CURRICULUM VITAE

EUN JOO LEE

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Food Science and Technology Program
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Education

Ph.D.	Food Science and Technology, Korea University, Korea	03/1997 - 08/2001
M.S.	Food Chemistry, Korea University, Korea	09/1992 – 02/1995
B.S.	Food and Nutrition, Myong Ji University, Korea	03/1988 – 02/1992

Professional experience

Professor	Kinesiology, Health, Food & Nutritional Sciences Department, University of Wisconsin-Stout, USA	08/2020 – Present
Department Chair	Food and Nutrition Department University of Wisconsin-Stout, USA	05/2018 – 06/2020
Graduate Program Director	M.S. Food and Nutritional Sciences Program University of Wisconsin-Stout, USA	01/2016 – 05/2019
Associate Professor	Food and Nutrition Department University of Wisconsin-Stout, USA	07/2015 – 08/2020
Evelyn Van Donk Steenbock Endowed Chair	Food and Nutrition Department University of Wisconsin-Stout, USA	07/2015 – 08/2017
Assistant Professor	Food and Nutrition Department University of Wisconsin-Stout, USA	08/2011 – 06/2015
Assistant Scientist I	Animal Science Department Iowa State University, Ames, IA, USA	01/2007 - 08/2011
Postdoctoral Research Associate	Animal Science Department Iowa State University, Ames, IA, USA	09/2001 - 12/2006
Part-time lecturer	Basic Nutrition course, Shin Heung College, Korea	03/2001 – 08/2001
Part-time lecturer	Public Hygiene course, Kyung Min College, Korea	09/2000 – 02/2001
Researcher	Center for Advanced Food Science & Technology (CAFST), Korea Univ. Korea	09/1995 – 02/1997
Part-time lecturer	Public Hygiene course, Shin Heung College, Korea	03/1996 – 08/1996
Teaching Assistant	Food and Nutrition Department, Yong-In University, Korea	09/1992 – 08/1994

Research areas

- Production of plant-based meat alternatives using 3D-food printing technology
- Development of functional bioactive peptides using phosvitin from egg yolk
- Separation, modification and utilization of value-added egg components
- Mechanisms and control of off-odor production and color changes in irradiated meats
- Development of novel active packaging using TACD (triacetyl cyclodextrin) for irradiated beef products to minimize off-odor volatile compounds
- Production and characterization of lutein nano-emulsion
- Effect of omega-3 fatty acids on the quality of dairy products during processing and storage
- Sodium reduction of dairy and meat products
- Development of HACCP programs for health food, meat and egg companies
- Development of ESR (Electron Spin Resonance) detection method in irradiated food
- Physicochemical properties and eating quality of rice

Awards, Honors, and Recognition

- Sabbatical Award for 2021-2022 academic year, University of Wisconsin-Stout, Dec. 2020
- IFT Food Chemistry Division Service Award, Institute of Food Technologist (IFT), July 2020.
- Nominees of 2017 Outstanding Graduate Faculty Award, University of Wisconsin-Stout, May 2017.
- IFT Food Chemistry Division Volunteer Award, Institute of Food Technologist (IFT), July 2016.
- IFT Food Chemistry Division Service Award, Institute of Food Technologist (IFT), July 2015.
- Evelyn Van Donk Steenbock Endowed Chair Award, University of Wisconsin-Stout, May 2015.
- P&S Outstanding New Professional Award, Iowa State University, Sept. 2009.
- Medal of an Excellent Research Paper, Annual Meeting of Korean Society of Food Science and Technology, May 2000.
- Honor scholarship, Myong Ji University, Korea, Mar. 1991.
- Honor scholarship, Myong Ji University, Korea, Sept. 1989.

Licenses and Certification

- Certificate of FSPCA training course: "Preventive Controls for Human Food", approved by "Food Safety Preventive Controls Alliance (FSPCA) with Food & Drug Administration (FDA)", Aug. 2016.
- Certification of Certified Food Scientist (CFS), approved by "Institute of Food Technologist (IFT)", June 2016.
- Korean Nutritionist License, approved by "The Ministry of Health and Welfare, Korea", Apr. 1992.

RESEARCH ACTIVITIES

1. Publications

(1) Thesis

Ph.D. Electron Spin Resonance Studies of Free Radicals in γ-Irradiated Soybean Paste and Model System. 2001, Korea University, Seoul, Korea. (**Advisor**: Prof. Cherl-Ho Lee, Korea University)

M.S. Studies on Correlation between Physicochemical Properties and Eating Quality of Rice. 1995, Korea University, Seoul, Korea. (**Advisor**: Prof. Cherl-Ho Lee, Korea University)

(2) Referred Journal Articles (Scientific peer reviewed papers)

1. Shipman, R., Doering, S., Hemsath, J., **Lee**, E.J., and Grant, J.E, 2020, Activity of Phosvitin in Hydroxyapatite Acid-Damage Immersion and Antimicrobial Assays, *Biochemistry Research International*, Open Access: Vol. 2020 (Article ID 8831311, *https://doi.org/10.1155/2020/8831311*)
2. Huang, Xi, Moon, Sun Hee; Lee, Jae Hoon; Paik, Hyun-Dong; **Lee**, Eun Joo; Min, Byungrok; Ahn, Dong, 2019, Effective preparation method of phosphopeptides from phosvitin and the analysis of peptide profiles using tandem mass spectrometry, *Journal of Agricultural and Food Chemistry*, 67: 14086-14101.
3. Huang, X., E.J. **Lee** and D.U. Ahn, 2019, Development of Non-Dairy Creamers Analogs/Mimics for an Alternative of Infant Formula using Egg White, Yolk and Soy Proteins, *Asian-Australasian Journal of Animal Sciences (AJAS)*, 32 (5):607-617, DOI: https://doi.org/10.5713/ajas.18.0738.
4. Shin, J.M., E.J. **Lee**, and D.U. Ahn, 2018, Electrospinning of tri-acetyl-β-cyclodextrin (TA-β-CD) functionalized low-density polyethylene to minimize sulfur odor volatile compounds, *Food Packaging and Shelf Life*, 18:107-114. DOI: https://doi.org/10.1016/j.fpsl.2018.10.005
5. Al-Hijazeen, M., A. Mendonca, E.J. **Lee**, and D.U. Ahn, 2018, Effect of Oregano Oil and tannic acid combinations on the quality and sensory characteristics of cooked chicken meat, *Poultry Science*, 97(2):676-683.
6. Hong, S.P., E.J. **Lee**, Y.H. Kim, and D.U. Ahn, 2016, Effect Fermentation Temperature on the Volatile Composition of Kimchi, *Journal of Food Science*, 81(11): C2623-2629.
7. Al-Hijazeen, M., E.J. **Lee**, A. Mendonca, and D.U. Ahn, 2016, Effect of Oregano Essential Oil (*Origanum vulgare subsp. hirtum*) on the Storage Stability and Quality Parameters of Ground Chicken Breast Meat, *Antioxidants*, 5(2),18; doi:10.3390/antiox5020018
8. Al-Hijazeen, M., E.J. **Lee**, A. Mendonca, and D.U. Ahn, 2016, Effects of Tannic Acid on Lipid and Protein Oxidation, Color, and Volatiles of Raw and Cooked Chicken Breast Meat during Storage, *Antioxidants*, 5(2),19; doi:10.3390/antiox5020019
9. Feng, X., E.J. **Lee**, K. Nam, C. Jo, K.Y. Ko, and D.U. Ahn, 2016, Mechanisms of Volatile Production from Amino Acid Esters by Irradiation, *Food Research International*, 81: 100-107.
10. Ahn, D., E.J. **Lee**, X. Feng, W. Zhang, J.H. Lee, C. Jo, and K. Nam, 2016, Mechanisms of volatile production from non-sulfur amino acids by irradiation, *Radiation Physics and Chemistry*, 119: 64-73.
11. Ahn, D., E.J. **Lee**, X. Feng, W. Zhang, J.H. Lee, C. Jo, and K. Nam, 2016, Mechanisms of volatile production from sulfur-containing amino acids by irradiation, *Radiation Physics and Chemistry*, 119: 80-84.
12. Samaraweera, H., S.H. Moon, E.J. **Lee**, J. Grant, J. Fouks, I. Choi, J.W. Suh and D.U. Ahn, 2014, Characterization of phosvitin phosphopeptides using MALDI-TOF mass spectrometry. Food Chem. Vol.165: 96-103.
13. Zhang, W., M. Al-Hijazeen, H. Samaraweera, E.J. **Lee**, and D.U. Ahn, 2013. Breast meat quality of broiler chickens can be affected by managing the level of nitric oxide. Poultry Science, 92:3044-3049.
14. Samaraweera, H., S.H. Moon, E.J. **Lee**, S.H. Yang, J.W. Suh, and D.U Ahn, 2013, Chemical Hydrolysis of Phosvitin and the Functional Properties of the Hydrolysates. Int. J. Eng. Res. & Tech., 2(11): 3373-3386.
15. Hur, S.J., B.R. Min, K.C. Nam, E.J. **Lee**, and D.U. Ahn, 2013. Effect of Dietary Cholesterol and Cholesterol Oxides on Blood Cholesterol, Lipids, and the Development of Atherosclerosis in Rabbits. Lipids in Health and Disease. Int. J. Mol. Sci. 14(6): 12593-12606.
16. Ahn, D.U., I.S. Kim and E.J. **Lee**, 2013. Irradiation and additive combinations on the pathogen reduction and quality of poultry meat. Poultry Sci. 92 (2): 534-545.
17. Sun, H., M. Persia, H. Samaraweera, E.J. **Lee**, and D.U. Ahn, 2013. Effects of dietary corn distiller's dried

