; 51(12):1518-26.
- Lu J, Xie L, Sylvester JE, Wang J, Bai J, Baybutt RC, Wang W*. Different gene expression of skin tissues between mice with weight controlled by either calorie restriction or physical exercise. *Experimental Biology and Medicine* 2007; 232(4):473-80.
- Zhao X, Young JE, Wang W, Iwamoto T, Carey EE. Influences of organic fertilization, high tunnel environment, and postharvest storage on phenolic compounds in lettuce. *HortScience* 2007; 42(1):71-6.
- Au A, Li B, Wang W, Roy H, Koehler K, Birt D. The effect of dietary apigenin on colonic ornithine decarboxylase activity, aberrant crypt foci formation and tumorigenesis in different experimental models. *Nutrition and Cancer* 2006; 54:243-51.
- Zhao X, Carey EE, Wang W, Rajashekar CB. Does organic production enhance phytochemical content of vegetables and fruits? current knowledge and prospects for research. *HortTechnology* 2006; 16:449-56.
- Wang J, Wang W*. New 2-D graphical representation of DNA sequences. *Biophysical Reviews and Letters* 2006; 1:133-40.
- Young JE, Zhao X, Carey T, Welti R, Yang SS, Wang W*. Phytochemical phenolics in organically grown vegetables. *Molecular Nutrition and Food Research* 2005; 49:1136-42.
- Xue Y, Williams TL, Li T, Umbehr J, Fang L, Wang W, Baybutt RC. Type II pneumocytes modulate surfactant production in response to cigarette smoke constituents: restoration by vitamins A and E. *Toxicology in Vitro* 2005; 19:1061-9.
- Stewart JW, Koehler K, Jackson W, Hawley J, Wang W, Au A, Myers R, Birt DF. Prevention of mouse skin tumor promotion by dietary energy restriction requires an intact adrenal gland and glucocorticoid supplementation restores inhibition. *Carcinogenesis* 2005; 26:1077-84.
- Qu H, Madl RL, Takemoto DJ, Baybutt R, Wang W*. Phytochemical lignans associated with the cancer prevention by wheat bran. *Journal of Nutrition* 2005; 135:598-602.
- Wang W, VanAlstyne PC, Irons KA, Chen S, Stewart JW, Birt DF. Individual and interactive effect of apigenin analogues on G2/M cell cycle arrest in human colon carcinoma celllines. *Nutrition and Cancer* 2004; 48: 106-14.
- Birt DF, Przybyszewski J, Wang W, Stewart J, Liu Y. Identification of molecular targets for dietary energy restriction prevention of skin carcinogenesis: an idea cultivated by Edward

Bresnick. *Journal of Cellular Biochemistry* 2004; 91:258-64.

- Liu Y, Wang W, Hawley J, Birt DF. Adrenalectomy abrogates reduction of TPA-induced ERK activity in the epidermis of dietary energy restricted SENCAR mice: implications of glucocorticoid hormone. *Cancer Epidemiology Biomarkers & Prevention* 2002; 11:299-304.
- Birt DF, Hendrich S, Wang W. Dietary agents in cancer prevention: flavonoids and isoflavonoids. *Pharmacology & Therapeutics* 2001; 90:157-77.
- Przybyszewski J, Yaktine AL, Duysen E, Blackwood D, Wang W, Au A, Birt DF. Inhibition of phorbol ester-induced AP-1:DNA binding, c-jun protein and c-jun mRNA by dietary energy restriction is reversed by adrenalectomy in SENCAR mouse epidermis. *Carcinogenesis* 2001; 22:1421-7.
- Birt DF, Duysen E, Wang W, Yaktine AL. Corticosterone supplementation reduced selective protein kinase C isoform expression in the epidermis of adrenalectomized mice. *Cancer Epidemiology Biomarkers & Prevention* 2001; 10:679-85.
- Liu Y, Duysen E, Yaktine AL, Au A, Wang W, Birt DF. Dietary energy restriction inhibits ERK but not JNK or p38 activity in the epidermis of SENCAR mice. *Carcinogenesis* 2001; 22:607-12.
- Wang W, Heideman L, Chung C, Pelling JC, Koehler KJ, Lepley D, Birt DF. Cell cycle arrest at G2/M and growth inhibition by apigenin in human colon carcinoma cell lines. *Molecular Carcinogenesis* 2000; 28:102-10.
- Wang W*, Higuchi CM. Soy protein is associated with reduced intestinal mucosal polyamine concentration in male Wistar rats. *Journal of Nutrition* 2000; 130:1815-20.
- Wang W*, Goodman MT. Antioxidant properties of dietary phenolic agents in a human LDL-oxidation ex vivo model: interaction of protein binding activity. *Nutrition Research* 1999; 19:191-202.
- Wang W*, Liu LQ, Higuchi CM, Chen H. Induction of NADPH:quinone reductase by dietary phytoestrogens in human colonic Colo205 cells. *Biochemical Pharmacology* 1998; 56:189-95.
- Franke AA, Custer LJ, Wang W, Chen YS. HPLC analysis of isoflavonoids and other phenolic agents from foods and from human fluids. *Proceedings of the Society for Experimental Biology and Medicine*. 1998; 217:263-73.
- Wang W*. Radioimmunoassay determination of formononetin in murine plasma and mammary glandular tissue. *Proceedings of the Society for Experimental Biology and Medicine* 1998; 217:281-7.
- Wang W*, Higuchi CM, Zhang R. Individual and combinatory effects of soy isoflavonoids on the *in vitro* potentiation of lymphocyte activation. *Nutrition and Cancer* 1997; 29:29-34.
- Zhang R, Li Y, Wang W*. Enhancement of immune function in mice fed high doses of soy daidzein. *Nutrition and Cancer* 1997; 29:24-8.
- Wang W*, Liu LQ, Higuchi CM. Mucosal polyamine measurements and colorectal cancer risk. *Journal of Cellular Biochemistry* 1996; 63:252-7.
- Wang W*, Kucuk O, Franke AA, Liu LQ, Custer LJ, Higuchi CM. Reproducibility of erythrocyte polyamine measurements and correlation with plasma micronutrient levels in an antioxidant vitamin intervention study. *Journal of Cellular Biochemistry* 1996; 62:19-26.
- Wang W*, Tanaka Y, Han Z, Higuchi CM. Proliferative response of mammary glandular tissue to formononetin. *Nutrition and Cancer* 1995; 23:131-40.

