

# CURRICULUM VITAE

Liangli (Lucy) Yu

Notarization. I have read the following and certify that this curriculum vitae is a current and accurate statement of my professional record.

Signature\_  \_Date\_\_\_\_\_ February 6, 2012\_\_

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## 1. Personal Information

Name: Liangli Lucy Yu

Department: Nutrition and Food Science

Professional address: 3303 Marie Mount Hall, College Park, MD 20742

Current Rank: Professor and Chair (Acting), Director for the Graduate Program in Nutrition, Food Science/Chemistry and Biochemistry of Nutraceuticals and Foods

Appointment to Current Rank: August 2009 (University of Maryland)

Type of appointment:

Teaching: 50%

Research: 50%

Extension: 0%

Educational Background:

<u>Degree</u>	<u>Year</u>	<u>Institution</u>
B.S.	1984	China Pharmaceutical University, Pharmaceutical Chemistry
M.S.	1989	China Pharmaceutical University, Organic and Medicinal Chemistry Research area: cAMP-PDE inhibitor design, synthesis, and enzyme kinetics
Ph.D	1999	Purdue University, Food Science/Food Chemistry Research area: lipid chemistry and conjugated linoleic acids

## Employment Background:

- Nov 2009-  
Professor & Chair (Acting), Department of Nutrition and Food Science, and Director for the Graduate program in Nutrition , University of Maryland, College Park, MD 20742;  
  
Affiliate Faculty, Department of Food Science and Human Nutrition, Colorado State University, Fort Collins, CO 80523-1571  
  
Research Area: food chemistry and enzymology, nutraceuticals & functional foods, food safety, natural shelf-life enhancers; Food Nanotechnology
- Aug 2009-Nov 2009  
Professor  
Department of Nutrition and Food Science, University of Maryland, College Park, MD 20742;  
  
Affiliate Faculty, Department of Food Science and Human Nutrition, Colorado State University, Fort Collins, CO 80523-1571  
  
Research Area: food chemistry and enzymology, nutraceuticals & functional foods, food safety, natural shelf-life enhancers; Food Nanotechnology
- Aug 2007-2009  
Director for the Graduate Nutrition Program  
Department of Nutrition and Food Science, University of Maryland, College Park, MD 20742;
- 2005-2009  
Associate Professor, Department of Nutrition and Food Science, University of Maryland, College Park, MD 20742;  
  
Affiliate Faculty, Department of Food Science and Human Nutrition, Colorado State University, Fort Collins, CO 80523-1571  
  
Research Area: food chemistry and enzymology, nutraceuticals & functional foods, food safety, natural shelf-life enhancers, food nanotechnology
- 2003 - 2005  
Assistant Professor, Department of Nutrition and Food Science, University of Maryland, College Park, MD 20742;  
  
Affiliate Faculty, Department of Food Science and Human Nutrition, Colorado State University, Fort Collins, CO 80523-1571  
  
Research Area: food chemistry and enzymology, nutraceuticals & functional foods/value-added utilization of edible materials, food analysis
- 1999 - 2003  
Assistant Professor, Department of Food Science and Human Nutrition, Colorado State University, Fort Collins, CO 80523  
Research Area: food chemistry and enzymology, nutraceuticals & functional foods/value-added utilization of

	edible materials, food analysis
1999 - 1999	Post-doctoral research Associate, Department of Biochemistry, Biophysics, and Molecular Biology, Iowa State University, Ames, IA 50010 <u>Research Area:</u> carbohydrate chemistry & enzymology
1999 - present	Consultant, Kellogg's Company, Battle Creek, MI
1996 - 1999	Graduate Research Associate, Department of Food Science, Purdue University, West Lafayette, IN 47907 <u>Research Area:</u> lipid chemistry and conjugated linoleic acids
1998 - 1998	Intern, Department of Functional Foods, R & D Center, Kellogg's Company, Battle Creek, MI <u>Research Area:</u> dietary fibers and functional foods
1994 - 1996	Visiting Scientist, Center for New Crops and Plant Products, Purdue University, West Lafayette, IN 47907 <u>Research Area:</u> bioactive phytochemicals and food volatiles
1994 - 1994	Research Assistant, Department of Biochemistry, Biophysics, and Molecular Biology, Iowa State University, Ames, IA 50010 <u>Research Area:</u> enzyme kinetics and bioactive botanicals
1993 - 1994	Chief Scientist and Director of R & D Center, Dong Yang Zhi Hua Cosmetic Company Limited, Nantong, Jiangsu, P. R. China <u>Research Area:</u> functional cosmetics and QC/QA
1993	Vice Chief Scientist, and Director of R & D Center, Nantong Jissic Cosmetic Company Limited, Nantong, Jiangsu, P. R. China
1984 - 1993	Faculty, Department of Organic Chemistry, China Pharmaceutical University, Nanjing, Jiangsu, P. R. China <u>Research Area:</u> synthetic organic chemistry, cAMP-PDE inhibitors as anti-aging agents, and medicinal herbs

## 2. Research, Scholarly, and Creative Activities

### a. Books.

#### i. *Books edited*

1. Ni, P., Wang, L. and **Yu, L.** (ed.) 1993. ORGANIC CHEMISTRY; China Medicinal Publisher, Beijing, P. R. China.
2. **Yu, L.** (ed) 2008. WHEAT ANTIOXIDANTS; John Wiley & Sons, Inc. Hoboken, NJ 07030, USA.
3. **Yu, L.**, Cao, R., Shahidi, F. (ed) 2012. Cereals and Pulses: Nutraceutical Properties and Health Benefits; Wiley-Blackwell, Inc. Oxford, OX4 2DQ

ii. *Chapters in books*

1. **Yu, L.** 1993. Carboxylic acids and functional derivatives of carboxylic acids (chapter 10); in Ni, P., Wang, L. and Yu, L. (ed.) **ORGANIC CHEMISTRY**; China Medicinal Publisher, Beijing.
2. **Yu, L.** 1993. Substituted carboxylic acids (chapter 11); in Ni, P., Wang, L. and Yu, L. (ed.) **ORGANIC CHEMISTRY**; China Medicinal Publisher, Beijing.
3. **Yu, L.** 1993. Molecular orbital (chapter 16); in Ni, P., Wang, L. and Yu, L. (ed.) **ORGANIC CHEMISTRY**; China Medicinal Publisher, Beijing.
4. Watkins, B. A., Devitt, A. A., **Yu, L.**, and Latour, M. A. 1999. Biological activities of conjugated linoleic acids and designer eggs in Sim, J. S. (ed.) **EGG NUTRITION AND NEWLY EMERGING OVO-TECHNOLOGIES**, CAB International.
5. **Yu, L.**, Parry, J., Zhou, K. 2005. Oils from fruit, spice, and herb seeds. In Shahidi, F. (ed) **BAILEY'S INDUSTRIAL OIL & FAT PRODUCTS**, 6<sup>th</sup> Edition, Volume 3, pp 233-258, John Wiley & Sons, Inc., Hoboken, NJ.
6. Yin, J.-J., Yu, L., Yurawecz, M. P., Roach, J., **Yu, L.**, Kramer, J. K. G. 2006. Antioxidant activity of conjugated linoleic acid determined by ESR. In Yurawecz, MP, Kramer, JKG, Gudmundsen, O, Pariza, MW, Banni S. (ed) **ADVANCES IN CONJUGATED LINOLEIC ACID RESEARCH**, Volume 3, pp 183-200, AOCS Press, Champaign, Illinois.
7. **Yu, L.**, Parry, J., Zhou, K. 2006. Fruit seed oils. In Shahidi, F. (ed) **NUTRACEUTICAL AND SPECIALTY LIPIDS AND THEIR CO-PRODUCTS**, pp 73-90, Taylor & Francis Group, New York, NY.
8. Moore, J., **Yu, L.** 2008. Method for antioxidant capacity estimation of wheat and wheat-based food products. In Yu, L. (ed) **WHEAT ANTIOXIDANTS**, pp118-172, John Wiley & Sons, Inc. Hoboken, NJ 07030, USA
9. Moore, J., **Yu, L.** 2008. Effects of extraction method and conditions on wheat antioxidant activity estimation. In Yu, L. (ed) **WHEAT ANTIOXIDANTS**, pp100-117, John Wiley & Sons, Inc. Hoboken, NJ 07030, USA
10. **Yu, L.** 2008. Overview and Prospective. In Yu, L. (ed) **WHEAT ANTIOXIDANTS**, pp1-6, John Wiley & Sons, Inc. Hoboken, NJ 07030, USA.
11. **Yu, L.** and Slavin, M. 2008. Nutraceutical Potential of Pine Nut. In Shahidi, F. and Alasalvar, C. (eds) **TREE NUT NUTRACEUTICALS AND PHYTOCHEMICALS**, Taylor & Francis Group, New York, NY.
12. **Yu, L.** and Hao, J. 2009. Parsley, carrot, and onion seed oils. In Moreau, R. and Kamal-Eldin, A. (eds) **GOURMET AND HEALTH-PROMOTING SPECIALTY OILS**, pp479-490. AOCS Press, Champaign, Illinois.

13. Zhou K, Slavin M, Whent M, and **Yu L.** (Anticipated 2012). Biochemical Changes in Raw Foods: Cereals and Legumes. In Eskin and Shahidi (eds) *Biochemistry of Foods*, 3<sup>rd</sup> ed., Elsevier, San Diego, CA.
14. Tsao, R., **Yu, L.**, Shahidi, F. 2012. Cereals and Pulses-an overview. In Yu, L., Cao, R., Shahidi, F. (ed). *CEREALS AND PULSES: NUTRACEUTICAL PROPERTIES AND HEALTH BENEFITS*; Wiley-Blackwell, Inc. Oxford, OX4 2DQ.
15. **Yu, L.**, Xie, Z., Liu, W. Nutraceutical and Health properties of psyllium. 2012. In Yu, L., Cao, R., Shahidi, F. (ed). *CEREALS AND PULSES: NUTRACEUTICAL PROPERTIES AND HEALTH BENEFITS*; Wiley-Blackwell, Inc. Oxford, OX4 2DQ.
- 16.

*Articles in conference proceedings*

1. Yin, J.-J., **Yu, L.**, Yurawecz, M. P., Roach, J., Kramer, J. K. G. Dual antioxidation and prooxidation characteristics of conjugated linoleic acids. 2005. In *NATURAL ANTIOXIDANTS AND MICRONUTRIENTS -the Proceeding of 2<sup>nd</sup> SFRR Asia/3<sup>rd</sup> ISNA*, June 24-29, 2005 Shanghai, P. R. China. Pp 91-99, MEDIMOND International Proceedings, Via Maserati 5 Bologna, Italy. (ISBN: 88-7587-184-1)

b. Articles in Refereed Journals

1. **Yu, L.**, Wang, L., Huang, J., Zhu, K., and Zhang, C. 1989. The inhibitory activity of thieno [3,4-d] pyrimidine-2,4-dione derivatives on phosphodiesterase. *Zhonggou Yaoke Daxue Xuebao* 20: 381-3. [CA112: 17174c, 1990; *CA stands for the Chemical Abstracts by the American Chemical Society*]
2. Zhu, K., Zhang, C., Chen, G. and **Yu, L.** 1990. New inhibitors on CaM-dependent cyclic nucleotide phosphodiesterase. *Journal of Xuzhou Medical University* 10: 137-142.
3. Zhang, G., Feng, Z., Wei, Y. and **\*Yu, L.** 1990. Studies of tyrosine protein kinase in human blood. *Journal of Xuzhou Medical University* 10:106-111.
4. Wang, L., **Yu, L.**, Hunag, J., Gen, Q., and Liu, J. 1990. Synthesis of 5-cyanouracil derivatives. *Zhonggou Yaoke Daxue Xuebao*. 1990, 21: 325-8. [CA114: 185345e, 1991]
5. **Yu, L.**, Wang, L., Huang, J. 1990. Synthesis of thieno [3,4-d] pyrimidine-2,4-dione derivatives. *Zhonggou Yaoke Daxue Xuebao* 21:193-7. [CA114: 16414v, 1991]
6. Wang, L., **Yu, L.**, Huang, J., Gen, Q., Liu, J., Dai, D., and Chen, D. 1991. Synthesis of thieno [3,4-d] pyrimidine-2,4-dione derivatives. *Zhonggou Yaoke Daxue Xuebao*. 1991, 22: 142-4. [CA116: 59305v, 1992]
7. Dai, D., Chen, D., Xu, W., Wang, L. **Yu, L.**, and Huang, Z. 1991. Isolation, purification

and inhibition by D13 of rabbit lung & heart 3',5'-cyclic nucleotide phosphodiesterase isoenzymes. *Bulletin of the New Drug Research Foundation* 1: 212-6.