grains with solubles (DDGS) on chemical composition and nutrients content of egg. Poultry Sci. 92:233–242.

18. Sun, H., M. Persia, H. S. Ragheb, E.J. **Lee**, and D.U. Ahn, 2012. Effects of increasing concentrations of corn distiller's dried grains with solubles (DDGS) on the egg production and internal quality of eggs. Poultry Sci. 91:3236-3246.
19. Kwon, J.H., K. Akram, K.C. Nam, B.R. Min, E.J. **Lee**, and D.U. Ahn, 2012. Potential chemical markers for the identification of irradiated sausages. J. Food Sci. 77 (9): C1000-1004.
20. Lee, K.H., H.J. Yun, J.W. Lee, D.U. Ahn, E.J. **Lee**, and C. Jo, 2012. Volatile compounds and odor preference of ground beef added with garlic and red wine, and irradiated with charcoal pack. Rad. Phys. Chem. 81(8):1103-1106.
21. Kim, I.S., C. Jo, K.H. Lee, E.J. **Lee**, D.U. Ahn, and S.N. Kang. 2012. Effects of Low-Level Gamma Irradiation on the Characteristics of Fermented Pork Sausage during Storage. Radiation Physics Chemistry 81(4): 466-472.
22. Kwon, J.H., Y.J. Kwon, T. Kausar, K.C. Nam, B.R. Min, E.J. **Lee**, and D.U. Ahn, 2012. Effect of cooking on radiation-induced chemical markers in beef and pork during storage. J. Food Sci. 77(2): C211-215.
23. Kwon, J.H., E.J. **Lee**, T. Kausar, and D. U. Ahn, 2011. Effect of fat substitute or plum extract on the formation of hydrocarbons and 2-alkylcyclobutanones in freeze-dried beef patties by irradiation. Korean J. Food Sci. Anim. Resources 31(6): 858-864.
24. Samaraweera, H., W. Zhang, E.J. **Lee**, and D.U. Ahn, 2011. Production of functional phosphopeptides from phosvitin and their applications in foods and promoting human health. J. Food Sci. 76 (7): R143-149.
25. Kwon, J.H., K. Akram, K.C. Nam, E.J. **Lee**, D.U. Ahn, 2011. Evaluation of radiation-induced compounds in irradiated raw or cooked chicken meat during storage. Poultry Sci. 90:2578-2583.
26. Yang, H. S., E. J. **Lee**, S. H. Moon, H. D. Paik and D. U. Ahn, 2011. Effect of garlic, onion, and their combination on the quality and sensory characteristics of irradiated raw ground beef. Meat Sci. 89:202-208.
27. Nam, K.C., E.J. **Lee**, D.U. Ahn, J.H. Kwon, 2011. Dose-dependent changes of chemical attributes in irradiated sausages. Meat Science 88:184-188.
28. Xiao, S., W. Zhang, E.J. **Lee**, C. Ma and D.U. Ahn, 2011. Effects of diet, packaging, and irradiation on protein oxidation, lipid oxidation and color of raw broiler thigh meat during refrigerated storage. Poultry Sci. 90:1348-1357.
29. Xiao, S. W. G. Zhang, E. J. **Lee**, C. W. Ma, and D. U. Ahn, 2011. Lipid and protein oxidation of chicken breast rolls as affected by dietary oxidation levels and packaging. J. Food Sci. 76(4):C612-C617.
30. Ko, K. Y., K.C. Nam, C. Jo, E.J. **Lee**, and D. U. Ahn, 2011. A simple and efficient method for separating phosvitin from egg yolk using ethanol and sodium chloride. Poultry Sci. 90: 1096-1104.
31. Zhang, W., S. Xiao, E.J. **Lee** and D.U. Ahn, 2011. Consumption of oxidized oil increases oxidative stress and affects the quality of broiler breast meat. J. Agric. Food Chem. 59 (3): 969–974.
32. Yang, H. S., E. J. **Lee**, S. H. Moon, H. D. Paik and D. U. Ahn, 2011. Addition of garlic or onion before irradiation on lipid oxidation, volatiles and sensory characteristics of cooked ground beef. Meat Sci. 88(2):286-291.
33. Zhang, W., S. Xiao, H. Samaraweera, E.J. Lee and D. U. Ahn, 2010. Improving functional value of meat products. Meat Sci. 80:15-31.

