

CURRICULUM VITA

Yun-Hwa Peggy Hsieh



Betty M. Watts Professor and Graduate Program Director

Department of Nutrition, Food and Exercise Sciences
College of Human Sciences, Florida State University
Tallahassee, Florida, 32306-1493

EDUCATION

B.S.	Nutrition & Food Science	Fu-Jen University, Taiwan
M.S.	Animal Science	Purdue University, Indiana, USA
Ph.D.	Food Science	Florida State University, Florida, USA

PROFESSIONAL EXPERIENCE

2008-present Graduate Program Director, Department of Nutrition, Food and Exercise Sciences (NFES), FSU.
2007-present Betty M. Watts Professor of Food Science, NFES, FSU.
2003-2006 Professor and Tyner Lecturer, NFES, FSU.
2003-present Professor, NFES, FSU.
2002-2003 Professor, Department of Nutrition & Food Science, Auburn University
1997-2002 Associate Professor, Department of Nutrition & Food Science, Auburn University.
1993-1997 Assistant Professor, Department of Nutrition & Food Science, Auburn University.
1988-1993 Chemist Administrator, Florida Department of Agriculture and Consumer Services.

HONORS AND AWARDS

- Betty M. Watts Professor, 2007
- Fellow, Institute of Food Technologists (IFT), 2007
- Fellow, International Academy of Food Science & Technology (IAFoST), 2006
- Centennial Laureate Award, College of Human Sciences, FSU, Fall 2005
- Tyner Lecturer, College of Human Sciences, FSU, 2003-2005.
- Distinguished Service Award, Chinese American Food Society (CAFS), 2005
- Professional Achievement Award, Chinese American Food Society (CAFS), 2004
- Florida Food Safety and Food Defense Advisory Council, 2003- present, elected Secretary, 2008
- Distinguished Alum Award, College of Human Sciences, Florida State University, 2002

- Consulting Professor in Food Science, College of Food Science, Biotechnology and Environmental Engineering, Hangzhou University of Commerce, China. 2001.
- Advisory Board Member, Professional Educational Services International, Hong Kong, China, 1997, 2006-present
- Kappa Omicron Nu National Human Sciences Honor Society
- Phi Tau Sigma Food Science Honor Society
- Invited speaker, > 65 invited talks in the U.S. Australia, New Zealand, Hungary, China, Spain, Japan & Taiwan.

TEACHING

Courses Taught at:

Florida State University

- FOS 5936 Food Safety and Food Quality
- HUN 3934 Selected Topics in Food & Nutrition
- FOS 4209 Food Safety & Food Quality
- HUN 6248 Immunoassay
- FOS 3026 Foods
- HUN/FOS/PET 6930 Seminar for Doctoral Students
- HUN/FOS 5930 Seminar in Nutrition and Food Sciences
- HUN 6906 Directed Individual Study

Auburn University

- NUFS 4410 Experimental Food Science
- NUFS 6450 Food Analysis and Quality Control
- NUFS 7210 Advanced Food Science: Protein and Fat
- NUFS 7280 Lab Research Method: immunoassay
- NUFS 645 Food Product Development
- NUFS 655 Graduate Seminar
- NUFS 609 Special Problems in Food Science

2. Graduate Students Completed (44)

- **Major Professor** (16 students)
- **Committee Member** (20 students)
- **Outside Reader** (5 students)
- **Honor-in-Major** (2 student)
- **Science Prep Research Intern** (1 student)

3. Students in Progress (11)

- **Major Professor** (6 students)
- **Committee Member** (6 students)

4. Postdoctoral Fellow Supervised (5)

5. International Visiting Scholars Hosted (8)

RECENT REFEREED PUBLICATIONS (Since 2005: 59)

1. Article-Length Publications (17)

(* denotes graduate students; ** denotes Research Associates)

a. Book Chapter (4) (⊥ indicates invited articles)