8. Wang, L., Hao, Z., and **Yu, L.**, Huang, J., and Song, L. 1991. Mass spectra of thieno [3,4-d] pyrimidine-2,4 -dione derivatives. *Zhonggou Yaoke Daxue Xuebao*. 22: 321-5. [CA116: 235559s, 1992]
9. Wang, L., **Yu, L.**, Huang, J., Zhou, S., Liu, J., and Jiang, X. 1992. Synthesis of plant growth hormone DCPDA. *Zhonggou Yaoke Daxue Xuebao* 23: 59-60. [CA117: 150629k, 1992]
10. Chen, H., Wang, L., **Yu, L.**, Huang, J., Zhu, Y., Huang, J., Su, L., and Dai, D. 1992. Synthesis and biological activity of 3-aminopropiophenone and 1-phenyl-3-aminopropanol compounds. *Zhonggou Yaoke Daxue Xuebao*. 23: 129-34. [CA117: 233530x, 1992]
11. Wang, L., **Yu, L.**, Shi, X., Huang, J., and Chang, B. 1992. Synthesis of skin UV-protecting agents. *Zhonggou Yaoke Daxue Xuebao* 23: 316-7.
12. **Yu, L** et al. Synthesis of D<sub>13</sub>. 1992. *Bulletin of the New Drug Research Foundation*. 2: 121-3.
13. Robyt, J.E., Kim, D., and **Yu, L.** 1995. Mechanism of dextran activity of dextransucrase. *Carbohydrate Research*. 266 (2): 293-297
14. Hao, Z., Charles, D.J., **Yu, L.**, and Simon, J.E. 1996. Purification and characterization of a phenylalanine ammonia-lyase isoform from methyl cinnamate basil, *Ocimum basilicum* L. *Phytochemistry*. 43: 735-739.
15. **Yu, L.** and Robyt, J.F. 1998. Effects of water soluble constituents of clove on the activities of glucansucrases and the potential for the inhibition of dental plaque formation. *Carbohydrate letters*. 3: 294-8.
16. **Yu, L.** 2001. Free radical scavenging properties of conjugated linoleic acids. *Journal of Agricultural and Food Chemistry*. 49: 3452-3456.
17. Wu, D., **Yu, L.**, Nair, M.G., DeWitt, D.L., and Ramsewak, R.S. 2002. Cyclooxygenase enzyme inhibitory compounds with antioxidant activities from Piper methysticum (kava kava) roots. *Phytomedicine*. 9: 41-47.
18. **Yu, L.**, Scanlin, L., Wilson, J., and Schmidt, G. 2002. Rosemary extracts as inhibitors for lipid oxidation and color change in cooked turkey products. *Journal of Food Science*. 67, 582-585.
19. **Yu, L.**, Haley, S., Perret, J., Harris, M., Wilson, J., and Qian, M. 2002. Free radical scavenging properties of wheat extracts. *Journal of Agricultural and Food Chemistry*. 50: 1619-1624.
20. **Yu, L.**, Haley, S., Perret, J. and Harris, M. 2002. Antioxidant properties of hard winter

- wheat extracts. *Food Chemistry*. 78: 59-63.
21. **Yu, L.**, Perret, J., Davy, B., Wilson, J., and Melby, C. 2002. Antioxidant properties of cereal products. *Journal of Food Science*. 67: 2600-2603.
  22. Mukerjea, R., **Yu, L.**, and Robyt, J. F. 2002. Starch biosynthesis: mechanism for the elongation of starch chains. *Carbohydrate Research*. 337: 1015-1022.
  23. **Yu, L.**, Adams, D., and Gabel, M. 2002. Conjugated linoleic acid isomers differ in their free radical scavenging properties. *Journal of Agricultural and Food Chemistry*. 50: 4135-4140.
  24. **Yu, L.** 2003. Structural modification to improve psyllium functionality. *ACS Symposium Series*. 851: 392-399.
  25. **Yu, L.**, Adams, D., and Watkins, B. A. 2003. Comparison of commercial supplements containing conjugated linoleic acids. *Journal of Food Composition and Analysis*. 16: 419-428.
  26. **Yu, L.**, Perret, J., Parker, T. and Allen, K. 2003. Enzymatic modification to improve the water-absorbing and gelling properties of psyllium. *Food Chemistry*. 82: 243-248.
  27. **Yu, L.** and Perret, J. 2003. Effects of xylanase treatments on gelling and water-uptaking properties of psyllium. *Journal of Agricultural and Food Chemistry*. 51: 492-495.
  28. **Yu, L.** 2003. Inhibitory effects of (S)- and (R)-6-hydroxy-2,5,7,8-tetramethylchroman-2-carboxylic acids on tyrosinase activity. *Journal of Agricultural and Food Chemistry*. 51: 2344-2347.
  29. **Yu, L.** and Perret, J. 2003. Effects of solid-state enzyme treatments on the water-absorbing and gelling properties of psyllium. *Lebensmittel-Wissenschaft und-Technologie*. 36: 203-208.
  30. **Yu, L.**, Perret, J., Harris, M, Wilson, J., and Haley, S. 2003. Antioxidant properties of bran extracts from 'Akron' wheat grown at different locations. *Journal of Agricultural and Food Chemistry*. 51: 1566-1570.
  31. Watkins, B. A., Feng, S., Strom, A. K., DeVitt, A. A., **Yu, L.**, and Li, Y. 2003. Conjugated linoleic acid composition and physical properties of egg yolk and albumen. *Journal of Agricultural and Food Chemistry*. 51, 6870-6876.
  32. Parker, T. D., Adams, D. A., Zhou, K. Harris, M., and **Yu, L.** 2003. Fatty acid composition and oxidative stability of cold-pressed edible oils. *Journal of Food Science*. 68: 1240-1243.
  33. **Yu, L.**, Haley, S., Perret, J., and Harris, M. 2004. Comparison of wheat flours grown at different locations for their antioxidant properties. *Food Chemistry*. 86: 11-16.
  34. Zhou, K., and **Yu, L.** 2004. Antioxidant properties of bran extracts from 'Trego' wheat grown at different locations. *Journal of Agricultural and Food Chemistry*. 52:

1112-1117.

35. **Yu, L.**, and Zhou, K. 2004. Antioxidant properties of bran extracts from 'Platte' wheat grown at different locations. *Food Chemistry*. 90: 311-316.
36. Zhou, K., Laux, J., and **Yu, L.** 2004. Comparison of Swiss red wheat grain and fractions for their antioxidant properties. *Journal of Agricultural and Food Chemistry*. 52: 1118-1123.
37. Parry, J., and **Yu, L.** 2004. Fatty acid content and antioxidant properties of cold-pressed black raspberry seed oil and meal. *Journal of Food Science*. 69: 189-193.
38. Zhou, K., and **Yu, L.** 2004. Effects of extraction solvent on wheat antioxidant activity estimation. *Lebensmittel-Wissenschaft und-Technologie*. 37: 717-721.
39. Allen, G. D. K., Bristow, S. J., and **Yu, L.** 2004. Hypolipidemic effects of modified psyllium preparations. *Journal of Agricultural and Food Chemistry*. 52: 4998-5003.
40. Zhou, K., Su, L., and **Yu, L.** 2004. Phytochemicals and antioxidant properties in wheat bran. *Journal of Agricultural and Food Chemistry*. 52: 6108-6114.
41. Parry, J., Zhou, K., and **Yu, L.** 2005. Radical scavenging properties of cold-pressed edible seed oils. *ACS Symposium Series*. 909: 107-117.
42. Zhou, K., Parry, J., and **Yu, L.** 2005. Determination of phenolic acid composition in wheat bran by HPLC. *ACS Symposium Series*. 909: 10-18.
43. **Yu, L.**, Zhou, K., Parry, J. 2005. Inhibitory effects of wheat bran extracts on human LDL oxidation and free radicals. *Lebensmittel-Wissenschaft und-Technologie*. 38: 463-470.
44. **Yu, L.**, Zhou, K., Parry, J. 2005. Antioxidant properties of cold-pressed black caraway, carrot, cranberry, and hemp seed oils. *Food Chemistry*. 91: 723-729.
45. Parry, J., Su, L., Luther M., Zhou, K., Yurawecz, P., Whittaker, P., and **Yu, L.** 2005. Fatty acid composition and antioxidant properties of cold-pressed marionberry, boysenberry, red raspberry, and blueberry seed oils. *Journal of Agricultural and Food Chemistry*. 53: 566-573.
46. Zhou, K., Yin, J., and **Yu, L.** 2005. Phenolic acid, tocopherol and carotenoid compositions and antioxidant functions of hard red winter wheat bran. *Journal of Agricultural and Food Chemistry*. 53: 3916-3922.
47. Moore, J., Hao, Z., Zhou, K., Luthur, M., Costa, J., and **Yu, L.** 2005. Carotenoid, tocopherol, phenolic acid, and antioxidant properties of Maryland grown soft wheat. *Journal of Agricultural and Food Chemistry*. 53: 6649-6657.
48. Hao, Z., Paker, B., Knapp, M., **Yu, L.** 2005. Simultaneous quantification of  $\alpha$ -tocopherol and four major carotenoids in botanical materials by normal phase liquid chromatography-atmospheric pressure chemical ionization-tandem mass spectrometry. *Journal of Chromatography A*. 1094: 83-90.

49. Zhou, K., Yin, J., and **Yu, L.** 2006. ESR determination of the reactions between wheat phenolic acids and free radicals or transition metals. *Food Chemistry*. 95: 446-457.
50. Zhou, K., Xia, W., Zhang, C., and **Yu, L.** 2006. In vitro binding of bile acids and triglycerides by selected chitosan preparations and their physicochemical properties. *Lebensmittel-Wissenschaft und-Technologie*. 39: 1087-1092.
51. Zhou, K., and **Yu, L.** 2006. Total phenolic contents and antioxidant properties of commonly consumed vegetables grown in Colorado. *Lebensmittel-Wissenschaft und-Technologie*. 39: 1155-1162.
52. Moore, J., Yin, J.-J., **Yu, L.** 2006. Novel fluorometri assay for hydroxyl radical scavenging capacity (HOSC) estimation. *Journal of Agricultural and Food Chemistry*. 54: 617-626.
53. Parry, J., Su, L., Moore, J., Cheng, Z., Luther M., Rao, J. N., Wang, J-Y., **Yu, L.** 2006. Chemical composition, antioxidant capacities, and antiproliferative activities of selected fruit seed flours. *Journal of Agricultural and Food Chemistry*. 54: 3773-3778.
54. Moore, J., Liu, J., Zhou, K., **Yu, L.** 2006. Effects of genotype and environment on the antioxidant properties of hard winter wheat bran. *Journal of Agricultural and Food Chemistry*. 54: 5313-5322.
55. Cheng, Z., Su, L., Moore, J., Zhou, K., Luther, M., Yin, J., **Yu, L.** 2006. Effects of Post-harvesting treatment and heat stress on availability of wheat antioxidants. *Journal of Agricultural and Food Chemistry*. 54: 5623-5629.
56. Yin, J.-J., Kramer, J. K. G., Yurawecz, M. P., Eynard, A. R., Mossoba, M. M., **Yu, L.** 2006. Effects of conjugated linoleic acid (CLA) isomers on oxygen diffusion-concentration products in liposomes and phospholipid solutions. *Journal of Agricultural and Food Chemistry*. 54: 7287-7293.
57. Cheng, Z., Moore, J., **Yu, L.** 2006. A high-throughput relative DPPH radical scavenging capacity (RDSC) assay. *Journal of Agricultural and Food Chemistry*. 54: 7429-7436.
58. Parry, J., Hao, Z., Luther, M., Su, L., Zhou, K., **Yu, L.** 2006. Characterization of cold-pressed onion, parsley, cardamom, mullein, roasted pumpkin, and milk thistle seed oils. *Journal of American Oil Chemists' Society*. 83: 847-854.
59. Zhang, C., Ding, Y., Ping, Q., **Yu, L.** 2006. Novel chitosan-derived nanomaterials and their micelle forming properties. *Journal of Agricultural and Food Chemistry*. 54: 8409-8416.
60. Moore, J., Cheng, Z., Su, L., **Yu, L.** 2006. Effects of solid-state enzymatic treatments on the antioxidant properties of wheat bran. *Journal of Agricultural and Food Chemistry*. 54: 9032-9045.
61. Su, L., Yin, J.-J., Charles, D., Zhou, K., and **Yu, L.** 2007. Total phenolic contents, chelating capacities, and radical scavenging properties of black peppercorn, nutmeg,

- rosehip, cinnamon, and oregano leaf. *Food Chemistry*. 100: 990-997.
62. Liu, X., Ardo, S., Bunning, M., Parry, J., Zhou, K., Stushnoff, C., Stoniker, F., **Yu, L.**, Kendall, P. 2007. Total phenolic content and DPPH radical scavenging activity of lettuce (*Lactuca sativa* L.) grown in Colorado. *LWT-Food Science and Technology*. 40: 552-557. (Corresponding author)
63. Zhang, C., Ding, Y., **Yu, L.**, Ping, Q. 2007. Polymeric micelle system of hydroxycamptothecin based on amphiphilic chitosan derivatives. *Colloid and Surface B*, 55: 192-199.
64. Parry, J., Zhou, K., Luther, M., and **Yu, L.** 2007. Phytochemical compositions and free radical scavenging capacities of selected cold-pressed edible seed oils. *ACS Symposium Series*. 956: 255-267.
65. Yao, Z., Zhang, C., Ping, Q., and **Yu, L.** 2007. A series of novel chitosan derivatives: synthesis, characterization and micellar solubilization of paclitaxel. *Carbohydrate Polymers*. 68: 781-792.
66. Luther, M., Parry, J., Moore, J., Meng, J., Zhang, Y., Cheng, Z., **Yu, L.** 2007. Inhibitory effect of chardonnay grape and black raspberry seed flour extracts on lipid peroxidation in fish oil and their radical scavenging and antimicrobial properties. *Food Chemistry*. 104: 1065-1073.
67. Cheng, Z., Zhou, H., Yin, J., **Yu, L.** 2007. ESR estimation of hydroxyl radical scavenging capacity for lipophilic antioxidants. *Journal of Agricultural and Food Chemistry*. 55: 3325-3333.
68. Cao, Y.-X., Zhang, C., Shen, W.-B., Cheng, Z., **Yu, L.**, Ping, Q.-N. 2007. Poly(N-isopropyl acrylamide)-chitosan as thermosensitive in situ gel-forming system for ocular drug delivery. *Journal of Controlled release*. 120: 186-194.
69. Wang, C. Y., Wang, S. Y., Yin, J.-J., Parry, J., **Yu, L.** 2007. Enhancing antioxidant, antiproliferation, and free radical scavenging activities in strawberries with essential oils. *Journal of Agricultural and Food Chemistry*. 55: 6527-6532.
70. Moore, J., Cheng, Z., Hao, J., Guo, G., Liu, J.-G., Lin, C., Kendall, P., **Yu, L.** 2007. Effects of solid-state yeast treatment on the antioxidant properties, and protein and fiber compositions of hard wheat bran. *Journal of Agricultural and Food Chemistry*. 55: 10173-10182.
71. Pang, X., Chen, Z., Gao, X., Liu, W., Slavin, M., Yao, W., **Yu, L.** 2007. A novel low molecular weight polysaccharide (GLPP) from *Ganoderma lucidum* grown in Anhui and its potential role in tumor treatment and immunostimulation. *Journal of Food Science*. 72(6): S435-442.
72. Parry, J., Cheng, Z., Moore, J., and **Yu, L.** 2008. Fatty acid composition, antioxidant properties, and antiproliferative capacities of selected cold-pressed seed flours. *Journal of American Oil Chemists' Society*. 85: 457-464.