34. Kwon, J. H., K. C. Nam, E. J. Lee, H. J. Kang, and D. U. Ahn, 2010. Effect of electron beam irradiation and storage on the quality attributes of sausages with different fat contents. J. Animal Sci. 88:795-801.
35. Ismail, H.A., E.J. Lee, K.Y. Ko and D.U. Ahn, 2009. Fat content influences the color, lipid oxidation and volatiles of irradiated ground beef. J. Food Sci. 74(6): C432-C440.
36. Kwon, J.H., J. Lee, C. Waje, J.J. Ahn, G.R. Kim, H.W. Chung, D.H. Kim, J.W. Lee, M.W. Byun, K.S. Kim, K.S. Kim, S.H. Park, E.J. Lee, and D.U. Ahn, 2009. The quality of irradiated red ginseng powder following transport from Korea to the United States. Rad. Phys. Chem. 78:643-646.
37. Ismail, H.A., E.J. Lee, K.Y. Ko, H. D. Paik and D.U. Ahn, 2009. Effect of antioxidant application methods on the color, lipid oxidation and volatiles of irradiated ground beef. J. Food Sci. 74(1/2): C25-32.
38. Kwon, J.H., Y.J. Kwon, K.C. Nam, E. J. **Lee**, and D. U. Ahn, 2008. Effect of electron-beam irradiation before and after cooking on the chemical properties of beef, pork, and chicken. Meat Sci. 80:903-909.
39. Ismail, H.A., E.J. **Lee** and D.U. Ahn, 2008. Effects of aging time and natural antioxidants on the color, lipid oxidation and volatiles of irradiated ground beef. Meat Sci. 80:582-591.
40. Nam, K.C., K.Y. Ko, B.R. Min, H. Ismail, E.J. **Lee**, and D.U. Ahn, 2007. Effects of oleoresin-tocopherol combinations on lipid oxidation, off-odor, and color of irradiated raw and cooked pork patties. Meat Sci. 75(1): 61-70.
41. Yan, H.J., E. J. **Lee**, K. C. Nam, B. R. Min and D. U. Ahn, 2006. Dietary functional ingredients: Performance of animals and quality and storage stability of irradiated raw turkey breast. Poultry Sci. 85:1829-1837.
42. Yan, H.J., E. J. **Lee**, K. C. Nam, B. R. Min and D. U. Ahn, 2006. Effects of dietary functional ingredients and irradiation on the quality of cooked turkey breast meat during storage. J. Food Sci. 71(9):c556-563
43. Yan, H.J., E. J. **Lee**, K. C. Nam, B. R. Min and D. U. Ahn, 2006. Effects of dietary functional ingredients and packaging methods on sensory characteristics and consumer acceptance of irradiated turkey breast meat. Poultry Sci. 85(8): 1482-1489.
44. Kwon, Joong-Ho, Jin-Ki Shin, Kwang-Dong Moon, Hun-Sik Chung, Yong-Jin Jeong, Eun-Joo **Lee**, and Dong U. Ahn, 2006. Color, volatiles and organoleptic acceptability of mixed powders of red ginseng and Cheonggukjang. Korean Soc. Food Preservation. 13(4): 483-489.
45. Nam, K.C., K.Y. Ko, B.R. Min, H. Ismail, E.J. **Lee**, and D.U. Ahn, 2006. Influence of rosemary-tocopherol/packaging combination on the chemical quality and Listeria monocytogenes and Salmonella typhimurium survival in restructured pork loins following electron irradiation. Meat Sci. 74(2):380-387.
46. Ahn, D.U., S.H. Lee, H. Singam, E.J. **Lee**, and J.C. Kim, 2006, Sequential separation of main components from chicken egg yolk. Food Science and Biotechnology 15(2): 189-195.
47. Min B.R., K.C. Nam, E.J. **Lee**, G.Y. Ko, D.W. Trampel, and D.U. Ahn, 2005, Effect of irradiating shell eggs on quality attributes and functional properties of yolk and white. *Poultry Science* 84(11):1791-1796.
48. **Lee,** E.J. and D.U. Ahn, 2005, Quality characteristics of irradiated turkey breast rolls formulated with plum extract, *Meat Science,* 71(2):300-305.
49. Zhu, M.J., A. Mendonca, H.A. Ismail, M. Du, E.J. **Lee**, and D.U. Ahn, 2005. Impact of Antimicrobial ingredients and Irradiation on the Survival of *Listeria monocytogenes* and the Quality

of Ready-to-Eat Turkey, *Poultry Science* 84(4):613-620.

50. Houser, T.A., J.G. Sebranek, W.N. Maisonet, J.C. Cordray, B.R. Wiegand, D.U. Ahn, and E.J. **Lee**, 2005. The effects of irradiation at 1.6 kGy on quality characteristics of commercially produced ham and pork frankfurters over extended storage, *Journal of Food Science* 70(4) s262-266.
51. **Lee,** E.J. and D.U. Ahn, 2004. Sources and mechanisms of carbon monoxide production by irradiation, *Journal of Food Science* 69(6) c485-490
52. Zhu, M.J., A. Mendonca, E.J. **Lee**, and D.U. Ahn, 2004. Influence of irradiation and storage on the quality of ready-to-eat turkey breast rolls. *Poultry Sci.* 83(8):1462-1466
53. Zhu, M.J., A. Mendonca, B. Min, E.J. **Lee**, K.C. Nam, K. Park, M. Du, H.A. Ismail, and D.U. Ahn, 2004. Effects of Electron Beam Irradiation and Antimicrobials on the Volatiles, Color, and Texture of Ready-to-eat Turkey Breast Roll. J. Food Sci. 69(5):c382-c387.
54. Zhu, M., E.J. **Lee**, A. Mendonca and D.U. Ahn, 2004. Effect of Irradiation on the Quality Turkey Ham during Storage. *Meat Sci.* 66(1):63-68.
55. **Lee** E.J., J. Love and D.U. Ahn, 2003. Effect of antioxidants on consumer acceptance of irradiated turkey meat. *Journal of Food Science* 68(5) 1659-63.
56. **Lee** E.J. and D.U. Ahn, 2003. Effect of antioxidants on the production of off-odor volatiles and lipid oxidation in irradiated turkey breast meat and meat homogenates. *Journal of Food Science* 68(5) 1631-38.
57. Nam, K.C., B.R. Min, H. Yan, E.J. **Lee**, A. Mendonca, I. Wesley, and D.U. Ahn, 2003. Effect of dietary vitamin E and irradiation on lipid oxidation, color, and volatiles of fresh and previously frozen turkey breast patties, *Meat Science* 65(1): 513-521.
58. **Lee,** E.J. and D.U. Ahn, 2003. Production of volatiles from fatty acids and oils by irradiation, *Journal of Food Science* 68(1):70-75.
59. Ahn, D.U. and E.J. **Lee**, 2002. Production of off-odor volatiles from liposome containing amino acid homopolymers by irradiation, *Journal of Food Science* 67(7):2659-2665.
60. **Lee,** E.J., V.I. Volkov, M.W. Byun and C.H. Lee, 2002. Detection of free radicals in γ-irradiated soybean paste and model system by Electron Spin Resonance Spectroscopy, *Radiation Physics and Chemistry* 64(1):61-66.
61. Cho, Y.J., S.Y. Park, E.J. **Lee** and C. H. Lee, 2001. Effective components of commercial fermented plant extracts and their HACCP scheme, *Korean Society for Industrial Food Engineering*, 5(3):165-174.
62. **Lee,** E.J., V.I. Volkov and C.H. Lee, 2001. Electron spin resonance studies of free radicals in γ-irradiated soybean paste, *Journal of Agricultural and Food Chemistry,* 49(7):3457-3462.
63. **Lee,** E.J. and C.H. Lee, 2001. Effective Components of Commercial Enzyme Food Products and Their HACCP Scheme, *Korean Journal of Food Science and Technology*, 33(4):461-468.
64. **Lee,** E.J., Y.J. Cho, S.Y. Park and C.H. Lee, 2001. Quality Assessment of Commercial Chlorophyll Products in Korea, *Korean Society for Industrial Food Engineering*, 5(2):96-102.
65. **Lee,** E.J., S.O. Ro and C.H. Lee, 1996. A survey on the consumer attitude toward health food in Korea (II): Consumer perception on health and food habit, *Journal of The Korean Society of Dietary Culture*, 11(4):475-485.
66. **Lee,** E.J., S.O. Ro and C.H. Lee, 1996. A survey on the consumer attitude toward health food in Korea (I): Consumer perception on health foods, *Journal of The Korean Society of Dietary Culture*, 11(4):487-495.