- ⊥ Hsieh, Y-H. P and Ofori, J. Advances in biotechnology for the production of nutraceuticals and functional foods. In: Biotechnology in Functional Foods and Nutraceuticals. (In Review)
- ⊥ Hsieh, Y-H. P. 2009. Chapter 17: Immunoassay. In: Food Analysis. 4th. Edition. Ed. Nielsen. Springer. (In Press).
- ⊥ Hsieh, Y-H. P. Pao, S. Li, J.R. 2008. Chinese fermented functional foods. In: 2nd Edition of the Handbook of Fermented Functional Foods, 2nd.Edition. Ed. Edward Farnworth. CRC Press. Chapter 16, pp.433-474.
- ⊥ Hsieh, Y-H.P. 2005. Meat species identification. In: Handbook: Food Science, Technology and Engineering. Ed. Hui, CRC Press. (Invited review) pp. 30-1 to 30-19.

2. Journal Articles (13)

- Ofori, J.A. * and Hsieh, Y-H.P. Infectivity of blood in TSE transmission: is it safe to use blood as a food source for humans and animals? International Journal of Food Science and technology. (In review).
- Gajewski, K.G. * Yi-Tien Chen* and Hsieh, Y-H. P. 2009. Production and characterization of monoclonal antibodies specific to Pangasius catfish, basa and tra. Journal of Food Science. 74(3):C241-247.
- Gajewski, K.G. * and Hsieh, Y-H. P. 2009. Monoclonal antibody to a major fish allergen-parvalbumin. Journal of Food Protection. 72(4):818-825.
- Rao, Q. * and Hsieh, Y-H.P. 2008. Competitive enzyme-linked immunosorbent assay for the quantitative detection of bovine blood in heat-processed meat and feed. Journal of Food Protection. 71 (5):1000-1006.
- Wu, V.C.H.; Qiu, X. and Hsieh, Y-H.P. 2008. Evaluation of Escherichia coli O157:H7 in apple juice with Cornus fruit (*Cornus officinalis Sieb.et Zucc.*) extract by conventional media and thin agar layer method. Food Microbiology 25:190-195.
- Rao, Q. * and Hsieh, Y-H.P. 2007. Evaluation of a commercial lateral flow feed test for rapid detection of beef and sheep content in raw and cooked meats. Meat Science 76:489-494.
- Hsieh, Y-H.P. and Ofori, J.A. * 2007. Innovation in food technology for health. Asia Pacific Journal of Clinical Nutrition. 16(Suppl 1):65-73.
- Hsieh, Y-H. P. Ofori, J.A. *, Rao, Q. * and Bridgman, R.C. 2007. Monoclonal antibodies specific to thermo-stable proteins in animal blood. Journal of Agricultural and Food Chemistry 55:6720-6725.
- Ofori, J.A. * and Hsieh, Y-H.P. 2007. Sandwich ELISA for the detection of bovine blood in animal feed. Journal of Agricultural and Food Chemistry 55:5919-5924.
- Chen, F-C, Hsieh, Y-H.P., Kilonzo-Nthenge, A. and Bridgman, A. 2006. Kinetics of tropomyosin denaturation as a predictive model for verifying thermal processing

- of beef products. Journal of Food Protection. 69: 2447-2453.
- Liu, L. *, Chen, F-C., Dorsey, J. and Hsieh, Y-H.P. 2006. Sensitive monoclonal antibody-based sandwich ELISA for the detection of porcine skeletal muscle in meat and feed products. Journal of Food Science, 71: M-1-6.
- Djordjevic, N. * and Hsieh, Y-H.P. 2005. Quantitative detection of poultry adulterants in cooked meat products. J. Food Science. 70(9): C586-C593.
- Ren, Z. * and Hsieh, Y-H. P., 2005. Real time determination of microbial activity of pasteurized fluid milk using a novel microrespirometer method. Journal of AOAC International. 88(6):1756-1761.