73. **Yu, L.**, Cheng, Z. 2008. Application of electron spin resonance (ESR) in nutraceutical and food research. *Molecular Nutrition & Food Research*. 52: 62-78. (Invited review article)
74. Zhang, C., Cheng, Y., Qu, G., Wu, X. L., Ding, Y., Cheng, Z., **Yu, L.**, Ping, Q. N. 2008. Preparation and characterization of galactosylated chitosan coated BSA microspheres containing 5-Fu. *Carbohydrate Polymers*. 72: 390-397.
75. **Yu, L.** Slavin, M. 2008. All natural whole-wheat functional foods for health promotion and disease prevention. *ACS Symposium Series*. 993: 125-142.
76. Cheng, Z., Zhou, H., Yin, J.-J., **Yu, L.** 2008. Effects of wheat antioxidants on oxygen diffusion-concentration products in liposomes and key genes for cholesterol biosynthesis and metabolism in primary rat hepatocytes. *Journal of Agricultural and Food Chemistry*. 56: 5033-5042.
77. **Yu, L.**, Lutterodt, H., Cheng, Z. 2008. Health beneficial properties of psyllium and approaches to improve its functionalities. *Advances in food and Nutrition Research*. 55: 194-220. (Invited review article)
78. Liu, Y., Gaskell, K. J., Cheng, Z., **Yu, L.**, Payne, G. F. 2008. Chitosan-coated electrodes for bimodal sensing. Selective post-electrode film reaction for spectroelectrochemical analysis. *Langmuir*. 24: 7223-7231.
79. Cheng, Z., Blackford, J., Wang, Q., **Yu, L.** 2009. Acid treatment to improve psyllium functionality. *Journal of Functional Foods*. 1: 44-49. (Invited submission)
80. Slavin, M., Cheng, Z., Luther, M., Kenworthy, W., and **Yu, L.** 2009. Antioxidant properties and phenolic, isoflavones, tocopherol and carotenoid composition of Maryland-grown soybean lines with special fatty acid profiles. *Food Chemistry*. 114:20-27.
81. Moore, J., Luther, M., Cheng, Z., **Yu, L.** 2009. Effects of baking conditions, dough fermentation, and bran particle size on antioxidant properties of whole-wheat pizza crusts. *Journal of Agricultural and Food Chemistry*. 57: 832-839.
82. Dykstra, P., Hao, J., Koev, S., Payne, G., **Yu, L.**, Ghodssi, R. 2009. An optical MEMS sensor for on-chip catechol detection. *Sensors and Actuators B: Chemical*. 138: 64-70.
83. Zhou, H., Cheng, Z., Lutterodt, H., **Yu, L.** 2009. Anti-inflammatory and antiproliferative activities of rifolirhizin, a flavonoid from *Sophora flavescens* roots. *Journal of Agricultural and Food Chemistry*. 57: 4580-4585.
84. Hao, J., Li, L., Wolf, M., Xu, M., Brinsko, B., Yanik, M., Chen, S., Binzer, L., Green, S., Hitz, C., **Yu, L.** 2009. Antioxidant properties and phenolic components of grape seeds. *Functional Plant Science & Biotechnology*. 3(Special Issue 1): 60-68 (Invited submission).
85. Slavin, M., Cheng, Z., Luther, M., Kenworthy, W., and **Yu, L.** 2009. Antioxidant

- properties, phytochemical composition and antiproliferative activity of Maryland-grown soybeans with colored seed coats. *Journal of Agricultural and Food Chemistry*. 57: 11174-1185.
86. Whent, M., Hao, J., Slavin, M., Zhou, M., Song, J., Kenworthy, W., and **Yu, L.** 2009. Effect of genotype, environment, and their interactions on chemical composition and antioxidant properties of low linolenic soybeans grown in Maryland. *Journal of Agricultural and Food Chemistry*. 57: 10163-10174.
  87. Whent, M., Slavin, M., Kenworthy, W., and **Yu, L.** 2010. Potential relationships between fatty acid compositions and phytochemicals of selected low linolenic soybeans grown in Maryland. *Journal of American Oil Chemists' Society*. 87: 549-558.
  88. Liu, W., Xu, J., Jing, P., Gao, X., Yao, W., **Yu, L.** 2010. Synthesis and characterization of hydroxypropyl Ganoderma lucidum polysaccharides. *Food Chemistry*. 122: 965-971.
  89. Liu, W., Zhang, B., Wang, Q., Xie, Z., Gao, X., Yao, W., **Yu, L.** 2010. Effects of sulfation on the physicochemical and functional properties of psyllium. *Journal of Agricultural and Food Chemistry*. 58: 172-179.
  90. Lutterodt, H., Luther, M., Slavin, M., Yin, J. Parry, J., Gao, J., **Yu, L.** 2010. Fatty acid profile, thymoquinone content, oxidative stability, and antioxidant properties of cold-pressed black cumin seed oils. *LWT-Food Science and Technology*. 43: 1409-1413.
  91. Liu, W., Xie, Z., Zhang, B., Wang, Q., Yao, W., Gao, X., **Yu, L.** 2010. Effects of hydroxypropylation on the functional properties of psyllium. *Journal of Agricultural and Food Chemistry*. 58: 1615-1621.
  92. Liu, W., Wang, H., Yao, W., Gao, X., **Yu, L.** 2010. Effects of sulfation on the physicochemical and functional properties of a water-insoluble polysaccharide preparation from Ganoderma lucidum. *Journal of Agricultural and Food Chemistry*. 58: 3336-3341.
  93. Xie, Z., Liu, W., Huang, H., Slavin, M., Zhao, Y., Whent, M., Blackford, J., Lutterodt, H., Zhou, H., Chen, P., Wang, T., Wang, S., **Yu, L.** 2010. Chemical composition of five commercial Gynostemma pentaphyllum samples, and their radical scavenging, anti-proliferative and anti-inflammatory properties. *Journal of Agricultural and Food Chemistry*. 58:11243-11249.
  94. Whent, M., Ping, T., Kenworthy, W., and **Yu, L.** 2010. High-throughput assay for detection of soybean lipoxygenase-1. *Journal of Agricultural and Food Chemistry*. 58: 12602-12607.
  95. Zhao, Y., Chen, P., Lin, L., Harnly, J.M., **Yu, L.**, Li, Z. 2011. Identification, quantitation, and principal component analysis of green pu-erh, green, and white teas using UPLC/UV/MS. *Food Chemistry*. 126: 1269-1277.
  96. Luo, Y., Zhang, B., Whent, M., **Yu, L.**, Wang, Q. 2011. Preparation, characterization of zein/chitosan complex for encapsulation of  $\alpha$ -tocopherol and in vitro controlled release

- study. *Colloids and Surfaces B: Biointerfaces*. 85: 145-152.
97. Lutterodt, H., Slavin, M., Whent, M., Turner, E., **Yu, L.** 2011. Fatty acid composition, oxidative stability, antioxidant and antiproliferative properties of selected cold-pressed grape seed oils and flours. *Food Chemistry*. 128: 391-399.
98. Niu, Y., Wang, H., Xie, Z., Whent, M., Gao, X., Zhang, X., Zou, S., Yao, W., **Yu, L.** 2011. Structural analysis and bioactivity of a polysaccharide from the roots of *Astragalus membranaceus* (Fisch) Bge. var. *mongolicus* (Bge.) Hsiao. *Food Chemistry*. 128: 620-626.
99. Xie, Z., Zhao, Y., Chen, P., Jing, P., Yue, J., **Yu, L.** 2011. Chromatographic fingerprint analysis, and rutin and quercetin compositions in the leaf and whole-plant samples of diploid and tetraploid *Gynostemma pentaphyllum*. *Journal of Agricultural and Food Chemistry*. 59: 3042-3049.
100. Huang, H., Cheng, Z., Shi, H., Xin, W., Wang, T.Y., **Yu, L.** 2011. Isolation and characterization of two flavonoids, engeletin and astilbin, from the leaves of *Engelhardtia roxburghiana*, and their potential anti-inflammatory properties. *Journal of Agricultural and Food Chemistry*. 59: 4562-4569.
101. Liu, Y., Flynn T.J., Ferguson, M., Hoagland, E.M., **Yu, L.** 2011. Effects of dietary phenolics and botanical extracts on hepatotoxicity-related endpoints in human and rat hepatoma cells and statistical models for prediction of hepatotoxicity. *Food and Chemical Toxicology*. 49: 1820-1827.
102. Jing, P., Ruan, D., Dong, Y., Zhang, X.-G., Yue, J., Kan, J.-Q., Slavin, M., **Yu, L.** 2011. Optimization of purification conditions of radish (*Raphanus sativus* L.) anthocyanins-rich extracts using chitosan. *LWT-Food Science and Technology*. 44: 2097-2103.
103. Xie, Z., Whent, M., Niu, Y., Lutterodt, H., Slavin, M., Kratochvil, R., **Yu, L.** 2011. Phytochemicals, antioxidant and anti-proliferative properties of Maryland-Grown tobacco seed oils and flours. *Journal of Agricultural and Food Chemistry*. 59: 9877-9884.
104. Xie, Z., Huang, H., Zhao, Y., Shi, H., Wang, S., Wang, T., Chen, P., **Yu, L.** 2012. Chemical composition, and anti-proliferative and anti-inflammatory effects of the leaf and whole-plant samples of diploid and tetraploid *Gynostemma pentaphyllum*. *Food Chemistry*. 132: 125-133.
105. Xin, W., Huang, H., Yu, L., Shi, H., **Yu, L.** 2012. Three new flavanonol glycosides from leaves of *Engelhardtia roxburghiana*, and their bioactivities. *Food Chemistry*. 132: 788-798.
106. Niu, Y., Xie, Z., Hao, J., Yao, W., Yue, J., Sheng, Y., **Yu, L.** 2012. Preparation of succinyl derivatives of psyllium and their physicochemical and bile acid-binding properties. *Food Chemistry*. 132: 1025-1032.
107. Jing, P. Zhao, S-J. Dong, Y. Ruan, S-Y., **Yu, L.** Anthocyanin and glucosinolate

occurrence in the roots of Chinese red radish (*Raphanus sativus* L.) and their stability to heat and pHs. *Food Chemistry*. Revision.

108. Lv, J., Huang, H., Lu, Y., Whent, M., Wang, T., Luthria, D., Charles, D., Liu, L. **Yu, L.** 2012. Phenolic composition, anti-proliferative, anti-inflammatory, and antioxidant properties of conventional and organic cinnamon and peppermint. *Food Chemistry*. 132: 1442-1450.
109. Jing, P., Ye, T., Shi, H., Sheng, Y., Slavin, M., Gao, B., Liu, L., **Yu, L.** 2012. Antioxidant properties and phytochemical composition of China-grown pomegranate seeds. *Food Chemistry*. 132: 1457-1464.
110. Zhao, Y., Xie, Z., Shi, H., Niu, Y., Chen, P., **Yu, L.** 2012. Chemical compositions, HPLC/MS fingerprinting profiles and radical scavenging properties of commercial *Gynostemma pentaphyllum* (Thunb.) Makino samples. *Food Chemistry*. Revision
111. Whent, M., Huang, H., Xie, Z., Lutterodt, H., Yu, L., Fuerst, E. P., Morris, C. F., **Yu, L.**, Luthria, D. 2012. Phytochemical composition, anti-inflammatory, and antiproliferative activity of whole wheat flour. *Journal of Agricultural and Food Chemistry*. Revision.(co-corresponding author)
112. Whent, M., Lv, J., Lutterodt, H., Luthria, D., Kenworthy, W., **Yu, L.**, 2012. Phytochemical composition and antioxidant capacity of modified-lipoxygenase soybeans grown in Maryland. *Journal of Agricultural and Food Chemistry*. accepted.

113.

c. Talks, Abstracts, and Other Professional Papers Presented.

i. Invited talks, etc (since 2000).

1. **Yu, L.** 2000. Conjugated linoleic acids. School of Food and Technology, Wuxi University of Light Industry, June, Wuxi, Jiangsu, China.
2. **Yu, L.** 2000. Nutraceuticals and functional foods. School of Food and Technology, Wuxi University of Light Industry, June, Wuxi, Jiangsu, China.
3. **Yu, L.** 2000. Trends in nutraceuticals: new business opportunities. Consulting conference for the City Council of Nanjing. June, Nanjing, Jiangsu, China.
4. **Yu, L.** 2000. Nutraceuticals and medicinal herbs. China Pharmaceutical University. June, Nanjing, Jiangsu, China.
5. **Yu, L.** 2000. Development of functional cosmetics. Dong-Yiang-Zhi-Hua Cosmetic Co. June, Shanghai, China.