(3) Book Chapters

1. Ahn, D.U., E.J. **Lee**, and A. Mendonca, 2017. Meat decontamination by irradiation. In *Advanced Technologies for Meat Processing.* 2nd Edition, Leo Nollet and Fidel Toldra, Eds. Marcel Dekker, Inc. *(Updated the 1st edition published in 2006, the publication date of 2nd edition: October 16, 2017*), p197-225
2. Nam, K.C., E.J. **Lee**, and D.U. Ahn. 2016. Chap. 14. The colour of poultry meat: understanding, measuring and maintaining product quality in *Achieving Sustainable Production of Poultry Meat Volume 1; Safety quality and sustainability*. S. Ricke (Ed). Burleigh Dodds Science Publishing Ltd. Cambridge, UK (ISBN:9781 78676 064 7; http://www.bdspublishing.com) (publication date Nov. 21, 2016).
3. Ahn, Doug U. and E.J. **Lee**, 2012. Chapter 12. Mechanisms and Prevention of Quality Changes in Meat by Irradiation. In *Food Irradiation Research and Technology*, 2nd ed. Xuetong Fan and Christopher H. Sommers ed. Wiley-Blackwell, IFT Press. p207-224
4. Fan, X., E.J. **Lee** and D. U. Ahn, 2011. Chapter 12. Volatile sulfur compounds in foods as a result of ionizing radiation. In "Volatile Sulfur Compounds in Food". ACS Symposium Series 1068; American Chemical Society: Washington, DC, 2011. ACS Symposium Series p243-258.
5. **Lee**, E.J. and D. U. Ahn, 2011. The use of irradiation in processed meat products. In "Processed Meats: improving safety, nutrition and quality". Joseph P. Kerry and John F. Kerry (Ed), Woodhead Publishing. pp109-133
6. Ahn, D. U., K. C. Nam, and E. J. **Lee**, 2009. Lipid oxidation and flavor. In "Current Topics in Applied Muscle Biology and Meat Science". Min Du and Richard McCormick (Ed). CRC Press. p227-246.
7. **Lee**, E. J. and D. U. Ahn, 2009. *Chapter 8* - Advanced decontamination technologies: Irradiation. In "Safety of Meat and Processed Meat, (F. Toldrá, editor), Springer, New York, NY. 209-228.
8. Nam, K.C., B.R. Min, K.Y. Ko, E.J. **Lee**, J. Cordray, and D.U. Ahn, 2008. Packaging determines color and odor of irradiated ground beef. Radiation Physics Research Progress. Aidan N. Camilleri (Ed), Nova Publisher. p287-300.
9. Ahn, D. U. and E. J. **Lee**, 2006. Mechanisms and prevention of quality changes in meat by irradiation. In "*Food Irradiation Research and Technology*" C. Sommers and X. Fan Eds. IFT Symp. Book Ser. p127-142.
10. Ahn, D.U., E. J. **Lee**, and A. Mendonca, 2006. Meat Decontamination by Irradiation. In *"Advanced Technologies for Meat Processing"*. CRC press, p. 155-191.
11. Ahn, D.U. and E.J. **Lee**, 2004. Mechanisms and Prevention of Off-Odor Production and Color Changes in Irradiated Meat. In "*Irradiation of Food and Packaging: Recent Development*". American Chemical Society Symposium Book series Volume 875, ACS, Washington, DC. p. 43-76.
12. **Lee,** E.J., V.I. Volkov and C.H. Lee, 2001. Detection of free radicals in γ-irradiated soybean paste by Electron Spin Resonance spectroscopy, In "*Magnetic Resonance in Food Science-A view to the future"*, Magnetic Resonance in Food Science Symposium Book series, Royal Society of Chemistry Press, p.98-104.

(4) Published Abstracts and Proceedings in Conferences

1. Mitra, P., K. Parajuli, and E.J. **Lee**, 2021, Optimization of processing parameters and formulations of industry wastes cranberry pomace fortified value-added cookies using Response Surface

Methodology, IFT Annual Conference, July 19-21, 2021, Virtual Meeting.

2. Rohrer, C.A., E.J. **Lee**, and S.P. Hong, 2020, Consumer Acceptance and Sensory Attributes of Korean Soy Sauce Products, IFT Annual Conference, July 13-15, 2020, Virtual Meeting.
3. **Lee**, E.J., C. Vang, and C.T. Kim, 2019, Nano-emulsion Production using Lipid Soluble Bioactive Compounds, UKC Conference, August 15-17, 2019, Chicago, IL. (***Oral presentation as an Invited Speaker***)
4. Acharya, B., E.J. **Lee**, A. Hossain, and P. Mitra, 2019, Development of Extruded Plant-Protein Reich Cereals using Soy Protein and Rice Flours Blend, Wisconsin Science & Technology (WiSys) Symposium, July 22-23, 2019, UW-Stout, Menomonie, WI.
5. Rohrer, C.A., E.J. **Lee**, and S.P. Hong, 2019, Consumer Acceptance and Sensory Attributes of Korean Convenience Foods, IFT Annual Conference, June 3-5, 2019, New Orleans, LA.
6. **Lee**, E.J., 2019, Effective assessment of student learning for maintaining IFT approval of UW-Stout Food Science and Technology program, The 1st Food Science Major IFT Approval Experience Sharing Symposium, May 22-24, 2019, Shanghai Ocean University (SHOU), Shanghai, China. (***Oral presentation as an Invited Speaker***)
7. Shirkhani, M., E.J. **Lee**, and J. Talukder, 2018, Mechanism of Absorption and Transportation of Ovotransferrin in the Intestine, Topic category: 1166-APS, Abstract ID: 4160, 2018 Experimental Biology (EB) conference, April 21-25, 2018, San Diego, CA.
8. Richter, R., E.J. **Lee** and J. Grant, 2018, Optimization of Extraction and Isolation of Proteins from the Eggshells, 2018 Experimental Biology (EB) conference, April 21-25, 2018, San Diego, CA.
9. Shipman III, R.D., B.G. Quelle, J. Grant, and E.J. **Lee**, 2018, Development of an Immersion Model for Tooth Decay Observed via Scanning Electron Microscopy, Atomic Force Microscopy and Flame Atomic Absorption Spectroscopy, 2018 Experimental Biology (EB) conference, April 21-25, 2018, San Diego, CA.
10. Shin, J.M., E.J. **Lee**, and D.U. Ahn, 2017, Development, optimization, and characterization of electrospun Lowdensity polyethylene (LDPE) nano fibers containing triacetyl-β-cyclodextrin (TACD), IFT Annual Conference, June 26-28, 2017, Las Vegas, NV.
11. Rohrer, C.A., E.J. **Lee**, and S.P. Hong, 2017, Consumer Acceptance and Sensory Attributes of Korean Ethnic Sauce Products, IFT Annual Conference, June 26-28, 2017, Las Vegas, NV.
12. Lee, E.J., J. Shin, and D.U. Ahn, 2016, Reduction of sulfur compounds using triacetyl β-cyclodextrin (TACD)-impregnated packaging materials, IFT Annual Conference, July 17-19, 2016, Chicago, IL.
13. Rohrer, C., E.J. **Lee**, E. Sigmund, and S.P. Hong, 2016, Sensory Attributes and Acceptance of Korean Kimchi as an Ethnic Food to US Consumers, IFT Annual Conference, July 17-19, 2016, Chicago, IL.
14. Vang, C., C.T. Kim and E.J. **Lee**, 2015, Production and characterization of lutein nano-emulsion, Wisconsin Science & Technology Symposium, July 27-28, 2015, UW-River Falls, WI.
15. Vang, C., C.T. Kim and E.J. **Lee**, 2015, Production and characterization of lutein nano-emulsion, IFT Annual Conference, July 11-14, 2015, Chicago, IL.
16. Doering, S., M. Thomas, C. Vang, J. Grant and E.J. **Lee**, 2015, MALDI-TOF MS Analysis of the Enrichment of Peptides Derived from Egg Yolk Phostvitin Using Affinity Microchromatography Techniques, American Society for Mass Spectrometry (ASMS), May 31-June 4, 2015, St. Louis, MO.