3. Papers at Professional Meetings with Published Abstracts (29):

Papers/Abstracts at International Meetings (7):

- Hsieh, Y-H.P. and Rao, Q. An improved extraction method enhances the detection of CNS tissue in processed food and feedstuffs. 14th World Congress, Shanghai, China , October 19-23, 2008
- Hsieh, Y-H.P. and Ofori, J. Infectivity of Blood in transmission of prion diseases. International Conference on Agricultural Research, Athens, Greece, Aug 28-31, 2008
- Ofori, J.A. * and Hsieh, Y-H.P , Sandwich ELISA for the Detection of Bovine Blood in Animal Feedstuffs. 2007 Annual meetings of the International Association of Food Protection. Abstract No. 164-05.
- Gajewski, K. * and Hsieh, Y-H.P Thermo-stable Antigenic Proteins in Fish. 2007 Annual meetings of the International Association of Food Protection.
- Rao, Q. * and Hsieh, Y-H.P Characterization of a monoclonal antibody specific to ruminant blood. 2007 Annual meetings of the International Association of Food Protection.
- Tang,F. Guo, J. Zhang, J. Li, SU,M., Jing, J. and Hsieh, Y-H.P. Hypotensive and Vasodilatory Properties of Celery (*Apium graveolens*) Juice. 13th IUFoST World Congress, Nante, France. 2006. Abstract No.
- Gajewski, K. *, Rao, Q. * and Hsieh, Y-H.P. Enzyme-linked immunosorbent assay (ELISA) for detection of poultry content in heat-processed meat. 2006 Annual Meetings of the International Association of Food Protection. Abstract No. P2-43.

Papers/Abstracts at National Meetings (21):

- Chen, Y-T. * and Hsieh, Y-H.P. 2009. Characterization of a thermal-stable antigenic protein in fish. Annual Meeting of Institute of Food Technologists, Anaheim, CA.
- Rao, O * and Hsieh, Y-H. P. 2009. A sensitive immunoassay for the detection of raw and processed bovine brain. Annual Meeting of Institute of Food Technologists, Anaheim, CA.
- Ofori, J. * and Hsieh, Y-H. P. 2009. Characterization of a 12 kDa thermal-stable antigenic protein in bovine blood. Annual Meeting of Institute of Food Technologists, Anaheim, CA.
- Rao, Q. * and Hsieh, Y-H. P. 2008. Stability of Bovine Myelin Basic Protein. 2008 Annual Meeting of Institute of Food Technologists, New Orleans, LA.