6. **Yu, L.** 2001. Nutraceuticals: opportunities and challenges. Department of Horticulture, Colorado State University. Fort Collins, CO.
7. **Yu, L.** 2001. Structural modification to improve psyllium functionality. Presented at 221<sup>st</sup> ACS National Meeting, April 1-5, San Diego, CA.
8. **Yu, L.,** Harris, M., Perret, J., and Haley, S. 2001. Antioxidant properties of wheat extracts, Presented at The International Conference and Exhibition on Nutraceuticals and Functional Foods, November 28-December 1, Portland, Oregon.
9. **Yu, L.,** Gabel, M., Adams, D. 2002. Conjugated linoleic acid isomers differ in their free radical scavenging properties. Presented at 223<sup>rd</sup> ACS National Meeting, April 7-11, Orlando, FL.
10. **Yu, L.** 2003. Inhibitory effects of (S)- and (R)-6-hydroxy-2,5,7,8-tetramethylchroman-2-carboxylic acids on tyrosinase activity. Presented at the 225<sup>th</sup> ACS National Meeting, March 23-27, New Orleans, LA.
11. Zhou, K., Parry, J., **Yu, L.** 2003. Determination of phenolics acid composition in wheat bran by HPLC. Presented at the 226<sup>th</sup> ACS National Meeting, September 7-11, New York City, NY.  
(Zhou and Parry are Ph.D students of Yu's)
12. Parry, J. and **Yu, L.** 2004. Phytochemical composition and free radical scavenging capacities of selected cold-pressed edible seed oils. Presented at the 228<sup>th</sup> ACS National Meeting, August 22-26, 2004. Philadelphia, PA.  
(Parry is a Ph.D student of Yu's)
13. **Yu, L.** 2005. Development of Nutraceuticals and Functional Foods. Presented at the China Agricultural University, June 20, 2005 Beijing, P. R. China
14. **Yu, L.** 2005. Nutraceuticals and Functional Foods. Presented at the China Pharmaceutical University, June 30, 2005 Nanjing, P. R. China
15. Yin, J.-J., **Yu, L.,** Yurawecz, M. P., Roach, J., Kramer, J. K. G. 2005. Dual antioxidation and prooxidation characteristics of conjugated linoleic acids. The 2<sup>nd</sup> SFRR Asia/3<sup>rd</sup> ISNA, June 24-29, 2005 Shanghai, P. R. China
16. **Yu, L.** 2005. Solid-state enzymatic reactions to improve functionality and bioactivity of psyllium. Green process for Extraction and Formulation of Phytochemical-derived Products Symposium, the 230<sup>th</sup> ACS National Meeting, August 28-September 1, Washington, DC.
17. Parry, J., Moore, J., Zhou, K., Yin, J.-J., Wang, J.-Y., **Yu, L.** 2005. Potential of wheat antioxidants in disease prevention and health promotion. The Potential health Benefits of Antioxidants Symposium, the 230<sup>th</sup> ACS National Meeting, August 28-September 1, Washington, DC.
18. **Yu, L.,** Parry, J., Zhou, K., Yin, J.-J., Wang, J.-Y. 2005. Antioxidant activities of

- wheat phenolic acids and their inhibitory effect on intestinal epithelial growth. Chemistry and Biochemistry of Antioxidative Phytochemicals Symposia, Pacifichem 2005, December 15-20, Honolulu, Hawaii.
19. **Yu, L.**, Parry, J., Zhou, K., Moore, J., Wang, J.-Y. 2005. Wheat antioxidants inhibited cyclooxygenase-2 activity and suppressed colon cancer cell proliferation. Food and Nutraceutical Bioactives in Health Promotion and Disease Prevention Symposia, Pacifichem 2005, December 15-20, Honolulu, Hawaii.
  20. **Yu, L.**, Parry, J., Moore, J. 2006. Value-added utilization of fruit seeds for health promotion and disease prevention. The Healthy Products from Agricultural By-Products Symposium, the 231<sup>th</sup> ACS National Meeting, March 26-30, Atlanta, GA.
  21. **Yu, L.**, Parry, J., Moore, J., Su, L., Luther, M. 2006. Chemical composition and health beneficial property of hazelnuts. The Nutrition and Sensory Properties of Nuts Symposium, the 231<sup>th</sup> ACS National Meeting, March 26-30, Atlanta, GA.
  22. **Yu, L.** 2006. All natural whole-wheat functional foods for health promotion and disease prevention. The Functional Food Symposium, the 232<sup>th</sup> ACS National Meeting, September 10-14, San Francisco, CA. (presentation for the 2006 ACS-ADFG Young Scientist Award)
  23. **Yu, L.**, Cheng, Z., Zhou, H., Yin, J. 2007. Effect of wheat antioxidants on oxygen diffusion-concentration products in liposomes and its cholesterol-lowering property. The Bioactives Symposium, the 234<sup>th</sup> ACS National Meeting, August 19-23, Boston, MA.
  24. Cheng, Z., Zhou, H., **Yu, L.** 2007. Isolation and characterization of two flavonoids from *Sophora flavescens* roots, and their antiproliferative and COX-2 inhibitory properties. The Bioactives Symposium, the 234<sup>th</sup> ACS National Meeting, August 19-23, Boston, MA.
  25. **Yu, L.**, Cheng, Z. 2007. Psyllium derivatives and their health beneficial properties. The Polymer Design for Food and Nutrition Symposium, the 234<sup>th</sup> ACS National Meeting, August 19-23, Boston, MA.
  26. **Yu, L.** 2008. Advances in Food Science. Presented at the China Pharmaceutical University, February 21, Nanjing, P. R. China
  27. **Yu, L.** 2008. Application of Electron Spin Resonance (ESR) in Nutraceutical and Food Research. Presented at Kansas State University, March 11, Manhattan, KS.
  28. **Yu, L.** 2008. Research in Nutraceuticals, Functional Foods, and Novel Shelf-life Enhancers, Presented at Martek Bioscience Corporation, March 14, Winchester, KY.
  29. **Yu, L.** 2008. Cold-Pressed Edible Specialty Seed Oils and Flours. Presented at FDA Grand Rounds, FDA-CFSAN, March 19, College Park, MD.
  30. **Yu, L.** 2008. Antioxidant Availability in Wheat-Based Food Products. Presented at

Kraft Foods, April 17, East Hanover, NJ.

31. **Yu, L.** 2008. Chemistry in promoting the production and consumption of value-added functional foods. Experimental Cuisine Workshop, New York University, May 15, New York City, NY
32. **Yu, L.** 2008. Nutraceutical lipids from fruit, vegetable, spice, and herb seeds. The 99<sup>th</sup> AOCS Annual Meeting, May 18-21, Seattle, NY (presentation for the 2008 AOCS Young Scientist Research Award)
33. **Yu, L.** 2008. Stabilization of omega-3 fatty acids with novel antioxidants. Symposium 077-Omega-3 oils: the new functions in functional foods and nutraceuticals. The Institute of Food Technologists Annual Meeting, June 28-July 1, New Orleans, Louisiana.
34. **Yu, L.** 2008. Preservation of n-3 PUFA. The Specialty Fatty Acids Symposium, the 236<sup>th</sup> ACS National Meeting, August 17-21, Philadelphia, PA.
35. Lutterodt, H., Turner, E., Pei, X., Parry, J., **Yu, L.** 2008. Cold-pressed edible seed oils rich in oleic and  $\alpha$ -linolenic acids, and their phytochemical and antioxidant properties. The Specialty Fatty Acids Symposium, the 236<sup>th</sup> ACS National Meeting, August 17-21, Philadelphia, PA.
36. **Yu, L.** 2008. Psyllium, the 1<sup>st</sup> International Society for Nutraceuticals and Functional Foods Meeting, November 14-17, Taiwan
37. **Yu, L.** 2009. Wheat Antioxidants, the 56<sup>th</sup> Annual Soft Wheat Research Review Conference, March 2009, Wooster, OH
38. **Yu, L.** 2009. Effects of post-harvest treatments and food processing conditions on wheat antioxidant availability. The 238<sup>th</sup> ACS National Meeting, August 16-20. Washington, DC
39. **Yu, L.** 2009. Application of solid-state enzymatic reactions in nutraceuticals and food science. The Global Solid-State Fermentation Meeting sponsored by Novozyme Biologicals, Inc, September 8-9. Salem, VA
40. **Yu, L.** 2009. In vitro assays for improving bioactivity and functionality of cereal grain based nutraceuticals and functional food ingredients. The American Association of Cereal Chemists Annual meeting, September 13-16, Baltimore, MD
41. **Yu, L.** 2009. Effects of post-harvest treatments and food processing conditions on wheat antioxidant availability, the American Bakers Association-USDA Agricultural Research Service meeting, October 28, Beltsville, MD
42. **Yu, L.** 2010. Health effects of natural antioxidants from the selected edible botanical materials, The Antioxidants and Health Symposium, the 240<sup>th</sup> ACS National Meeting, August 22-26, Boston, MA.

43. **Yu, L.** 2010. Assays for scavenging capacities against hydroxyl and DPPH radicals, The Antioxidants Methods Symposium, the 240<sup>th</sup> ACS National Meeting, August 22-26, Boston, MA.
44. **Yu, L.** 2010. Phytochemical composition of five *Gynostemma pentaphyllum* samples and their antioxidant, antiproliferative, and anti-inflammatory effects, Understanding the Chemistry of Phytochemical Antioxidants and Their Role in Human Health and Wellness Symposium, Pacificchem 2010, December 15-20, Honolulu, Hawaii.
- 45.

ii. Refereed abstracts (since 2000)

1. **Yu, L.** and Robyt, J. 2000. Synthesis of starch by eight varieties of starch granules using ADPGlc and UDPGlc. The 219<sup>th</sup> American Chemical Society 2000 meeting, March 26-30, San Francisco, CA.
2. **Yu, L.** 2001. Free radical scavenging activity of conjugated Linoleic acids. The 92<sup>nd</sup> AOCS Annual Meeting & Expo, May 13-16, Minneapolis, MN.
3. **Yu, L.**, Scanline, L., and Schmidt, G. 2001. Rosemary Extracts as Inhibitors of Lipid Oxidation and Color Change in Cooked Poultry Products. The Institute of Food Technologists Annual Meeting, June 23-27, New Orleans, Louisiana.
4. Perret, J. and **Yu, L.** 2001. A procedure to improve psyllium functionality by solid-state reaction(s). The Institute of Food Technologists Annual Meeting, June 23-27, New Orleans, Louisiana.
5. **Yu, L.** 2001. Free radical scavenging capacity of wheat extracts, Presented at Institute of Food Technologists Annual Meeting, June 23-27, New Orleans, Louisiana.
6. **Yu, L.**, Adams, D., Gabel, M. 2002. Characterization of CLA-DPPH radical reactions. The 93<sup>rd</sup> AOCS Annual Meeting & Expo, May 5-8, Montreal, Canada.
7. **Yu, L.**, Gabel, M., Harris, M., Lakkakula, S., Perret, J., Haley, S., Parker, T. 2002. Effects of growing conditions on wheat antioxidant properties. The Institute of Food Technologists Annual Meeting, June 15-19, Anaheim, California.
8. Adams, D. A., **Yu, L.** 2002. n-3 Fatty acid composition of commercial raw fish products. The Institute of Food Technologists Annual Meeting, June 15-19, Anaheim, California.
9. Zhou, K., Perret, J., Wilson, J., Harris, M., Haley, S., **Yu, L.** 2003. Effects of growing conditions on radical scavenging activities of wheat antioxidants. Presented at the 225<sup>th</sup> ACS National Meeting, March 23-27, New Orleans, LA.
10. Parker, T. D., Adams, D. A., Zhou, K., Harris, M., **Yu, L.** 2003. Fatty acid composition of edible cold-pressed seed oils. The 94<sup>th</sup> AOCS Annual Meeting & Expo, May 4-7,

Kansas City, MO.

11. Zhou, K., Adams, D., Parry, J., **Yu, L.** 2003. Antioxidant properties of cold-pressed black caraway seed oil. The 94<sup>th</sup> AOCS Annual Meeting & Expo, May 4-7, Kansas City, MO.
12. **Yu, L.** 2003. Free radical scavenging properties of CLA isomers. Presented at the 94<sup>th</sup> AOCS Annual Meeting & Expo, May 4-7, Kansas City, MO.
13. Parry, J., **Yu, L.** 2004. Fatty acid composition and oxidative stability of cold-pressed black raspberry seed oil. The Institute of Food Technologists Annual Meeting, July 12-16, Las Vegas, Nevada.
14. Parry, J., Zhou, K., **Yu, L.** 2004. Antioxidant properties of black raspberry seed oil and meal. The Institute of Food Technologists Annual Meeting, July 12-16, Las Vegas, Nevada.
15. Zhou, K., Parry, J., **Yu, L.** 2004. Antioxidant activities of wheat extraction from different solvent systems. The Institute of Food Technologists Annual Meeting, July 12-16, Las Vegas, Nevada.
16. Zhou, K. **Yu, L.** 2004. Antioxidant properties of Swiss red wheat grain and fractions. The Institute of Food Technologists Annual Meeting, July 12-16, Las Vegas, Nevada.
17. Su, L., Zhou, K., Parry, J., and **Yu, L.** 2004. Oxygen radical absorbing capacities of selected vegetables, wheat bran and fruit seed oil samples. The 228<sup>th</sup> ACS National Meeting, August 22-26, 2004. Philadelphia, PA.
18. Ardo, S., Su, L., Parry, J., and **Yu, L.** 2004. Fatty acid composition and antioxidant properties of selected commercial olive oils. Presented at the 228<sup>th</sup> ACS National Meeting, August 22-26, Philadelphia, PA.
19. Parry, J. and **Yu, L.** 2004. Fatty acid composition, iodine value, and oxidative stability of selected cold-pressed fruit seed oils. The 228<sup>th</sup> ACS National Meeting, August 22-26, Philadelphia, PA.
20. Zhou, K., and **Yu, L.** 2004. Radical scavenging properties and phytochemical composition of wheat bran. Presented at the 228<sup>th</sup> ACS National Meeting, August 22-26, Philadelphia, PA.
21. Parry, J., Su, L., **Yu, L.** 2005. Antioxidant activity and phytochemical contents of cold-pressed onion, parsley, cardamom, mullein, roasted pumpkin, and milk thistle seed oils. The Institute of Food Technologists Annual Meeting, July 16-20, New Orleans, Louisiana.
22. Parry, J., **Yu, L.** 2005. Fatty acid compositions and oxidative stabilities of cold-pressed onion, parsley, cardamom, mullein, roasted pumpkin, and milk thistle seed oils. The Institute of Food Technologists Annual Meeting, July 16-20, New Orleans, Louisiana.