17. Mandal, Mamta and E.J. **Lee**, 2014, Effects of different extraction methods on the chemical properties of cranberry seed oils, IFT Annual Conference, June 21-24, 2014, New Orleans, LA.
18. Samaraweera, H., S.H. Moon, E.J. **Lee**, J. Grant, J. Fouks, J.W. Suh, and D.U. Ahn, 2014, Characterization of Phosvitin Digests Using MALDI-TOF Mass Spectrometry, American Society for Mass Spectrometry (ASMS), June 15-19, 2014, Baltimore, MD.
19. **Lee**, E.J., H. Stevens, H.Y. Lee, and D.U. Ahn, 2013, Production of Bio-active peptides form egg, US-Korea Conference (UKC), Aug. 8-10, 2013, New York, NJ. ***(Oral presentation)***
20. Leuer, Emily and Eun Joo **Lee**, 2013. Effect of antioxidants on the oxidation of isohumulones (bitter compounds) in beer, IFT Annual Conference. July 13 - 16, 2013, Chicago, IL.
21. Jellal, Y., J. Sindelar, N. Chikthimmah, C. Rohrer and E.J. **Lee**, 2013. Physical, Sensory, and Microbial Attributes of Reduced-Sodium All-Beef Frankfurters, IFT Annual Conference. July 13 - 16, 2013, Chicago, IL.
22. **Lee**, E. J. and D. U. Ahn, 2012. Use of egg white and/or yolk in non-dairy creamers to improve their protein content. UKC conference, Anaheim, CA Aug. 8-11, 2012. ***(Oral presentation)***
23. Samaraweera, Himali, Eun Joo **Lee**, and Dong U Ahn, 2012. Antioxidant and Mineral-Chelating Activities of Phosvitin and Its Enzymatic Hydrolysates. UKC conference, Anaheim, CA Aug. 8-11, 2012.
24. Ahn, Dong U. and Eun Joo **Lee**, 2012. Irradiation and additive combinations on the pathogen reduction and quality of poultry meat. Poultry Science Conference, Athens, GA. July 8-12, 2012.
25. Samaraweera, Himali, Eun Joo **Lee**, and Dong U Ahn, 2012. Chemical Hydrolysis of Phosvitin and the Functional Properties of the Hydrolysates. Poultry Science Conference, Athens, GA. July 8-12, 2012.
26. Shrestha, Bimala, Cynthia Rohrer, and Eun Joo **Lee**, 2012. Effects of feeding flaxseed mix on the content of omega-3 fatty acids in cheese curd and cheese during cheese-making process and storage. 2012 Polytechnic Summit, June 6-8, Marietta, GA.
27. Samaraweera H., E. J. **Lee**, and D. U. Ahn, 2011. Enzymatic susceptibility of phosvitin for improved hydrolysis. Poultry Science Conference, July 16-19, St. Louis, MO.
28. Hongyu Sun, Mike Persia, H. S. Ragheb, Eun Joo **Lee**, and Dong U. Ahn, 2011. Effects of Dietary Content of Corn Distiller's Dried Grains with Solubles on Chemical Composition and Nutrients of Eggs. Poultry Science Conference, July 16-19, St. Louis, MO.
29. Hongyu Sun, Mike Persia, H. S. Ragheb, Eun Joo **Lee**, and Dong U. Ahn, 2011. Effects of Dietary Content of Corn Distiller's Dried Grains with Solubles on the Egg Production and Internal Quality of Eggs. Poultry Science Conference, July 16-19, St. Louis, MO.
30. Kwon, J.H., E.J. **Lee**, T. Kausar, and D.U. Ahn, 2011. Effect of fat substitute and plum extract on radiation induced hydrocarbons and 2-alkylcyclobutanones in freeze-dried beef patties. IMRP conference, June 13-16. Montreal, Canada
31. Lee, K.H., H.J. Yun, J.W. Lee, D.U. Ahn, E.J. **Lee**, and C. Jo, 2011. Volatile compounds and odor preference of ground beef added with garlic and red wine, and irradiated with charcoal pack. IMRP conference, June 13-16. Montreal, Canada
32. Xiao, Shan, Wangang Zhang, Eun Joo **Lee** and Dong U. Ahn. 2010. Effects of dietary oxidation, package and irradiation on the oxidative stability in broiler chicken patties. ICoMST conference, Aug. 15-20, 2010. Jeju, Korea

33. Zhang, Wangang, Shan Xiao, Eun Joo **Lee** and Dong U Ahn, 2010. Dietary oxidation affects SRCA activity and drip loss in breast muscle of broiler chicken. ICoMST conference, Aug. 15-20, 2010. Jeju, Korea

34. **Lee**, Eun Joo and Dong Ahn 2010. Effect of various processing on omega-3 fatty acids, lutein and choline in egg products. UKC-2010. Aug. 15-17, 2010. Seatle, WA. ***(Oral presentation)***

35. **Lee,** E.J. and D.U. Ahn, 2010. Effect of ultra-pasteurization processing on the quality of egg products. IFT Annual Conference. July 17 - 20, 2010, Chicago, IL. 229-10.

36. Samaraweera, Himali, E.J. **Lee** and D.U. Ahn, 2010. Pre-treatment of egg yolk Phosvitin for improved hydrolysis. IFT Annual Conference. July 17 - 20, 2010, Chicago, IL. 289-19.

37. Zhang, Wangang, Shan Xiao, Eun Joo **Lee** and Dong U Ahn, 2010. Dietary oxidation is related to stress and meat quality in broiler chickens. Annual IFT Conference, Chicago, IL. July, 2010.

38. Zhang, W., Shan Xiao, Eun Joo **Lee** and Dong U. Ahn, 2009. Effects of dietary oxidation on the quality of broiler breast meat. Dasan International Conference, Jeju, Korea, Nov. 16-18.

39. Kim, Jung Kon, Tae Hyun Kim, Eun Joo **Lee**, and Dong Uk Ahn, 2009. Fractionation of Micro-algae for Bioethanol Production. AIChE Annual Meeting. Nov. 2009.

40. **Lee,** E.J. and D.U. Ahn, 2009. Effects of fat content, aging time, and additive application methods on the quality characteristics of irradiated ground beef. US-Korea Conference (UKC), Raleigh, North Carolina, July 17-18, 2009. ***(Oral presentation)***

41. **Lee,** E.J. and D.U. Ahn, 2009. Effect of Pasteurization, Storage and Cooking on the Stability of Omega-3 Fatty Acids, Lutein and Choline in Egg Product. IFT Annual Conference. June 6 - 9, 2009, Anaheim, CA. 058-43.

42. Kim, Jung Kon, Eun Joo **Lee**, Tae Hyun Kim, Dong Uk Ahn, 2009. Fractionation and Bioconversion of Micro-algae into Bioethanol. The 31st Symposium on Biotechnology for Fuels and Chemicals. May 3-6, 2009, San Francisco

43. **Lee,** E.J., B.R. Min, and D.U. Ahn, 2007. Separation of Phosvitin from Egg Yolk and the preparation of phosphopeptides using enzyme digestion. IFT Annual Conference. July 28-August 1, 2007, Chicago, IL. 144-18

44. **Lee,** E.J., J.H. Kwon, and D.U. Ahn, 2006. Effect of antioxidants on the production of hydrocarbon and 2-alkylcyclobutanone in irradiated oils during storage. IFT Annual Conference. June 24-28, 2006, Orlando, FL.

45. **Lee,** E.J. and D.U. Ahn, 2005. Effect of reducing potential and carbon monoxide on the color of myoglobin solution. IFT Annual Conference. July 16-20, 2005, New Orleans, LA. 71B-26.

46. **Lee,** E.J. 2005. Mechanism of quality changes in irradiated meat. 2005. Kyungpook National University, Deagu, Korea. May 10, 2005. ***(Oral presentation)***

47. **Lee**, E.J., C. Shriver, S.P. Hong, and D.U. Ahn, 2004. Quality Characteristics of Freeze-Dried, Irradiated or Freeze-Dried-Irradiated Cooked Hamburger Patties Formulated with a Novel Fat Substitute and Plum Extract. ICES. July 19-22, Colorado springs, CO.

48. **Lee,** E.J., K.S. Park and D.U. Ahn, 2004. Quality characteristics of irradiated turkey breast roll formulated with plum extract, IFT Annual Conference. July 12-16, 2004, Las Vegas, NV. p. 168.