- Chen, Y-T. *, Gujewski, K. * and Hsieh, Y-H.P. 2008. An immunoassay for distinguishing snapper and grouper from aquacultured substitute. 2008 Annual Meeting of Institute of Food Technologists, New Orleans, LA.
- Gujewski, K. * and Hsieh, Y-H.P. 2008. Monoclonal Antibody Specific to the Major Fish Allergen – Parvalbumin. 2008 Annual Meeting of Institute of Food Technologists, New Orleans, LA.
- Hylton, N. * Chuang, K. * and Hsieh, Y-H.P. 2008. Evaluation of Disinfecting Wipes on the Removal of Natural Bacterial Contaminants from Shopping Cart Handles. 2008 Annual Meeting of Institute of Food Technologists, New Orleans, LA.
- Hsieh, Y-H.P.;Gajewski, K. * and Chen, Y-T. *, 2008. Rapid identification of imported Asian catfish after cooking. 59th Pacific Fisheries Technologists Annual meeting Abstract Book, p. 18.
- Tom, P.D. and Hsieh, Y-H.P. 2008. Antimicrobial Agents in imported aquacultured seafood. 59th Pacific Fisheries Technologists Annual meeting. Abstract Book p. 29.
- Turesdell, D., Hylton, N. *, Sullivan, P. Hsieh, P. 2007. Dietetics/merchandising collaboration boosts retail opportunities for entry-level graduates. Abstract no. A-16, August 2007 Supple 3-Abstracts Vol 107, No. 8.
- Chung, K. * and Hsieh, Y-H.P. Sanitary condition of supermarket shopping cart handle surface in Tallahassee, Florida. 2007 Annual meetings of the International Association of Food Protection.
- Hsieh, Y-H.P., Ofori, J.A. *, Rao, Q. * Monoclonal antibody specific to thermo-stable proteins in animal blood. 2007 Annual Meetings of Institute of Food Technologists. Abstract No. 164-05.
- Chen, Fur-Chi, Hsieh, Y-H. P., Bridgman, R.C. and Kilonzo-Nthenge, A. Immunoassay for quantifying denaturation of tropomyosin in cooked beef. 2006 Annual Meetings of Institute of Food Technologists. Abstract No. 071-04.
- Rao, Q. * and Hsieh, Y-H. P. Thermal-stable marker protein in bovine central nervous system. 2006 Annual Meetings of Institute of Food Technologists. Abstract No. 0391-10.
- Liu, L. * and Hsieh, Y-H.P. Monoclonal Antibody-based Sandwich ELISA for Detection of Ovine Muscle in Cooked Meat. 2006 Annual Meetings of Institute of Food Technologists. Abstract No. 0391-15.
- Ofori, J. * and Hsieh, Y-H. P. Double Sandwich ELISA for Detecting Bovine Blood in Processed Food. 2006 Annual Meetings of Institute of Food Technologists. Abstract No. 039F-18.
- Gajewski, K. * Chen, F. , Bridgman, R. and Hsieh, Y-H. P., Monoclonal antibodies specific to poultry trponin I. 2006 Annual meeting of Institute of Food Technologists. Abstract No. 0391-17.
- Wu, V.C.H.and Hsieh, Y-H.P. Effect of *Cornus* fruit (*Cornus officinalis* Sieb. et Zucc.) extract on suppression of growth of *Escherichia coli* O157:H7, *Listeria monocytogenes*, *Salmonella Typhimurium*, and *Staphylococcus aureus* in fresh ground beef. 2005 IFT Annual Meetings.
- Ju, Z. ** and Hsieh, Y-H.P. Aggregation of proteins in salt extracts from twelve animal species of meat. 2005 IFT Annual Meetings.

Rao, Q. * and Hsieh, Y-H.P. Monoclonal antibody-based sandwich enzyme immunoassay for the detection of mammalian meat in raw, cooked and autoclaved poultry products. 2005 IFT Annual Meetings.

Hsieh, Y-H.P., Liu, L. *, Chen, F-C. and Dorsey, J. Sensitive monoclonal antibody-based sandwich ELISA for the detection of porcine skeletal muscle in meat and feed products. 2005 IFT Annual Meetings.

Papers/Abstracts at Regional Meetings (1):

Truesdell, D., Hylton, N. * Hsieh, Y-H.P. and Sullivan, P. 2006. Dietetics/Merchandising Collaboration Boost Retail Opportunities for Entry-Level Graduates. Florida Dietetic Association Annual Meeting Poster Session Orlando, Florida, July 11, 2006

PATENTS AND INVENTIONS (11)

1. Title: Monoclonal antibodies specific to cooked meats. Y-H.P. Hsieh, inventor. **U.S. Patent Number 6,692,930, issued February 17, 2004.**
2. Title: Monoclonal antibodies specific to cooked meats. Y-H.P. Hsieh, inventor. **U.S. Patent Number 6,423,506, issued July 23, 2002.**
3. Title: Monoclonal antibodies specific to raw and cooked pork. Y-H. P. Hsieh, Inventor, **U.S. Patent Number 6,288,215, issued Sept 11, 2001.**
4. Title: Jellyfish collagen for prevention and treatment of rheumatoid arthritis. **U.S. Patent Number 6,894,029, issued May 17, 2005.**
5. Title: Microbiometer and associated methods. Y-H.P. Hsieh and Y.P. Hsieh. **U.S. Patent No. 7,141,430, issued on 11/28/2006.**
6. Title: Methods for end point temperature testing. Y-H. P. Hsieh, inventor. **U.S. patent No. 7,344,848, issued on 3/189/2008.**
7. Title: Troponin I as a thermostable species marker for cooked meat speciation, and monoclonal antibodies developed against troponin I. Y-H.P. Hsieh and F-C. Chen. **U.S. Patent No. 7,297,500, issued November 20, 2007.**
8. Title: Methods of forming monolayers for immunosensors and application for the detection of microorganisms. Vodyanoy, V.J., Chin, B.A., Barbaree, J.M., Neely, W.C., Pathirana, S.T., Hsieh, Y-H.P., Zee, R. Hing-Chung, Wikle, US and International Patent Pending.
9. Title: Immunoglobulin peptides against heated bovine blood, Y-H. P. Hsieh, Inventor. Filed Jan, 2007. Patent-pending.
10. Title: Immunoglobulin peptides against Asian Pangsius catfish. 2008. Patent application filed on 9/20/2008
11. Paten Disclosure (FSU TTO File # 06-097)