- Wang W*, Higuchi CM. Induction of NAD(P)H:quinone reductase by vitamins A, E and C in Colo205 colon cancer cells. *Cancer Letters* 1995; 98:63-9.
- Higuchi CM, Wang W. Comodulation of cellular polyamines and proliferation: biomarker application to colorectal mucosa. *Journal of Cellular Biochemistry* 1995; 57:256-61.
- Wang W*, Tanaka Y, Han Z, Cheng J. Radioimmunoassay for quantitative analysis of formononetin in blood plasma and rumen fluid of wethers fed red clover. *Journal of Agricultural and Food Chemistry* 1994; 42:1584-7.

Book Chapters:

- Cox S, Wang W, Lee SH, Smolensky D. Understanding the nutritional and nutraceutical properties of sorghum. *Improving the Nutritional and Nutraceutical Properties of Wheat and Other Cereals* (Editor Trust Beta) Burleigh Dodds Science Publishing, 2021; pp 293-318. dx.doi.org/10.19103/AS.2021.0087.
- Xu J, Wang W. Fiber-associated wheat lignans and colorectal cancer prevention. In: *Improving the Nutritional and Nutraceutical Properties of Wheat and Other Cereals* (Editor Trust Beta) Burleigh Dodds Science Publishing, 2021; pp 115-136. dx.doi.org/10.19103/AS.2021.0087.
- Xu J, Li Y, Wang W. Corn. In: *Bioactive Factors and Processing Technology for Cereal Foods* (Editors Wang J, Sun B, and Cao R) Springer Nature Singapore Pte Ltd., 2019; p 33-52.
- Davis H, Su X, Shen Y, Xu J, Wang D, Smith JS, Aramouni F, Wang W*. Phenotypic diversity of colored phytochemicals in sorghum accessions with various pericarp pigments. In: *Polyphenols in Plants* (Editor Ronald Ross Watson) 2nd Edition. Academic Press, 2019; p 123-31.
- Y Jiang, Wang W*. Potential Mechanisms of Cancer Prevention by Weight Control. In: *Research on the Physics of Cancer, A Global Perspective* (Editor Bernard S. Gerstman). World Scientific. 2016; p 191-207.
- Chen L, Madl R, Vadlani PV, Li L, Wang W. Value-added Products from Soybean: Removal of Anti-nutritional Factors via Bioprocessing. In: *Soybean-A Review/Book 2*. In Tech Open Access Publisher, 2013; p 161-79.
- Ayella AK, Wang W*. Lignan Biosynthesis Enhancement in Transgenic Wheat. In: *Agriculture Research and Technology* (ed. Bundgaard K and Jsaksen L). Nova Science Publishers, Inc., Hauppauge, NY, 2010; p 441-50.
- Wang W*, Ayella A, Jiang Y, Ouyang P, Qu H. Wheat lignans: promising cancer preventive agents. In: *Wheat Antioxidants* (Ed. Liu L). John Wiley & Sons, Ltd., Hoboken, New Jersey, 2008; p 264-72.
- Birt DF, Wang W, Pavia N, Au A, Chung C, Schmitt L, Jiang Y. Cancer prevention by phytochemicals: modulation of cell cycle. In: *Phytochemicals: Mechanisms of Action* (Ed. Meskin MS, Bidlack WR, Davies AJ, Lewis DS, Randolph RK). CRC Press, Washington, D.C., 2004; p 61-77.

6. Synergistic Activities:

Grant Support: Total 28 research grants have been funded, including NIH-NCI R01, NIH-NCI R15, NIH-COBRE, NIH-INBRE, USDA-NIFA, USDA Cooperative Projects, and American Heart Association Award, etc.

Editorial Board Service: *Molecular Nutrition and Food Research*
Experimental Biology and Medicine
Nutrition Research and Practice
Biophysical Reviews and Letters

Direction of Postdoctoral Fellows & Visiting Scholars:	13
Direction of PhD and MS Students as Major Professor:	52
Direction of PhD Students as Committee Chair:	27
Direction of Graduate Students as Committee Member:	53
Presentations in National or International Conferences:	77
Invited Seminars:	85