23. Moore, J., Zhou, K., Luther, M., **Yu, L.** 2005. Oxygen radical absorbing capacities and phytochemical composition of Maryland grown soft wheat. The Institute of Food Technologists Annual Meeting, July 16-20, New Orleans, Louisiana.
24. Zhou, K., Yin, J.-J., Su, L., **Yu, L.** 2005. Phytochemical profiles and antioxidant properties of hard red winter wheat bran. The Institute of Food Technologists Annual Meeting, July 16-20, New Orleans, Louisiana.
25. Zhou, K., Yin, J.-J., **Yu, L.** 2005. Radical scavenging properties and chelating capacities of ferulic and syringic acids. The Institute of Food Technologists Annual Meeting, July 16-20, New Orleans, Louisiana.
26. Zhou, K., **Yu, L.** 2005. Antioxidant properties of vegetables grown in Colorado. The Institute of Food Technologists Annual Meeting, July 16-20, New Orleans, Louisiana.
27. Su, L., Yin, J.-J., Charles, D., **Yu, L.** 2005. Antioxidant activities of whole black peppercorns and ground nutmeg. The Institute of Food Technologists Annual Meeting, July 16-20, New Orleans, Louisiana.
28. Moore, J., Zhou, K., Luther, M., **Yu, L.** 2005. Tocopherol, carotenoid, and antioxidant properties of Maryland grown soft wheat. Pacificchem 2005, December 15-20, Honolulu, Hawaii.
29. Su, L., Charles, D. J., **Yu, L.** 2005. Antioxidant capacities in species and medicinal herbs. 53<sup>rd</sup> Annual Congress of the Society for Medicinal Plant Research, August 21-25, Florence, Italy.
30. Luther, M., Parry, J., Moore, J., Cheng, Z., Meng, J., Zhang, Y., **Yu, L.** 2006. Development of natural food preservatives from selected spice and fruit seed meal and flour extracts. The Institute of Food Technologists Annual Meeting, June, 24-28, Orlando, FL.
31. Moore, J., Yin, J.-J., **Yu, L.** 2006. Novel fluorometric assay for hydroxyl radical scavenging capacity (HOSC) estimation. The Institute of Food Technologists Annual Meeting, June, 24-28, Orlando, FL.
32. Cheng, Z., Su, L., **Yu, L.** 2006. Effect of post-harvesting treatment and storage conditions on availability of wheat antioxidants. The Institute of Food Technologists Annual Meeting, June, 24-28, Orlando, FL.
33. Parry, J., Su, L., Moore, J., Luther, M., **Yu, L.** 2006. Chemical composition, antioxidant properties, and cancer cell growth inhibitory effects of Turkish and Oregon roasted hazelnuts. The Institute of Food Technologists Annual Meeting, June, 24-28, Orlando, FL.
34. Cheng, Z., Moore, J., **Yu, L.** 2007. A high-throughput relative DPPH radical scavenging capacity (RDSC) assay. The Institute of Food Technologists Annual Meeting, July 28-1, Chicago, IL

35. Cheng, Z., Yin, J., **Yu, L.** 2007. ESR assay of hydroxyl radical scavenging capacities for lipophilic antioxidants and potential solvent interference. The Institute of Food Technologists Annual Meeting, July 28-1, Chicago, IL
36. Luther, M., Moore, J., Cheng, Z., Charles, D., **Yu, L.** 2007. Antiproliferative and cyclooxygenase-2 inhibitory activities of selected spices and herbs. The Institute of Food Technologists Annual Meeting, July 28-1, Chicago, IL
37. Luther, M., Moore, J., **Yu, L.** 2007. Effects of thermal processing on the availability of antioxidant properties in baked pizza crust. The Institute of Food Technologists Annual Meeting, July 28-1, Chicago, IL
38. Moore, J., Cheng, Z., **Yu, L.** 2007. Effects of solid-state enzymatic treatments on the antioxidant properties of wheat bran. The Institute of Food Technologists Annual Meeting, July 28-1, Chicago, IL
39. Moore, J., Cheng, Z., Hao, J., Guo, G., Liu, J.-G., Lin, C., Kendall, P., **Yu, L.** 2007. Effects of solid-state yeast fermentation on the antioxidant properties, and protein and fiber compositions of hard wheat bran. The Institute of Food Technologists Annual Meeting, July 28-1, Chicago, IL
40. Smitka, M., Cheng, Z., Luther, M., Moore, J., **Yu, L.** 2007. Antioxidant properties and chemical composition of Maryland-grown soybeans. The Institute of Food Technologists Annual Meeting, July 28-1, Chicago, IL
41. Smitka, M., Parry, J., Luther, M., Moore, J., Cheng, Z., **Yu, L.** 2007. Antiproliferative activities and antioxidant capacities of cranberry seed meal and parsley seed flour extracts. The Institute of Food Technologists Annual Meeting, July 28-1, Chicago, IL
42. Whent, M., Slavin, M., Cheng, Z., **Yu, L.**, Charles, D. J. 2008. Antioxidant properties of thyme and lavender botanical extracts. The 7<sup>th</sup> Joint Meeting of AFERP, ASP, GA, PSE & SIF, August 3-8, Athens, Greece.
43. Lutterodt, H., Pei, X., **Yu, L.** 2008. Inhibitory effect of black cumin seed components on lipid oxidation and n-3 PUFA loss in fish oil. The Institute of Food Technologists Annual Meeting, June 28-July 1, New Orleans, Louisiana.
44. Hao, J., Charles, D., **Yu, L.** 2008. Chemical composition and antioxidant properties of clove bud, lavender, rosemary, red thyme, and white thyme essential oils. The Institute of Food Technologists Annual Meeting, June 28-July 1, New Orleans, Louisiana.
45. Pei, X., Cheng, Z., **Yu, L.** 2008. Effects of reaction temperature and psyllium-solvent ratio on water up-taking, swelling, gelling, and bile acid binding capacities of acid-modified psyllium samples. The Institute of Food Technologists Annual Meeting, June 28-July 1, New Orleans, Louisiana.
46. Lutterodt, H., Turner, E., **Yu, L.** 2008. Fatty acid composition and oxidative stability of selected cold-pressed grape seed oils. The Institute of Food Technologists Annual Meeting, June 28-July 1, New Orleans, Louisiana.

47. Blackford, J., Cheng, Z., **Yu, L.** 2008. Solid-state acid reaction to improve the functionality of psyllium. The Institute of Food Technologists Annual Meeting, June 28-July 1, New Orleans, Louisiana.
48. Lutterodt, H., Turner, E., **Yu, L.** 2008. Fatty acid composition and oxidative stability of selected cold-pressed grape seed oils. The Institute of Food Technologists Annual Meeting, June 28-July 1, New Orleans, Louisiana.
49. Slavin, M., Kenworthy, W., **Yu, L.** 2008. Antioxidant activity and phytochemical composition of Maryland-grown colored soybeans. The Institute of Food Technologists Annual Meeting, June 28-July 1, New Orleans, Louisiana.
50. Luther, M., Cheng, Z., **Yu, L.** 2008. Effects of solid-state yeast treatment on the antioxidant properties of wheat bran. The Institute of Food Technologists Annual Meeting, June 28-July 1, New Orleans, Louisiana.
51. Luther, M., Moore, J., **Yu, L.** 2008. In-vitro releasable antioxidant properties of baked pizza crust. The Institute of Food Technologists Annual Meeting, June 28-July 1, New Orleans, Louisiana.
52. Turner, E., Lutterodt, H., **Yu, L.** 2009. Fatty acid composition and antioxidant properties of cold-pressed black raspberry, red raspberry, pomegranate and cranberry seed oils. The Institute of Food Technologists Annual Meeting, June 6-9, Anaheim, CA.
53. Turner, E., Lutterodt, H., **Yu, L.** 2009. Fatty acid composition and antioxidant properties of cold-pressed chia, mustard, hemp, and broccoli seed oils. The Institute of Food Technologists Annual Meeting, June 6-9, Anaheim, CA.
54. Turner, E., Lutterodt, H., **Yu, L.** 2009. Fatty acid composition and antioxidant properties of cold-pressed cashew nut, njangsang, watermelon, and African melon seed oils. The Institute of Food Technologists Annual Meeting, June 6-9, Anaheim, CA.
55. Hao, J., Gu, K., **Yu, L.** 2009. Chemical composition and antioxidant properties of organic and conventional oregano oils. The Institute of Food Technologists Annual Meeting, June 6-9, Anaheim, CA.
56. Gu, K., Hao, J., **Yu, L.** 2009. Antioxidant properties and chemical composition and of organic and conventional lavender oils. The Institute of Food Technologists Annual Meeting, June 6-9, Anaheim, CA.
57. Lutterodt, H., Luther, M., Slavin, M., Parry, J., **Yu, L.** 2009. Oxidative stability, fatty acid profile, thymoquinone content, and antioxidant properties of cold-pressed black cumin seed oil. The Institute of Food Technologists Annual Meeting, June 6-9, Anaheim, CA.
58. Lutterodt, H., Slavin, M., Bloom, R., Turner, E., **Yu, L.** 2009. Phytochemical composition, antioxidant capacity, and antiproliferative properties of the selected cold-pressed grape seed flours. The Institute of Food Technologists Annual Meeting, June 6-9, Anaheim, CA.

59. Blackford, J., Liu, Y., Payne, G., **Yu, L.** 2009. A single step chronocoulometri assay for polyphenol estimation. The Institute of Food Technologists Annual Meeting, June 6-9, Anaheim, CA.
60. Whent, M., Slavin, M., Kenworthy, W., **Yu, L.** 2009. Antioxidant capacity, isoflavone level, and fatty acid composition of low-linolenic soybeans grown in three environments in Maryland. The Institute of Food Technologists Annual Meeting, June 6-9, Anaheim, CA.
61. Xie, Z., Lutterodt, H., Kratochvil, R., **Yu, L.** 2009. Characterization of Maryland-grown tobacco seed oils. The Institute of Food Technologists Annual Meeting, June 6-9, Anaheim, CA.
62. Whent M, Kenworthy W, **Yu L.** 2010. Novel high-throughput assay for soybean lipoxygenase-1 detection. The Institute of Food Technologists Annual Meeting, July 17-20, Chicago, IL.
63. Xie Z, Liu W, Zhao Y, Whent M, Blackford J, Lutterodt H, Chen P, **Yu L.** 2010. Effects of extraction solvents on estimating phytochemicals and antioxidant properties of *Gynostemma pentaphyllum*. The Institute of Food Technologists Annual Meeting, July 17-20, Chicago, IL.
64. Xie Z, Liu W, Huang H, Slavin M, Zhao Y, Chen P, **Yu L.** 2010. Chemical composition and antiproliferative and anti-inflammatory effects of five *Gynostemma pentaphyllum* samples. The Institute of Food Technologists Annual Meeting, July 17-20, Chicago, IL.
65. Liu W, Xie Z, Zhang B, Wang Q, Yao W, Gao X, **Yu L.** 2010. Effects of hydroxypropylation on the functional properties of psyllium. The Institute of Food Technologists Annual Meeting, July 17-20, Chicago, IL.
66. Xie Z, Liu W, Zhang B, Wang Q, **Yu L.** 2010. Sulfation to improve physicochemical and functional properties of psyllium. The Institute of Food Technologists Annual Meeting, July 17-20, Chicago, IL.
67. Liu W, Wang H, Gao X, Yao W, **Yu L.** 2010. Effects of sulfation on the physicochemical and functional properties of a water-insoluble polysaccharide preparation from *Ganoderma lucidum*. The Institute of Food Technologists Annual Meeting, July 17-20, Chicago, IL.
68. Xie Z, Huang H, Zhao Y, Wang S, **Yu L.** 2011. Chemical composition and anti-proliferative and anti-inflammatory effects of the leaf and whole-plant samples of diploid and tetraploid *Gynostemma pentaphyllum*. The Institute of Food Technologists Annual Meeting, June 11-14, New Orleans, LA.
69. Xie Z, Zhao Y, Chen P, Jing P, Yue J, Wang S, **Yu L.** 2011. Chromatographic fingerprint analysis of flavomoids, and rutin and quercetin compositions in the leaf and whole-plant samples of diploid and tetraploid *Gynostemma pentaphyllum*. The Institute of Food Technologists Annual Meeting, June 11-14, New Orleans, LA.
70. Lutterodt H, Yin J, Yue J, **Yu L.** 2011. ESR investigation of the radical scavenging

properties of thymoquinone, dithymoquinone, and black cumin seed oil extract. The Institute of Food Technologists Annual Meeting, June 11-14, New Orleans, LA.