49. Kwon, J.H., K.C. Nam, E.J. **Lee**, B.R. Min and D.U. Ahn, 2004. Radiation-induced chemical changes in stored sausages with different fat contents, IFT Annual Conference. July 12-16, 2004, Las Vegas, NV. p. 168.

50. Zhu, M, A.F. Mendonca, B.R. Min, E.J. **Lee**, K.C. Nam, K.S. Park, M. Du and D.U. Ahn, 2004. Electron-beam irradiation and antimicrobials on the quality of ready-to-eat turkey breast roll, IFT Annual Conference. July 12-16, 2004, Las Vegas, NV. p. 167.

51. Ahn, D.U., E.J. **Lee** and J.C. Kim, 2004. Efficient and economical separation of neutral lipids and phospholipids from liquid egg yolk, IFT Annual Conference. July 12-16, 2004, Las Vegas, NV. p. 174.

52. Hong, S.P., D.U. Ahn and **E J. Lee**, 2004. Effect of irradiation on the quality characteristics of premature and mature kimchi powders, IFT Annual Conference. July 12-16, 2004, Las Vegas, NV. p. 167.

53. **Lee,** E.J. and D.U. Ahn, 2003. Sources and mechanisms of carbon monoxide, carbon dioxide, and methane production by irradiation. IFT Annual Conference. July 12-16, 2003, Chicago, IL. p 203.

54. Hong, S.P., E.J. **Lee** and D.U. Ahn, 2003. Effect of herbs on the production of off-odor volatiles in irradiated turkey breast meat. IFT Annual Conference. July 12-16, 2003, Chicago, IL. p. 203.

55. Zhu, M., H.A. Ismail, E.J. **Lee**, A.F. Mendonca and D.U. Ahn, 2003. Effect of irradiation on the quality of turkey ham during storage. IFT Annual Conference. July 12-16, 2003, Chicago, IL. p 200.

56. **Lee,** E.J., J. Love and D.U. Ahn, 2003. Effect of antioxidants on the consumer acceptance of irradiated turkey meat. Poultry Science conference, July 6-9. Madison, WI. p 86.

57. **Lee,** E.J., H. Yan and D.U. Ahn, 2002. Effect of antioxidants on the production of off-odor volatiles and lipid oxidation in irradiated turkey breast meat and meat homogenates. *Poultry Science conference (PSA) 2002 Annual Meeting*, August 11-14, Newark, DE, U.S.A., p 65. ***(Oral presentation)***

58. **Lee,** E.J., D.U. Ahn, 2002. Production of off-odor volatiles from fatty acids and oils by irradiation, *The Institute of Food Technology (IFT) Annual Meeting*, June. 15-19, Anaheim, CA, U.S.A., p143.

59. **Lee,** E.J., V.I. Volkov and C.H. Lee, 2001. Detection of Free Radicals in Irradiated Soybean Paste by Electron Spin Resonance Spectroscopy, *11th World Congress of Food Science & Technology (IUFoST)*, Apr. 22-27, Seoul, Korea.

60. **Lee,** E.J., V.I. Volkov and C.H. Lee, 2001. Free Radicals in Irradiated Soybean Paste Components and Model Systems on the Electron Spin Resonance Data-Thermal Evolution, The Radical Nature, *11th World Congress of Food Science & Technology (IUFoST)*, Apr. 22-27, Seoul, Korea.

61. **Lee,** E.J., V.I. Volkov and C.H. Lee, 2000. Free Radicals in Irradiated Soybean Paste Components and Model Systems on the Electron Spin Resonance Data-Thermal Evolution, The Radical Nature, *Korean Society of Food Science & Technology (KoSFoST) 65th Symposium*, Nov. 3-4, Seoul, Korea.

62. **Lee,** E.J., V.I. Volkov and C.H. Lee, 2000. Detection of Free Radicals in Irradiated Soybean Paste by Electron Spin Resonance Spectroscopy, *International conference on Applications of Magnetic Resonance in Food Science*, Sep. 18-20, Averio, Portugal.

63. **Lee,** E.J., V.I. Volkov and C.H. Lee, 2000. Free Radicals in Irradiated Soybean Paste Components and Model Systems on the Electron Spin Resonance Data-Thermal Evolution, The Radical Nature, *International conference on Applications of Magnetic Resonance in Food Science*, Sep. 18-20, Averio, Portugal.

64. **Lee,** E.J., V.I. Volkov and C.H. Lee, 2000. Detection of Free Radicals in Irradiated Soybean Paste and Model Systems by Electron Spin Resonance Spectroscopy, *Korean Society of Food Science & Technology (KoSFoST) 64th Symposium*, May. 27, Taegu, Korea.

65. Park, S.Y., Y.J. Cho, E.J. **Lee** and C.H. Lee, 1999. Studies on the effective components and quality of commercial fermented plant extracts, *Korean Society of Food Science & Technology (KoSFoST) 63th Symposium*, Oct. 30, Suwon, Korea.
66. Lee, H.R., E.J. **Lee**, J.H. Hyun and C.H. Lee, 1998. Studies on the correlation between cholesterol contents in blood and fat intake in Korean, *Korean Society of Food Science & Technology (KoSFoST) 60th Symposium*, May. 1. Seoul, Korea.
67. **Lee,** E.J., H.R. Hong and C.H. Lee, 1997. Evaluation of effective components HACCP system of Enzyme food, *Korean Society of Food Science & Technology (KoSFoST) 59th Symposium*, Nov. 1, Seoul, Korea.
68. **Lee,** E.J., S.O. Ro and C.H. Lee, 1996. A survey on the consumer attitude toward health food in Korea, *International Union of Food Science & Technology (IUFoST) '96 Regional Symposium*, Oct. 22, Seoul, Korea.
69. **Lee,** E.J., and C.H. Lee, 1994. Studies on the correlation between physicochemical properties and eating quality of rice, *Korean Society of Food Science & Technology (KoSFoST) 53th Symposium*. Nov. 5, Seoul, Korea.

2. Grants *(Total $823,760 since 2002)*

(1) Extramural grants (Total $659,820 since 2002)

1. Korea Food Research Institute (KFRI), The sensory evaluation of Korean Soy Sauce Products, **$7,000**, October 1, 2019-December 31, 2019 (Role: Principal Investigator)
2. Korea Food Research Institute (KFRI), The sensory evaluation of Korean Convenience Foods, **$5,500**, October 1, 2018-December 31, 2018 (Role: Principal Investigator)
3. Korea Food Research Institute (KFRI), The sensory evaluation of Korean Sauces, **$5,629**, October 1, 2015-November 31, 2015 (Role: Principal Investigator)
4. Korea Food Research Institute (KFRI), The sensory evaluation of Korean Kimchi, **$4,600**, February 20, 2015-March 31, 2015 (Role: Principal Investigator)
5. Functional Proteins & Lipids LLC. (Ames, Iowa), Characterization of Phosvitin Phosphopeptides using Mass Spectrometry, **$5,005**, November 1, 2013-August 31, 2014 (Role: Principal Investigator)
6. Korea Food Research Institute (KFRI), The sensory evaluation of Korean Barbecue (BBQ) (Kalbi, roasted rib steak), **$5,200**, October 1-31, 2012 (Role: Principal Investigator)
7. U.S.A. Poultry & Egg Export Council (US PEEC) Grant, Use of Dried Egg White and /or Yolk in Non-Dairy Creamers to Improve the Protein Content in the Philippines, **$56,418**, May 1, 2010 – April 30, 2011. (Role: Co-Principal Investigator).
8. Food Safety Consortium (FSC) Grant, Identification and Characterization of Off-Taste and Off-Flavor Compounds in Irradiated Cooked Ham, **$25,000**, July 1, 2009 – June 30, 2010. (Role: Co-Principal Investigator).
9. Midwest Poultry Consortium (MPC)/Iowa Egg Council (IEC) Grant, Large-scale production of ovotransferrin from egg white for antimicrobial application, **$91,794**, July 1, 2008 – June 30, 2009. (Role: Co-Principal Investigator).
10. Iowa Egg Council (IEC) Grant, Production of ovotransferrin from egg white for antimicrobial application, **$14,035**, September 1, 2008 – August 31, 2009. (Role: Co-Principal Investigator).