LICENSED TECHNOLOGIES (3)

- Monoclonal antibodies for the detection of species content in heat-processed meats. Between Auburn University and ELISA Technologies, Inc. 2001.
 - (a) Products #1 : MELISA Ruminant Assay for the detection of banned ruminant tissue in feed (**Approved in Japan as the official method for BSE surveillance in 2006**)

- (b) Product #2: MELISA Pork Assay for the detection of porcine meat speciation.
- Monoclonal antibodies for the detection of species content in heat-processed meats.
- (c) Product #1: Reveal **Ruminant Assay in Meat-Bone-Meal**
- (d) Product #2: Reveal Ruminant Assay in Feed (**AOAC-certified method**)
- Monoclonal antibodies for the detection of raw and cooked fish species.
- (a) Product development in process

GRANTS AND CONTRACTS

- Funded Research Grants: >\$2.5 millions

GRANT PROPOSAL REVIEWER/PANELIST

- National Science Foundation, Invited review panelist for the Agricultural Marine and Foods Panel, SBIR Program
- USDA-NRI Competitive Grants
- USDA-SBIR Grant proposals
- Maryland Agricultural Experiment Station grant proposals
- Alabama Agricultural Experiment Station grant proposals
- Maine Agricultural Experiment Station grant proposals
- US Civillan Research and Development Foundation (CRDF)
- Auburn University Detection and Food Safety Center AUDFS (15 proposals)

FREQUENT REVIEWER FOR 23 REFEREED JOURNALS

Animal Feed Science and Technology, since 2008
 Archives of Industrial Hygiene and Toxicology, since 2007
 Aquaculture, since 2005
 Asia Pacific Journal of Clinical Nutrition, 2006
 Endangered Species Research, since 2008
 Food Control, 2007
 Food Science and Technology, 2008
 Hydrobiologia, since 2000
 Immunobiology, since 2007
 Journal of Animal Science, since 2008
 Journal of AOAC International, since 1993
 Journal of Food Science, since 1994
 Journal of Food Biochemistry, 2007
 Journal of Agricultural and Food Chemistry, since 1998
 Journal of Food Composition and Analysis, 1999
 Journal of Food Quality, 1994
 Journal of Food Protection, since 2008
 Journal of Food Processing and Preservation, since 2007
 Journal of Rapid Methods and Automation in Microbiology, 2007
 Journal of the Science of Food and Agriculture, 2007
 LWT - Food Science and Technology, since 2008

Meat Science, since 2000
Trends in Food Science and Technology, 1993

EDITORIAL BOARD MEMBER

- a) Archives of Industrial Hygiene and Toxicology, since 2007
- b) IFT's on-line journal Comprehensive Reviews in Food Science and Food Safety, since 2008

PROFESSIONAL MEMBERSHIP

- Institute of Food Technologists (IFT)
- International Association of Food Protection (IAFP)
- American Meat Science Association
- American Chemical Society (ACS)
- Association of Official Analytical Chemists International
- Chinese American Food Society (CAFS)
- Chinese American Professional and Academic Association in Southeastern United States (CAPASUS)
- Chinese American Scholar and professional Association in Florida (CASAF)
- Sigma Xi, The Scientific Research Society