71. Whent M, Huang H, Xie Z, Charles D, **Yu L.** 2011. Effect of extraction solvent on antioxidant capacity of organic and conventionally-grown basil and clove bud extracts. The Institute of Food Technologists Annual Meeting, June 11-14, New Orleans, LA.
72. Slavin M, Kenworthy W, **Yu L.** 2011. A single extraction and HPLC-UV-ELSD procedure for simultaneous quantification of phytosterols, tocopherols and lutein in soybeans. The Institute of Food Technologists Annual Meeting, June 11-14, New Orleans, LA.
73. Huang H, Cheng Z, Wang T, **Yu L.** 2011. Anti-inflammatory activities of engeletin and astilbin in J774a.1 macrophage cells. The Institute of Food Technologists Annual Meeting, June 11-14, New Orleans, LA.
- 74.

d. Patents and Disclosures.

i. Patents

1. **Yu, L.** DeVay, G. A., Lai, G. H., Simmons, C. T., and Neilsen, S. R. 2001. Enzymatic modification of psyllium. US Patent USP6,248,373; European Patent EP1379633.
2. **Yu, L.** 2001. Acid and solvent modification of psyllium. European Patent EP1083797; WO9962342.

ii. Patents Pending

1. **Yu, L.** A procedure to improve psyllium functionality by solid-state reactions. USP & WO pending, PCT/US01/24755
2. **Yu, L.**, and Moore, J. Methods of making and using nutritional compositions. USP & WO pending, 20070184164, Filed in 2007 (Provisional US patent application, 60/644672. Filed in 2005)
3. Mueller, M. and **Yu, L.** Use of specialty cold-pressed edible seed oils, flours, and/or their blends as anti-inflammatory agents. USP & WO pending, 20070281044. (Provisional US patent application, 60/681833. Filed in 2005) (this application has been licensed to a US company)
4. **Yu, L.**, Liu, W., Xie, Z., Wang, Q., and Zhang, B. A sulfated psyllium derivative for reducing the risk of chronic human diseases and method for preparing the same. USP & WO Pending, US2011/0054207 (Provisional US patent application, 61/230929 filed 8/3/2009).filed in 2010

iii. Provisional Patent Applications and UMCP Invention Disclosures (filed by UMD)

1. **Yu, L.**, Moore, J., and Luther, M. Microwavable functional instant dry food mix and frozen dough. Provisional US patent application, 60/681353. Filed in 2005
2. **Yu, L.**, Zhou, K., and Wang, J. Preparation and use of berry extracts and other berry-based edible products in prevention of overweight and obesity. Provisional US patent application, 60/683812. Filed in 2005
3. **Yu, L.**, Parry, J., and Zhou, K. Wheat-based foods for disease prevention and health promotion. Provisional US patent application, 60/681569. Filed in 2005
4. **Yu, L.**, and Moore, J. Solid-state bioconversion of wheat bran to improve its health, nutritional, and sensory properties. Provisional US patent application, 60/806293. Filed in 2006
5. **Yu, L.**, Cheng, Z., Lei, D. Use of Sophora flavescens extracts, fractions, and/or individual flavanoides for cancer prevention and treatment, and the methods for their preparations. Disclosure LS-2007-075, 2007
6. **Yu, L.**, Luther, M., Meng, J. Novel fruit seed derived shelf-life enhancers for prevention of n-3 fatty acids and fish oils. LS-2007-093, 2007
7. **Yu, L.**, Lutterodt, H., Pei, X. Black cumin seed derived shelf-life enhancers for prevention of n-3 fatty acids and fish oils. LS-2008-007, 2008
8. **Yu, L.**, Cheng, Z., Pei, X. Methods to prepare psyllium with improved functionality. Disclosure LS-2008-011, 2008
9. **Yu, L.**, Liu, W., Xie, Z., Wang, Q., Zhang, B. Method to prepare sulfated psyllium for use to reduce the risk of chronic human diseases. LS-2009-086).
10. **Yu, L.**, Niu, Y., Xie, Z. Method to prepare succinyl psyllium for use to reduce the risk of chronic human diseases. LS-2011-049).
- 11.

e. Contracts and Grants.

*Extramural Grants (\* denotes competitive funding)*

2000	\$10,000	Hauser Company “Rosemary extracts as inhibitors of lipid oxidation & color changes in cooked poultry product” Principal Investigator, Co-PI: G. Schmidt
2000-2001	\$12,000	Hauser Company “Effects of rosemary extracts on coffee quality” Principal Investigator, Co-PI: M. Harris
2000-2001*	\$15,000	Hazelnut Council Competitive Grant “Flavor profiles of model and food systems containing hazelnuts” Co-Principal Investigator; PI: M. Stone

2000-2001*	\$15,000	Hazelnut Council Competitive Grant “The use of hazelnut in bakery product development” Co-Principal Investigator; PI: M. Stone
2001	\$18,000	Pharmanutrients Company “Lipid research” Principal Investigator
2001-2003	\$17,100	Pharmanutrients Company “Dietary fiber research” Principal Investigator
2001-2002	\$40,135	“Winter wheat cultivar development for Colorado and the central great plain” Co-Principal Investigator; PI: S. Haley
2003-2005*	\$80,000*	Pharmanutrients Company “Enhancing the market competitiveness of chitosan products” Principal Investigator
2003-2004	\$8,300	Buhler Company “Wheat antioxidant research” Principal Investigator
2003	\$3,160	Brookfield Instruments Gift fund for viscometer Principal Investigator, Co-PI: K. Zhou
2004-2007*	\$236,000*	USDA CSREES NRI Competitive Grant “Enhancing wheat antioxidant availability through improved post-harvesting treatment, storage, and processing conditions” Principal Investigator
2004-2005*	\$5,000*	The Greater Cedar Rapids Community Foundation-New Frontier Foundation Fund “Screening for potential antioxidant activities to enhance the market for the selected botanicals” Principal Investigator
2004	\$12,000	Pharmanutrients Company “Lipid research” Principal Investigator
2005*	\$5,000*	The Greater Cedar Rapids Community Foundation-New Frontier Foundation Fund

		“Screening for potential antioxidant activities to enhance the market for the selected botanicals” Principal Investigator
2004-2005	\$27,950	Botanic Oil Innovations “Specialty edible oils and meals” Principal Investigator
2005*	\$9,000*	Maryland Grain Producers Utilization Board “Enhancing Maryland-Grown soft wheat consumption for health promotion and disease prevention” Principal Investigator, Co-PI M. Kantor
2005	\$30,000	Pharmanutrients Company “Lipid research” Principal Investigator
2005	\$10,000	Mennel Milling Company “wheat antioxidant study” Principal Investigator
2005-2006*	\$5,000*	The Greater Cedar Rapids Community Foundation-New Frontier Foundation Fund “Screening for potential antioxidant activities to enhance the market for the selected botanicals” Principal Investigator
2005-2008*	¥900,000*	Chinese Department of Science and Technology “Potential of N-octyl-O-sulfate chitosan derivatives in controlled release and targeted delivery of anticancer drugs” Co-PI Principal Investigator: Can Zhang
2006-2007	\$15,000	Colgate-Palmolive Company “Bioactives in the botanicals” Principal Investigator
2006*	\$9,000*	Maryland Grain Producers Utilization Board “Enhancing Maryland-Grown soft wheat consumption for health promotion and disease prevention” Principal Investigator
2006-2007	\$6,000	Pharmanutrients Company “Lipid research” Principal Investigator

2007-2010*	\$300,000* (\$138,264 for Yu)	National Science Foundation “CHITOSAN TO FUNCTIONALIZE FOOD (BIO)SENSORS” Co-Principal Investigator Principal Investigator: Gregory Payne (UMBC)
2007*	\$15,000*	Maryland Soybean Board “Development of Value-Added Utilizations for Maryland-Grown Soybean Varieties and By-products from Soy Oil Production in Nutraceutical Ingredients and Functional Foods” Principal Investigator
2007	\$3,600	Pharmanutrients Company “Lipid research” Principal Investigator
2006-2007*	\$5,000*	The Greater Cedar Rapids Community Foundation-New Frontier Foundation Fund “Screening for potential antioxidant activities to enhance the market for the selected botanicals” Principal Investigator
2007-2008	\$11,000	Botanic Oil Innovations “Specialty edible oils and meals” Principal Investigator
2007	\$5,000	The Greater Cedar Rapids Community Foundation-New Frontier Foundation Fund “Nutraceutical properties of botanicals” Principal Investigator
2007*	\$15,000*	Maryland Grain Producers Utilization Board “Enhancing Maryland-Grown soft wheat consumption for health promotion and disease prevention” Principal Investigator
2008*	\$18,500*	Maryland Soybean Board “Development of Value-Added Utilizations for Maryland-Grown Soybean Varieties and By-products from Soy Oil Production in Nutraceutical Ingredients and Functional Foods” Principal Investigator
2008	\$6,000	Pharmanutrients Company “Lipid research”

		Principal Investigator
2008*	\$15,000*	Maryland Grain Producers Utilization Board “Enhancing Maryland-Grown soft wheat consumption for health promotion and disease prevention” Principal Investigator
2009*	\$15,000*	Maryland Grain Producers Utilization Board “Enhancing Maryland-Grown soft wheat consumption for health promotion and disease prevention” Principal Investigator
2009*	\$24,000*	Maryland Soybean Board “Development of Value-Added Utilizations for Maryland-Grown Soybean Varieties and By-products from Soy Oil Production in Nutraceutical Ingredients and Functional Foods” Principal Investigator
2008-2009	\$10,000*	USDA (Sub-contract) “Alternative use of tobacco” Principal Investigator
2009-2010	\$5,000	The Frontier Inc. “Nutraceutical properties of botanicals” Principal Investigator
2009-2011	\$224,700	JIFSAN “Development and validation of in vitro hepatotoxicity assays for dietary supplemental materials” Principal Investigator
2009	\$42,000	Adderix, Inc “Development of nutraceuticals and functional foods” Principal Investigator
2009-2010	\$50,000	Asian-Citrus, Inc “nutraceuticals properties of selected botanicals” Principal Investigator
2009-2010	\$261,040	USDA (\$23,000) “Alternative use of tobacco” Co-Principal Investigator
2010*	\$18,000*	Maryland Grain Producers Utilization Board “Enhancing Maryland-Grown soft wheat

		consumption for health promotion and disease prevention” Principal Investigator
2010-2011	\$80,000	Asian-Citrus, Inc “nutraceuticals properties of selected botanicals” Principal Investigator
2010-2011	\$10,000	The Frontier Inc. “Nutraceutical properties of botanicals” Principal Investigator
2010-2011*	\$50,000	The UTDF “Promoting the commercialization of sulfated psyllium in functional foods and supplemental products” Principal Investigator
2011	\$18,000	Maryland Grain Producers Utilization Board “Enhancing Maryland-Grown soft wheat consumption for health promotion and disease prevention” Principal Investigator
2011	\$36,420	USDA-ARS “Development of line-scan chemical imaging techniques for detection of food contaminants” Principal Investigator
2011	\$20,000 33% share	ADVANCE program, UMD Developing value-added novel nanomaterials from chitosan and soy protein for targeted delivery and controlled release of bioactives Co-PI

Other small research gift funds: 2000-2003 \$9,593 (CSU)

2003-2005 \$20,700 (U. Maryland)

*Intramural Grants (\* denotes competitive funding)*

2000-2001*	\$18,185*	Colorado Agriculture Experimental Station Competitive Grant “Developing antioxidative nutraceuticals” Principal Investigator, Co-PI: K. Allen
2000-2001*	\$2,500*	Colorado Wheat Research Foundation

		“Evaluation of physiochemical properties of Colorado wheat varieties” Principal Investigator, Co-PI: S. Haley
2000-2001*	\$7,000*	Colorado Wheat Research Foundation “Development of methods for noodle quality evaluation” Principal Investigator, Co-PI: S. Haley
2001-2003*	\$66,900*	Colorado Agriculture Experimental Station Competitive Grant “Antioxidant properties of Colorado wheat” Principal Investigator, Co-PI: S. Haley
2002-2005*	\$93,230*	Colorado Agriculture Experimental Station Competitive Grant “Enhancing the market competitiveness of Colorado vegetables” Principal Investigator, Co-PI: P. Kendall
2002-2003*	\$5,000*	Colorado Wheat Research Foundation “Developing a model system to access noodle making potential” Principal Investigator, Co-PI: S. Haley
2002-2003*	\$5,000*	Colorado State University-Career Enhancement Grant “Assessing the acceptability of a whole-wheat-pizza” Principal Investigator, Co-PI: C. Melby
2005-2006	\$20,000*	Maryland Agriculture Experimental Station Competitive Grant “Enhancing the market competitiveness of Maryland grown soft wheat” Principal Investigator, Co-PI: J. Costa
2006	\$12,250*	General Research Board Award, University of Maryland “Effect of ferulic acid on intestinal epithelium and the mechanisms involved in its biological actions” Principal Investigator
2007-2008	\$25,000*	Maryland Agriculture Experimental Station Competitive Grant “Developing value-added utilization of agricultural and food processing by-products for health promotion and disease prevention” Principal Investigator

f. Fellowships, Prizes, and Awards.