11. Midwest Poultry Consortium (MPC)/Iowa Egg Council (IEC) Grant, Production of ovotransferrin from egg white for antimicrobial application, **$79,621**, July 1, 2007 – June 30, 2008. (Role: Co-Principal Investigator).
12. American Egg Board (AEB) Grant, Effect of Processing, Storage and Cooking on Omega-3 Fatty Acids, Lutein and Choline in Egg Products, **$218,350**, January 1, 2007 – December 31, 2009. (Role: Co-Principal Investigator).
13. Iowa Egg Council (IEC) Grant, Separation and Utilization of Egg Yolk Components, **$64,248**, October 1, 2002 – September 30, 2005. (Role: Co-Principal Investigator).
14. Midwest Poultry Consortium (MPC) Grant, A combination of irradiation and GRAS preservatives for inactivating *Listeria monocytogenes* and maintaining sensory quality of ready-to-eat turkey meat products, **$41,938**, May 1, 2003 – April 30, 2004. (Role: Co-Principal Investigator).
15. Midwest Poultry Consortium (MPC) Grant, Impact of electron-beam irradiation on survival of *L. monocytogenes* and quality of ready-to-eat turkey products during refrigerated storage, **$35,482**, April 1, 2002 - March 31, 2003. (Role: Co-Principal Investigator).

***(2) UW-Stout research grants (Total $147,842** since 2011)*

1. Evelyn Van Donk Steenbock Endowed Chair Award Grant (provided by UW-Stout Foundation), Novel Active Packaging for Irradiated Beef Products to Minimize Off-odor Volatile Compounds, **$95,998**, July 1, 2015-June 30, 2017, (Role: Principal Investigator).
2. Student Research Job Grant, **$8,000**, August 29, 2012 – May 22, 2015, (Role: Principal Investigator).
3. Collaborative Thematic Research Cohorts Grant from CEHHS, Characterization of Phosvitin Phosphopeptides using Matrix- Assisted Laser Desorption/Ionization- Time of Flight (MALDI-TOF) Mass Spectrometry, **$7,347,** May 29, 2012 – August 30, 2013. (Role: Principal Investigator).
4. Faculty Research Initiative (FRI) Grant, Separation of phosvitin from egg yolk and production of functional phosphopeptides from the phosvitin, **$9,876**, January 1, 2012 - June 30, 2013. (Role: Principal Investigator).
5. Research Equipment Grant from College of Education, Health and Human Science (CEHHS), Effects of feeding flaxseed mix on the content of omega-3 fatty acids in cheese curd and cheese during cheese-making process and storage, **$14,057**, September 1, 2011 – June 30, 2012. (Role: Principal Investigator).
6. Student Research Support Initiative Grant from CEHHS, Effects of different extraction methods on the chemical properties of cranberry seed oils and their potential use in food, **$2,564**, May 29, 2012 – August 26, 2013. (Role: Principal Investigator).
7. Discovery Center Grant with Heartland Co., Effects of feeding flaxseed mix on the content of omega-3 fatty acids in cheese curd and cheese during cheese-making process and storage, **$10,000**, January 17, 2012 – May 25, 2012. (Role: Principal Investigator).

***(3) Professional development grants (Total $16,098** since 2011)*

1. UW-Stout Professional Development Grant, Participation in the 2019 IFT (Institute of Food Technologists) Annual Meeting & Food Expo (New Orleans, LA), **$1,903.19**, June 2-5, 2019.
2. Institute of Food Technologists (IFT) Division Leader Travel Grant, Participation in the 2017 IFT (Institute of Food Technologists) Annual Meeting & Food Expo (New Orleans, LA), **$350**, June 2-5, 2019.

3. UW-Stout Professional Development Grant, Participation in the 2018 IFT (Institute of Food Technologists) Annual Meeting & Food Expo (Chicago, IL), **$1,877.00**, July 15-18, 2018.
4. Institute of Food Technologists (IFT) Division Leader Travel Grant, Participation in the 2017 IFT (Institute of Food Technologists) Annual Meeting & Food Expo (Chicago, IL), **$500**, July 15-18, 2018.
5. UW-Stout Professional Development Grant, Participation in the 2017 IFT (Institute of Food Technologists) Annual Meeting & Food Expo (Las Vegas, NV), **$775**, June 26-28, 2017.
6. Institute of Food Technologists (IFT) Division Leader Travel Grant, Participation in the 2017 IFT (Institute of Food Technologists) Annual Meeting & Food Expo (Las Vegas, NV), **$600**, June 26-28, 2017.
7. UW-Stout Professional Development Grant, Participation in the 2016 IFT (Institute of Food Technologists) Annual Meeting & Food Expo (Chicago, IL), **$1,000**, July 17-19, 2016.
8. Institute of Food Technologists (IFT) Division Leader Travel Grant, Participation in the 2015 IFT (Institute of Food Technologists) Annual Meeting & Food Expo (Chicago, IL), **$500**, July 11-14, 2015.
9. UW-Stout Professional Development Grant, Participation in the 2015 IFT (Institute of Food Technologists) Annual Meeting & Food Expo (Chicago, IL), **$979**, July 11-14, 2015.
10. UW-Stout Professional Development Grant, Participation in the 2014 IFT (Institute of Food Technologists) Annual Meeting & Food Expo (New Orleans, LA), **$1,400**, June 21-24, 2014.
11. UW-Stout Just-In-Time (JIT) Professional Development Grant, Participation in the 2013 US-Korea Conference (UKC) (New York, NJ), **$1,000**, August 8-10, 2013.
12. UW-Stout Professional Development Grant, Participation in the 2013 IFT (Institute of Food Technologists) Annual Meeting & Food Expo (Chicago, IL), **$1,161**, July 13-16, 2013.
13. CEHHS Professional Development Grant, Participation in the 2012 US-Korea Conference (UKC) (Orange County, CA), **$1,296**, August 8-11, 2012
14. UW-Stout Professional Development Grant, Participation in the 2012 IFT (Institute of Food Technologists) Annual Meeting & Food Expo (Las Vegas, NV), **$1,282**, June 25-29, 2012.
15. CEHHS Professional Development Grant, Participation in the 2012 Polytechnic Summit (Southern Polytechnic State University, Marietta, GA), **$1,475**, June 6-8, 2012

3. Patents

- Ahn, D.U., K.C. Nam, H.S. Yang, E.J. **Lee** and H.D. Paik, 2012. (Patent No.: KR 10-1158716), Method for preventing off-odor production in irradiated raw ground beef using garlic or onion, Approved by Korean Intellectual Property Office (KIPO), South Korea.
- Ahn, D.U., K.C. Nam, H.S. Yang, E.J. **Lee** and H.D. Paik, 2012. (Patent No.: KR 10-1147674), Method for preventing off-odor production in irradiated cooked ground beef using garlic or onion, Approved by Korean Intellectual Property Office (KIPO), South Korea.

