BIOGRAPHICAL SKETCH

Dr. Weiqun (George) Wang
Associate Professor, Department of Human Nutrition
209 Justin Hall, Kansas State University
Manhattan, KS 66506-4901
Phone: (785)532-0153; Fax: (785)532-3132; Email:
wwang@ksu.edu

1. Professional Preparation:

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

2. Appointments:

Associate Professor, 2006-Present, Department of Human Nutrition, Kansas State University
Assistant Professor, 2002-2006, Department of Human Nutrition, Kansas State University
Associate Scientist, 1998-2002, Department of Food Sciences & Human Nutrition, Iowa State University
Assistant Scientist II, 1997-1998, Department of Food Sciences & Human Nutrition, Iowa State University
Junior Researcher, 1992-1997, Cancer Research Center of Hawaii, University of Hawaii
Lecturer, 1990-1991, Department of Biology, Nanjing University, Nanjing, China
Research Associate, 1983-1985, Institute of Biological Vaccines, Shanghai, China

3. Honors:

2009 Dawley-Scholar Award for Faculty Excellence in Student Development, College of Human Ecology, Kansas State University.
2005 Faculty Research Excellence Award, College of Human Ecology, Kansas State University.
1996 Symposium Speaker, 2nd International Symposium on the Role of Soy in Preventing and Treating Chronic Disease. September 15-18, Brussels, Belgium.
1995 Symposium Speaker, 3rd International Conference on Phytoestrogens. December 3-6, Little Rock, Arkansas.
1994 Mead Johnson Award for Outstanding Achievement in the Field of Biomedical Research, John A. Burns School of Medicine, University of Hawaii
1994 Traineeship for Histopathobiology of Neoplasia, American Association for Cancer Research

4. Refereed Publications:

Ayella A, Lim S, Jiang Y, Iwamoto T, Lin D, Tomich J, **Wang W.** Cytostatic inhibition of cancer cell growth by lignan secoisolariciresinol diglycoside. *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 sencar 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.

Yu J, **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.

Young JE, **Wang W**. Phytochemical farming: a new age in food, nutrition, and agriculture. *European Journal of Nutraceuticals & Functional Foods* 2004; 16:38-9.

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, Przybyszweski 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 Cance*r 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:

Ayella AK, **Wang W**. Lignan Biosynthesis Enhancement in Transgenic Wheat. In: Agericulture Research and Technology (eds. Bundgaard K and Isaksen L). Nova Science Publishers, Inc., Hauppauge, NY, 2010; p441-50.

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; Pages 61-77.

5. Synergistic Activities

Teaching:	HN820-Functional Foods for Chronic Disease Prevention HN812-Advanced Micronutrient Metabolism (team teaching) HN620-Nutrient Metabolism	
Grant Support:	Total 13 research grants have been funded, including NIH R01, NIH-COBRE P20, NIH-INBRE P20, USDA Cooperative Projects, and American Heart Association Award, etc.	
Grant Reviewer:	NIH, USDA, Canadian Agricultural Research Funding Institute, and United Kingdom's National Cancer Research Institute, etc.	
Editorial Board:	Associate Editor:	*Biophysical Reviews and Letter*

Editorial Board Member: *Molecular Nutrition and Food Research*
Experimental Biology and Medicine
Nutrition Research and Practice
Journal of Nutrition & Food Sciences

6. Direction of Graduate Students as a Major Professor:

Linglin Xie, MS student in Human Nutrition (2002-2004)
Hongyan Qu, MS student in Food Science (2002-2004)
Janice Young, MS student in Food Science (2003-2004)
Jia Lu, MS student in Human Nutrition (2004-2005)
Allan Ayella, PhD student in Human Nutrition (2004-2007)
Jie Chen, MS student in Human Nutrition (2006-2007)
Ping Ouyang, PhD student in Human Nutrition (2003-2007)
Yu Jiang, PhD student in Human Nutrition (2006-2008)
Amit Sood, MS student in Distance Food Science (2008-2009)
Jie Chen, PhD student in Human Nutrition (2008-2009)
Seojin Choi, PhD Student in Human Nutrition (2006-Present)
Soyoung Lim, PhD student in Human Nutrition (2007-present)
Tzu-Yu Chen. MS Student in Human Nutrition (2010-Present)
Nicholas Honigschmidt, MS student in Distance Food Science (2010-Present)

7. Direction of Graduate Students as a Committee Chair or Member:

Xiulian Chen, PhD student in Human Nutrition (2000-2003)
Yuan Xue, MS student in Human Nutrition (2001-2003)
Weiqi Li, PhD student in Biochemistry (2001-2004)
Sara Reppert, MS student in Human Nutrition (2003-2005)
Shane Kasten, PhD student in Biochemistry (2001-2005)
Vinita Chauhan, PhD student in Diagnostic Medicine (2003-2005)
Yuan Xue, PhD student in Human Nutrition (2003-2006)
Xin Zhao, PhD Student in Horticulture (2002-2006)
Brian Thompson, PhD student in Pathobiology (2002-2007)
Enas Al-Tamimi, PhD student in Human Nutrition (2003-2007)
Myung-Min Oh, PhD Student in Horticulture (2006-2008)
Linglin Xie, PhD Student in Biology (2004-2008)
Maria Nagy, PhD Student in Biochemistry (2003-2008)
Joseph Atkins, Ph.D. Student in Chemistry (2006-2009)
Rommel Sulabo, PhD Student in Animal Science (2007-2009)
Brad James, Ph.D. student in Animal Science (2007-2009)
Kanithaporn Puangsombat, Ph.D. student in Food Science (2009-2010)
Daniel Linden, Ph.D. student in Animal Science (2008-Present)
Lauren Brewer, Ph.D. student in Grain Science (2009-Present)
Ellen Cyphers, MS student in Food Science Distance Education Program (2010-Present)
Liyan Chen, Ph.D. student in Grain Science (2010-Present)
Jin Han, MS student in Human Nutrition (2010-Present)
Amit Kumar, Ph.D. student in Biology (2011-Present)