*Awards obtained by Liangli (Lucy) Yu*

- |      |   |
|------|---|
| 1998 | Academic Scholarship Award, Kellogg's Company   |
| 2003 | Tenure Track Faculty Scholarly Excellence Award, Colorado State University, College of Applied Human Science, Fort Collins, Colorado  |
| 2006 | General Research Board Award, University of Maryland College Park, Maryland   |
| 2006 | Excellence in Instruction Award, University of Maryland College park, College of Agriculture and Natural Resources Alumni Association, Maryland                                     |
| 2006 | Young Scientist Award, American Chemical Society, Agricultural and Food Chemistry Division<br>(Young Scientist from any country may be nominated)                                   |
| 2007 | USDA CSREES NRI Research Highlights No. 6   |
| 2007 | Featured Chemist for The Many Faces of Chemistry, American Chemical Society   |
| 2008 | Young Scientist Research Award, American Oil Chemist Society<br>(Sponsored by International Food Science Center A/S in Denmark. Young Scientist from any country may be considered) |
| 2008 | Excellence in Research Award, University of Maryland College Park, College of Agriculture and Natural Resources Alumni Association, Maryland  |
| 2011 | Fellow Award, American Chemical Society, Agricultural and Food Chemistry Division   |
| 2011 | Outstanding Food Science Award, Department of Food Science, Purdue University, west Lafayette   |
| 2012 | Distinguished Agricultural Aluminum Award, College of Agriculture, Purdue University, west Lafayette  |

*Awards obtained by Liangli (Lucy) Yu's students*

- |            |   |
|------------|---|
| April 2001 | J. Perret, College research poster award winner at 7 <sup>th</sup> Annual Undergraduate Research and Creativity Symposium (undergraduate) |
|------------|---|

work-study student)

- May 2001 J. Perret, Student Travel Grant of \$500 from Rocky Mountain Institute of Food Technologists (RMIFT) (undergraduate work-study student)
- Nov. 2001 J. Perret, 1<sup>st</sup> place winner of the Rock Mountain Food & Dairy Expo Student Poster Competition (undergraduate work-study student)
- Nov. 2001 M. Gabel, 3<sup>rd</sup> place winner of the Rock Mountain Food & Dairy Expo Student Poster Competition (undergraduate work-study student)
- May 2002 D. Adams, Student Travel Grant of \$500 from Rocky Mountain Institute of Food Technologists (RMIFT) (M.S student)
- May 2002 T. Paker, Student Travel Grant of \$500 from Rocky Mountain Institute of Food Technologists (RMIFT) (M.S student)
- Sep 2002 D. Adams, 3<sup>rd</sup> place winner of the Rock Mountain Food & Dairy Expo Student Poster Competition (M.S student)
- 2003 J. Parry, 2<sup>nd</sup> place winner of the Maryland Section IFT Supplier's Night Poster Competition (Ph.D student)
- 2004 J. Parry, 2<sup>nd</sup> place winner of the Maryland Section IFT Supplier's Night Poster Competition (Ph.D student)
- 2004 K. Zhou, Jacob K. Goldhaber Travel Grant, Graduate School, University of Maryland, College Park, MD 20742 (PhD student)
- 2005 J. Parry, Outstanding Graduate Student of the Year Award, College of Agriculture and Nature Resources, University of Maryland, College Park, MD 20742 (PhD student)
- 2005 J. Parry, Jacob K. Goldhaber Travel Grant, Graduate School, University of Maryland, College Park, MD 20742 (PhD student)
- 2005 L. Su, Jacob K. Goldhaber Travel Grant, Graduate School, University of Maryland, College Park, MD 20742 (PhD student)
- 2005 Shane Ardo, 3<sup>rd</sup> place winner of the Maryland Section IFT Supplier's Night Poster Competition (MS student)
- 2005 Shane Ardo, Goldhaber Travel Grant, Graduate School, University of Maryland, College Park, MD 20742 (MS student)
- 2005 Jeff. Moore, Food Science Graduate Fellowship, college fellowship, College of Agriculture and Nature Resources, University of

- Maryland, College Park, MD 20742 (PhD student)
- 2005 Jeff Moore, Facchina Graduate Fellowship, Facchina Fund, (PhD student)
- 2005 Jeff Moore, IFT 2005/06 Graduate Fellowship, Institute of Food Technologists (PhD student)
- 2005 Jeff Moore, 4<sup>th</sup> place winner of the Maryland Section IFT Supplier's Night Poster Competition (PhD student)
- 2005 Jeff Moore, Goldhaber Travel Grant, Graduate School, University of Maryland, College Park, MD 20742 (PhD student)
- 2006 Jeff Moore, 1<sup>st</sup> place winner of the Bioscience Day, University of Maryland, College park, MD
- 2006 Jeff Moore, Outstanding Graduate Student of the Year Award, College of Agriculture and Nature Resources, University of Maryland, College Park, MD 20742 (PhD student)
- 2006 Marla Luther, Goldhaber Travel Grant, Graduate School, University of Maryland, College Park, MD 20742 (MS student)
- 2006 Marla Luther, Mitretek Scholarship, University of Maryland Alumni Association, College Park, MD 20742
- 2006 John Parry, 2006-2007 Dean's Dissertation Fellowship, Graduate School, University of Maryland, College Park, MD 20742
- 2006 Jeff Moore, Graduate Student Scholarship, Food Products Association, Washington, DC 20005 (PhD student)
- 2006 Jeff Moore, IFT 2006/07 Graduate Fellowship, Institute of Food Technologists (PhD student)
- 2007 Jeff Moore, 1<sup>st</sup> prize, Graduate Student Dissertation Research Competition, American Chemical Society, Agricultural and Food Chemistry Division (PhD student)
- 2007 Margaret Smitka, Dean's Flagship Fellowship, Graduate School, University of Maryland, College Park, MD 20742 (PhD student)
- 2008 Monica Whent, Facchina Graduate Fellowship, Facchina Fund,
- 2010 Margaret Smitka, Dean's Dissertation Fellowship, Graduate School, University of Maryland, College Park, MD 20742 (PhD student)

- 2010 Monica Whent, Summer Research Fellowship, Graduate School, University of Maryland, College Park, MD 20742 (PhD student)
- 2010 Zhuohong Xie, Summer Research Fellowship, Graduate School, University of Maryland, College Park, MD 20742 (PhD student)

g. Editorships, Editorial Boards, and Reviewing Activities for Journals and Other Learned Publications.

### **Editorships:**

#### **Editorship for Books:**

1. Ni, P., Wang, L. and **Yu, L.** (ed.) 1993. ORGANIC CHEMISTRY; China Medicinal Publisher, Beijing, P. R. China.
2. **Yu, L.** (ed) 2008. WHEAT ANTIOXIDANTS; John Wiley & Sons, Inc. Hoboken, NJ 07030, USA.
3. **Yu, L.**, Cao, R., Shahidi, F. (ed) 2012. Cereals and Pulses: Nutraceutical Properties and health benefits; Wiley-Blackwell, Inc. Oxford, OX4 2DQ

#### **Editorship for Scientific Journals**

2011-present: Associate Editor, *LWT-Food Science and Technology*, (An official publication of the International Union of Food Science and Technology)

2011-present: Associate Editor, *Journal of Food Science*

#### **Editorial Board:**

2011 - Present: Member of the Editorial Board, *Journal of Agricultural and Food Chemistry*

2006 - Present: Member of the Editorial Board, *Molecular Nutrition and Food Research*

2006 - 2011: Member of the Editorial Board, *LWT-Food Science and Technology*, (An official publication of the International Union of Food Science and Technology)

2007 – Present: Member of the Editorial Board, *Food Chemistry*

#### **Reviewer for following journals:**

Journal of Agricultural and Food Chemistry

Journal of Food Science

ACS Symposium Series

Food Chemistry

Lebensmittel-Wissenschaft und-Technologie

Phytochemistry

International Journal of Food Science & Technology

Journal of Free Radical Biology and Medicine

Meat Science

Life Science

Biochemical Engineering Journal

Lipids

Molecular Nutrition and Food Research

Chemico-Biological Interactions

Carbohydrate Polymers

Journal of Chromatography A

Journal of Food Composition and Analysis

Journal of Nutritional Biochemistry

Journal of Functional Foods

Carbohydrate Research

Food and Chemical Toxicology

British Journal of Nutrition

Journal of Pharmacy and Pharmacology

Journal of American Oil Chemists' Society

### **3. Teaching, Mentoring, and Advising**

- a. Courses taught in the last five years.

*Note:* § denotes courses taught at Colorado State University

FT320 Sensory Evaluation of Food (2 credits, with lab) §  
Spring 2000, 39 students

FT420 Food Quality Assessment (3 credits, with lab) §  
Fall 2001, 9 students  
Fall 2002, 8 students

FT447 Food Chemistry (2 credits) §  
Fall 2000, 63 students  
Fall 2001, 52 students  
Fall 2002, 54 students

FT448 Food Chemistry Lab (1 credit) §  
Fall 2000, 6 students  
Fall 2001, 4 students

FT449 Food Analysis (3 credits, with lab) §  
Spring 2001, 9 students

FN590 Nutraceutical (2 credits, with lab) §  
Spring 2000, 10 students

FT578 Nutraceuticals (3 credits) §  
Spring 2002, 9 students  
Spring 2003, 10 students

GEMS296 Team Project Seminar I (1 credit)  
Fall 2008, 14 students

NFSC 112 Food Science and Technology (3 credits, Food Chem Section)  
Spring 2004, 47 students  
Fall 2005, 88 students  
Fall 2006, 90 students

NFSC 421 Food Chemistry (3 credits)  
Fall 2007, 22 students  
Fall 2008, 21 students  
Fall 2009, 22 students  
Fall 2010, 20 students  
Fall 2011, 30 students

NFSC 423 Food Chemistry Laboratory (3 credits, with lab)  
Fall 2003, 7 students

Fall 2004, 5 students  
Fall 2005, 5 students  
Fall 2006, 5 students  
Fall 2007, 8 students  
Fall 2008, 12 students  
Fall 2009, 10 students  
Fall 2010, 9 students  
Fall 2011, 12 students

NFSC 678G Nutraceutical and Nutritional Chemistry (3 credits)

Spring 2004, 9 students  
Spring 2006, 3 students  
Spring 2007, 8 students  
Winter 2009, 8 students

NFSC 678C Food Safety Chemistry (3 credits)

Spring 2005, 8 students

iv. Independent Study, Tutorial, Internship Supervision.

*Note:* § denotes courses taught at Colorado State University

FT495 Independent Study §

Fall 2001, 1 student (4 credits)

NFSC 498 Selected Topics

Spring 2008, 1 student  
Fall 2008, 1 student

NFSC 699 Problems in Nutrition and Food Science (Independent study)

Summer 2004, 1 student  
Fall 2004, 3 students  
Spring 2005, 3 students  
Fall 2005, 4 students  
Spring 2006, 3 students  
Fall 2006, 4 students  
Spring 2007, 3 students  
Fall 2007, 3 students  
Spring 2008, 6 students  
Fall 2008, 5 students

NFSC 799 Master Thesis Research with group/individual research meetings

Spring 2004, 1 student  
Summer 2004, 2 students  
Fall 2004, 2 students  
*In addition, 1 MS student in Colorado State University*  
Spring 2005, 2 student

Fall 2005, 2 students  
Spring 2006, 2 students  
Fall 2006, 2 students  
Spring 2007, 1 student  
Spring 2008, 2 students  
Fall 2008, 4 students

NFSC 898 Doctoral (Pre)Dissertation Research with weekly group/individual research meetings

Fall 2003, 3 students  
Spring 2004, 3 students  
Fall 2004, 3 students  
Spring 2005, 3 students  
Fall 2005, 2 students  
Spring 2006, 2 students  
Fall 2006, 3 students  
Spring 2007, 2 students  
*In addition, 2 Ph.D students in Colorado State University*  
Fall 2007, 4 students  
Spring 2008, 5 students  
Fall 2008, 3 students

NFSC 899 Doctoral Dissertation Research with weekly group/individual research meetings

Fall 2005, 1 student  
Spring 2006, 1 student  
Fall 2006, 2 students  
Spring 2007, 1 student  
Fall 2008, 1 student  
Spring 2011, 2 students  
Fall 2011, 1 student

b. Course or Curriculum Development.

*Note:* § denotes courses taught at Colorado State University

NFSC 421 Food Chemistry (3 credits)

Fall 2007

NFSC 112 Food Science and Technology (3 credits)

Spring 2004

I revised the course content regarding the Food Chemistry section, prepared the contents for the course website, and taught the Food Chemistry section.

NFSC 423 Food Chemistry Laboratory (3 credits)

Fall 2003 and Fall 2004

I redesigned the course syllabus, prepared new laboratory manual for the course. The current course design encourage students to discuss in the class, and requires students to design and conduct a small research project, prepare a report of the project, and present the findings of the project in the class.

NFSC 678G Nutraceutical and Nutritional Chemistry (3 credits)  
Spring 2004

This is a brand new course for graduate students in Food Science program. I developed the course curriculum and course materials, and prepared study guide. Students are required to conduct literature search, analyze data, and write a technical paper on a selected topic in the field, and present his/her findings to the class.

NFSC 678C Food Safety Chemistry (3 credits)  
Spring 2005

This is a brand new course for graduate students in Food Science program. I developed the course curriculum and course materials, and prepared study guide. Students are required to conduct literature search, analyze data, and write a technical paper on a selected topic in the field, and present his/her findings to the class.

NFSC 421 Food Chemistry (3 credits)  
Fall 2007

I redesigned the course syllabus, prepared new handouts and other activities for the course. The current course design encourages students to discuss in the class, and requires students to prepare a term paper, and present the paper.

FT420 Food Quality Assessment (3 credits, with lab)<sup>§</sup>  
Fall 2001

This is a brand new course for senior undergraduate students in Food Science program. I developed the course curriculum, selected course materials, and prepared study guide and laboratory manual for the course. Students are required to prepare a total quality management plan for a selected food science business, and present his/her plan to the class.

FT447 Food Chemistry (2 Credits)<sup>§</sup>  
Fall 2000

I revised the course syllabus and materials, and prepared the study guide for students.

FT448 Food Chemistry Laboratory (1 Credit)<sup>§</sup>  
Fall 2002

I revised the course materials and prepared the new laboratory manual.

FT449 Food Analysis (3 credits, with lab)<sup>§</sup>  
Spring 2001

I redesigned the course syllabus, prepared new laboratory manual for the course.

FT320 Sensory Evaluation of Food (2 credits, with lab)<sup>§</sup>

Spring 2000

I redesigned the course syllabus, prepared new laboratory manual for the course.

FN 590 Nutraceutical (2 credits, with lab)<sup>§</sup>

Spring 2000

This is a brand new graduate level course for Nutrition and Food Science Students.

I designed the course curriculum and materials, designed the laboratory activities, and prepared the laboratory manual for the course.

FN 590 Nutraceutical (3 credits)<sup>§</sup>

Spring 2002

This is a brand new graduate level course for Food Science, Animal Science, and Plant Science students. I designed the course curriculum and materials, designed the laboratory activities, and prepared the laboratory manual for the course.

c. Manuals, Notes, Software, Webpages, and Other Contributions to Teaching.

**Note:** <sup>§</sup> denotes courses taught at Colorado State University

FT320 Sensory Evaluation of Food, Study Guide and Laboratory Manual, Spring 2000<sup>§</sup>

FT420 Food Quality Assessment, Study Guide and Laboratory Manual, Fall 2001<sup>§</sup>

FT447 Food Chemistry, Study Guide, Fall 2000; and Course Website, Fall 2002<sup>§</sup>

FT448 Food Chemistry Lab, Study Guide and Laboratory Manual, Fall 2000<sup>§</sup>

FT449 Food Analysis, Study Guide and Laboratory Manual, Spring 2001<sup>§</sup>

FN590 Nutraceutical, Study Guide and Laboratory Manual, Spring 2000<sup>§</sup>

FT578 Nutraceuticals, Study Guide, Spring 2002<sup>§</sup>

NFSC 112 Food Science and Technology, Study Guide and course website for Food Chemistry section, Spring 2004

NFSC 421 Food Chemistry, Lecture Notes, Fall 2007

NFSC 423 Food Chemistry Laboratory, Study Guide and Laboratory Manual, Fall 2003

NFSC 678G Nutraceutical and Nutritional Chemistry, Study Guide, Spring 2004

NFSC 678C Food Safety Chemistry, Study Guide, Spring 2005

d. Teaching Awards and Other Special Recognition.

1. Excellence in Instruction Award, University of Maryland College park, College of Agriculture and Natural Resources Alumni Association, Maryland (2006)
2. Invited Instructors for: International Training Program on Aromatic and Medicinal Plants” sponsored by Purdue University (1997)
3. Invited Instructors for International Training Program in Essential Oils: Advanced Studies, sponsored by Purdue University (1998)

e. Advising: Other than Research Direction.

- i. Undergraduate.  
about 3-6 of Food Science majors per year

f. Advising: Research Direction.

**Note:** § denotes activities at Colorado State University

i. Undergraduate.

- |           |  |
|-----------|--|
| 1999-2001 | Jonathan Perret, Antioxidant properties of wheat § <ul style="list-style-type: none"><li>• 5 published articles in peer reviewed scientific journals</li><li>• 3 conference presentations</li><li>• 2001 College research poster award at 7<sup>th</sup> annual undergraduate research and creativity symposium</li><li>• 1<sup>st</sup> place winner of the Rocky Mountain Food &amp; Dairy Expo Student Poster Competition</li><li>• Winner of the 2001 student Travel Grant from Rocky Mountain Institute of Food Technologists (RMIFT)</li></ul> |
| 2000-2001 | Jonathan Perret, Enzymatic modification of psyllium § <ul style="list-style-type: none"><li>• 3 published articles in peer reviewed scientific journals</li><li>• 1 conference presentation</li></ul>  |
| 2001-2002 | Michael Gabel, Free radical scavenging capacity of conjugated linoleic acids § <ul style="list-style-type: none"><li>• 1 published article in peer reviewed scientific journal</li><li>• 2 conference presentations</li></ul>  |

- 3<sup>rd</sup> place winner of the Rocky Mountain Food & Dairy Expo Student Poster Competition
- 2002 Stephanie Rupp, Functionality of wheat grain<sup>§</sup>
- 2003-2004 Marla Luther, Antioxidant properties of selected botanicals
- 1 manuscript submitted to a peer reviewed scientific journal
- 2007- Stephanie Shreiber, antioxidants
- 2008 Rick Lin, Antioxidants
- 2008 Kolade Osho, nutraceutical oils
- 2010 Yicheng Zhong
- 2009-2010 Nick P

ii. Master's.

Principal Research Advisor (for both *Food Science* and *Nutrition* majors)

- 2001-2002 Tina D. Parker, M.S. in Food Science, May 2003, Colorado State University  
Thesis: Fatty acid composition and oxidative stability of cold-pressed edible seed oils
- 2 articles published in peer reviewed scientific journals
  - 1 conference presentation
  - Winner of the 2002 student Travel Grant from Rocky Mountain Institute of Food Technologists (RMIFT)
- 2001-2003 Dwayne A. Adams, M.S. in Nutrition, August 2003, Colorado State University  
Thesis: Fatty acid Composition of commercial raw fish products
- 3 articles published in peer reviewed scientific journals
  - 5 conference presentations
  - 2<sup>nd</sup> place winner of the Rocky Mountain Food & Dairy Expo Student Poster Competition
  - Winner of the 2002 student Travel Grant from Rocky Mountain Institute of Food Technologists (RMIFT)
- 2003-2005 Xiangfei Liu, M.S. in Food Science, August 2004, Colorado State University  
Thesis: Total phenolic content and DPPH radical scavenging ability of lettuce grown in Colorado

- 1 article published
- 2003-2005 Shane Ardo, M.S. in Nutrition, August 2005, University of Maryland  
Thesis: Characterization of commercial olive oils in US
- 1 conference presentation
  - 1 poster presentation award
- 2003-2006 Lan Su, Food Science, University of Maryland  
These: Effects of post-harvest treatments and heat stress on wheat antioxidant properties
- 1 primary authored article published
  - Co-authored a number of articles
- 2005-2006 Marla Luther, Food Science, University of Maryland  
These: natural food preservatives
- 1 primary authored article published
  - Co-authored a number of articles
- 2007-2008 Xiaoying Pei, Food Science, University of Maryland  
Dissertation: psyllium and edible fibers
- 2008-2009 Monica Whent, Food Science, University of Maryland  
These: nutraceutical properties of soybeans grown in MD
- 2008-2009 Raquel Bloom, Nutrition, University of Maryland  
These: anticarcinogenic properties of selected food components
- 2008-2009 Zhouhong Xie, Food Science, University of Maryland  
These: food chemistry, switched to PhD in my lab
- 2008-2010 Jessica Blockford, Food Science, University of Maryland  
These: food chemistry

Member of thesis Committee

- 2000-2003 Serve on 3-5 M.S. thesis committees per year at CUS
- May 2004 Emily T. Yeh, Food Science, University of Maryland
- Aug. 2004 Jian He, Food Science, University of Maryland
- Aug. 2004 Lisa N. Sadar, Food Science, University of Maryland
- 2004-2006 Edra London, Nutrition, University of Maryland
- 2004-2006 Nivedita Dhiman, Food Science, University of Maryland

2006-2008 Peter Machado, Food Science, University of Maryland

2009 Junhao Mar, Nutrition, University of Maryland

2010-2011 Junhao Mar, Nutrition, University of Maryland

iii. Doctoral.

Principal Research Advisor (for both Food Science and Nutrition Majors)

2002-2005 Kequan Zhou, August 2005, Food Science, University of Maryland  
 Dissertation: Phytochemical composition and antioxidant properties of wheat  
First position: Tenure-track Assistant Professor, Department of Food Science, Virginia Tech

- Co-authored (including primary author) 16 articles with me

2003-2006 John Parry, December 2006, Food Science, University of Maryland  
 Dissertation: Fatty acid, tocopherol, carotenoid, and antioxidant properties of cold-pressed edible seed oils and meals  
First position: Assistant Professor, Virginia State University

- Co-authored (including primary author) > 10 articles with me

2004-2007 Jeffery C. Moore, May 2007, Food Science, University of Maryland  
 Dissertation: antioxidant properties and phytochemical profiles of soft wheat grown in Maryland (tentative)  
First position: Senior Scientific Associate, FCC, United States Pharmacopeia

- Co-authored (including primary author) >11 articles with me

2003-2006 Marisa Bunning, Food Science, Colorado State University (Co-advisor)  
 Dissertation: Phytochemical composition and antioxidant properties Colorado grown lettuce)  
First position: Assistant Professor, Colorado State University

2006-2008 Marla Luther, May 2008. Food Science, University of Maryland

	Dissertation: wheat antioxidants <u>First position:</u> FDA
2006-2011	Margaret Slavin, May 2011. Food Science, University of Maryland Dissertation: Nutraceutical properties of soybean <u>First position:</u> Assistant Professor, George Mason University
2007-2012	Herman Eric Lutterodt, Food Science, University of Maryland Dissertation: Nutraceutical properties and quality of novel botanical seed oils and flours
2008-	Ellen Turner, Food Science, University of Maryland Dissertation: specialty lipids and antioxidants
2009-	Monica Whent, Food Science, University of Maryland
2009-	Haiqui Huang, Food Science, University of Maryland
2009-	Zhouhong Xie, Food Science, University of Maryland
2010-	Haiwen Li, Food Science, University of Maryland
2011-	Lu Yu, Human Nutrition, University of Maryland

#### Member of Dissertation Committee

1999-2002	Maria Cristina Dias Paes, Ph.D in Food Science, Dec. 2002, Colorado State University Dissertation: Importance of zein composition in quality protein maize (QPM) to microstructural and chemical modifications of proteins during extrusion and their impact on texture of corn-based extrudates
2003-2005	Yifan Zhang, Major in Food Science, Dec. 2005, University of Maryland Dissertation: Imp
2005-2008 Dean's representative	Eun-Young Hwang, Major in Plant Science, University of Maryland Dissertation: Genetic association analysis for the detection of genetic factors controlling seed protein concentration in soybean
2005-2007	Tina Chung-Ting Han, Major in Nutrition, University of Maryland Dissertation: health and zinc status

- 2006-2007 Rita S. M. Shih, Major in Nutrition, University of Maryland  
Dissertation: Modulation of the growth-arrest and DNA damage-inducible gene (Gadd45) human tumor suppressor gene expression by zinc status
- 2006-2007 Stephen Hon-Kit Wong, Major in Nutrition, University of Maryland  
Dissertation: health and zinc status
- 2007- Junjun Zhang, Major in Nutrition, University of Maryland
- 2008-2010 Heather Shive  
Dean's representative
- 2009-2011 Kristine Crawford, Major in Chemistry, University of Maryland  
Dean's representative
- 2009-2011 Deana Majidi Jaber, Major in Chemistry, University of Maryland  
Dean's representative

iv. Post-Doctoral and Visiting Scientists.

Principal Research Supervisor

- 2001-2002 Dr. M. Qian, Colorado State University  
Project Area: Nutraceuticals for health promotion and disease prevention
- 2004-2005 Dr. Z. Huang, University of Maryland, College park  
Project Area: Relationship between physicochemical properties and potential beneficial effects of chitosan preparations
- 2005-2008 Dr. Z. Cheng, University of Maryland, College park  
Project area: nutraceuticals and Functional Foods
- 2006 Dr. C. Zhang, University of Maryland, College park  
Project area: Food Nanotechnology
- 2008 Dr. Tao Wu, University of Maryland, College park  
Project area: nutraceutical and functional food chemistry
- 2009-2010 Wei Liu, Visiting scientist, University of Maryland, College park  
Project Area: dietary fibers
- 2009-2010 Zhao Yang, Visiting scientist, University of Maryland, College

park  
 Project Area: bioactive factors in supplemental products  
 2010-2011 Yuge Niu, Visiting scientist, University of Maryland, College  
 park  
 Project Area: dietary fibers  
 2010-2012 Junli Lv, Visiting scientist, University of Maryland, College park  
 Project Area: nutraceuticals and functional foods  
 2010-2011 Dr. Wenb Xin, University of Maryland, College Park, MD  
 Project area: natural product chemistry

#### 4. Service

##### a. Professional.

##### i. Offices and committee memberships held in professional organizations.

Membership Chair, Agricultural and Food Chemistry Division, American  
 Chemical Society, (Since 2001)

Secretary, Nutraceutical and Functional Food Division, Institute of Food  
 Technologists, (2007-2008)

Teranishi Graduate Fellowship Committee Member, Agricultural and Food  
 Chemistry Division, American Chemical Society, (2006)

Symposia Co-Organizer, Agrochemistry Area, PacifiChem 2005  
 Co-sponsored by American Chemical Society), Honolulu, Hawaii.

Symposia Co-Organizer, Nutrition and Sensory Properties of Nuts, 231<sup>st</sup>  
 ACS National Meeting, Atlanta, GA, March 26-30, 2006

Symposia Co-Organizer, Specialty Lipids and Conjugated Fatty Acids,  
 236<sup>st</sup> ACS National Meeting, Philadelphia, PA, August 17-21, 2008

Symposia Co-Organizer, Antioxidants and Health, 240<sup>st</sup> ACS National  
 Meeting, Boston, MA, August 22-26, 2010

Symposia Co-Organizer, Agrochemistry Area, PacifiChem 2010  
 Co-sponsored by American Chemical Society), Honolulu, Hawaii.

Co-Organizer and moderator, IFT WebCast “Testing Standards for the  
 Efficacy of Functional Food Ingredients”, July 19<sup>th</sup>, 2011

Affiliate faculty, Department of Nutrition and Food Science, Colorado  
 State University, Fort Collins, CO 80523

Affiliate faculty, Center for Nutrition and Food Safety, Shanghai Jiao Tong  
 University, Shanghai, PR China

Member in following professional Societies:

Institute of Food Technologists  
American Oil Chemists' Society  
American Chemical Society, Membership Chair for Agricultural and Food  
Chemistry Division  
American Association of Cereal Chemists  
American Association for the Advancement of Science

ii. Reviewing activities for agencies.

Reviewed grants for USDA-NRI Human Nutrition and Improving Food  
Quality programs

iii. Paid consultancies.

- Consultant, Kellogg's Company, Battle Creek, MI
- Scientific Advisor, Botanic Oil Innovations, Spooner, WI 54801
- Consultant, FDA Staff College Training Workshop
- Consultant, Baker & Hostetler LLP, Washington, DC 20036

b. Campus.

i. Departmental (University of Maryland only).

Food Science Curriculum Committee  
Member, 2003-

Department TA Committee  
Member, 2003-2006

Merit Pay Committee  
Member, 2004-2006 (Chair, 2006)

Scholarship and Awards Committee  
Member, 2004-2008

Food Science Review Committee  
Member, 2004-

Mentor for Prof. Qin Wang  
2008-2009

And a member for a few faculty search committees

ii. College.

Academic Efficiencies and Effectiveness Committee  
Member, 2004

NFSC Chair Search Committee  
Member, 2004

iii. University.

Biological and Chemical Hygiene Committee (BACH)  
Member, 2003-2006

Nutrition graduate program  
Director (2007-2011)

c. Community, State, National.

Great DC Area China Pharmaceutical University Alumni Association  
President, 2003-2006

Consolidated Society of Chinese University Alumni Associations  
Board member, 2003-2006

Great DC Area China Pharmaceutical University Alumni Association  
Board member, 2006-

Great DC Area China Pharmaceutical University Alumni Association  
President, 2008-

Consolidated Society of Chinese University Alumni Associations  
Board member, 2008-