4. Meetings, Conferences, Workshops Attended

- Council of Food Science Administrators (CFSA) meeting, University of California-Davis (UC-Davis) (Davis, CA), Oct. 22-24, 2019

- Korean Society of Food Science and Technology (KoSFoST) International Symposium and Annual Meeting, Songdo, Incheon, Korea, June 26-28, 2019
- Council of Food Science Administrators (CFSA) meeting, Cornell University (Ithaca, NY), Oct. 24-26, 2018
- Korean Society of Food Science and Technology (KoSFoST) International Symposium and Annual Meeting, Busan, Korea, June 27-29, 2018
- American Chemical Society (ACS) National Meeting & Exposition, Washington D.C., August 20-24, 2017
- American Chemical Society (ACS) National Meeting & Exposition, San Diego, CA, March 13-17, 2016
- American Society for Mass Spectrometry (ASMS) Annual Conference, Minneapolis, MN, June 9-13, 2013
- Off Flavors in Foods Short Course, Flavor Research and Education Center, University of Minnesota, St. Paul, MN, August 20-22, 2014.
- Flavor Applications Short Course, Flavor Research and Education Center, University of Minnesota, St. Paul, MN, May 28-30, 2014.
- Basic Flavor Systems Short Course, Flavor Research and Education Center, University of Minnesota, St. Paul, MN, May 20-22, 2013.
- NIMSS (NC1199-Polyunsaturated Fatty Acid and Human Health and Disease) Annual meeting, Bloomington, MN, Oct 17-19, 2012.
- Wisconsin Science & Technology Symposium, Marshfield, WI, July 23-24, 2012.
- Short course: Sausage and processed meat short course, Ames, IA, July 14-18, 2003. (certification)
- Short course: Basic sausage short course, Ames, IA, November 9-11, 2004. (certification)
- Short course: Developing and implementing HACCP in meat and egg products plants, Ames, IA, October 21-23, 2004. (certification)
- Workshop: Writing Competitive Proposals and Grants, Ames, IA, September 16-17, 2004.
- Conference: Food Irradiation. Dallas, Texas, March 25-27, 2002.

ACADEMIC ACTIVITIES

(1) Teaching Courses

- ***Science of Food** (FN 123, GE), ***Science of Food Lab** (FN 125, GE), [1]Food Technology (FN 222, GE), Farm to Fork: Food Issues (FN 244, GE), Food Science (FN 240,+lab), ***Food Chemistry** (FN 425/625, +lab)**, *Food Analysis** (FN 435/635, +lab)**,** Basic Sensroy Analysis (FN 442/642, +lab), ***Flavor Chemistry** (FN 725)**,** Food Science Workshop (FN 325/525, +lab, co-instructor), [1]Advanced Foods (FN 342/542,+lab), Food Science Seminar (FN 720), Food Processing (FN 350/550, +lab, co-instructor), Problems in Food Science and Nutrition (FN 735), [1]Advanced Experimental Food (FN 756, +lab), Intro of Food and Nutrition Research (FN728), Research Proposal for Food and Nutrition Sciences (FN729), Thesis-Food Science and Nutrition (FN 770) (*** New courses which I developed**, GE: general education course and [1]Fade-out courses)

(2) Graduate Students

Mohammad Shirkhani	Sept. 2016 – Dec. 2017	Received M.S. degree
Darwin Rajamanickam	Sept. 2015 – Dec. 2016	Received M.S. degree
Khalid Jamal	Sept. 2015 – Aug. 2016	Received M.S. degree
Brehm-Leuer, Emily	Sept. 2011 – Dec. 2015	Received M.S. degree
Shrestha, Bimala	Sept. 2011 – Dec. 2015	Received M.S. degree
Mandal, Mamta	Jan. 2012 – Dec. 2013	Received M.S. degree
Jellal, Younes	Sept. 2011 – May 2013	Received M.S. degree

Patel, Jayjanmejay B.	Sept. 2011 – May 2012	Received M.S. degree
Patel, Pranaykumar V.	Sept. 2011 – May 2012	Received M.S. degree

(3) Graduate Program Committee

Acharya, Binu	Food Sci. and Nut. (2020)	Received M.S. degree
Drager, Kurtis	Food Sci. and Nut. (2014)	Received M.S. degree
Vanevenhoven, Daniel W.	Food Sci. and Nut. (2012)	Received M.S. degree

(4) Assessment Report Submission

- 2018 Planning and Review Committee (PRC) report submission for M.S. Food and Nutritional Sciences program, *submitted to UW-Stout*, November 30, 2018. (Role: Graduate Program Director)
- 2018 Assessment in Major (AIM) report submission for M.S. Food and Nutritional Sciences program, *submitted to UW-Stout*, June 1, 2018. (Role: Graduate Program Director)
- 2017 IFT Annual Assessment Report submission for maintaining the Food Science program accreditation, *submitted to IFT*, August 31, 2017. (Role: Leading Faculty)
- 2016 Assessment in Major (AIM) report submission for M.S. Food and Nutritional Sciences program, *submitted to UW-Stout*, June 1, 2016. (Role: Graduate Program Director)
- 2016 IFT Annual Assessment Report submission for maintaining the Food Science program accreditation, *submitted to IFT*, August 31, 2016. (Role: Leading Faculty)
- General Education (GE) Assessment report submission for FN 222 (Food Technology, 2012-2014) and FN 123 (Science of Food, since 2014) (Role: Leading Faculty).

(5) Undergraduate and Graduate Student Research Publication

1. Shirkhani, Mohammad (Rebin), 2017. In Vitro Study on the Absorption and Transportation of Ovotransferrin Using Rat Intestinal Epithelial Cells (IEC-6), **Master thesis**, University of Wisconsin-Stout. December 2017.
2. Rajamanickam, Darwin, 2016. Solubility Enhancement of Vitamin D using Biopolymers and Hot Melt Extrusion, **Master thesis**, University of Wisconsin-Stout. December 2016.
3. Jamal, Khalid, 2016. A Comparison of Baking Quality Characteristics and Texture of Soft Cookies Made with Sucrose and Splenda. **Master thesis**, University of Wisconsin-Stout. August 2016.
4. Shrestha, Bimala, 2015. Effects of Feeding Flaxseed Mix on the Content of Omega-3 Fatty Acids in Cheese Curd and Cheese during Cheese-Making Process and Storage. **Master thesis**, University of Wisconsin-Stout. December 2015.
5. Brehm-Leuer, Emily, 2015. Mitigating the Risk of Isohumulone Degradation in Beer Exposed to Light and Heat with Natural Antioxidants. **Master thesis**, University of Wisconsin-Stout. December 2015.
6. Vang, C., C.T. Kim and E.J. **Lee**, 2015, Production and characterization of lutein nano-emulsion, **Poster** presentation at Wisconsin Science & Technology Symposium, July 27-28, 2015, UW-River Falls, WI.
7. Vang, C., C.T. Kim and E.J. **Lee**, 2015, Production and characterization of lutein nano-emulsion, **Poster** presentation at IFT Annual Conference, July 11-14, 2015, Chicago, IL.
8. Doering, S., M. Thomas, C. Vang, J. Grant and E.J. **Lee**, 2015, MALDI-TOF MS Analysis of the Enrichment of Peptides Derived from Egg Yolk Phosvitin Using Affinity Microchromatography Techniques, **Poster** presentation at American Society for Mass Spectrometry (ASMS), May 31-June 4, 2015, St. Louis, MO.
9. Doering, S., M. Thomas, E.J. **Lee** and J. Grant, 2015, Phosvitin antimicrobial potential and isolation

of bioactive peptides from egg yolk. **Poster** presentation at 12th Annual Wisconsin State Posters in the Rotunda, April 22, 2015, Madison, WI.

10. Doering, S., M. Thomas, C. Vang, J. Grant and E.J. **Lee**, 2015, MALDI-TOF MS Analysis of the Enrichment of Phosvitin Peptides Using Affinity Microchromatography Techniques, **Poster** presentation at 2015 UW-Stout Research Day, Menomonie, WI. April 28, 2015.
11. Vang, C., C.T. Kim and E.J. **Lee**, 2015, Production and characterization of lutein nano-emulsion, **Poster** presentation at 2015 UW-Stout Research Day, Menomonie, WI. April 28, 2015.
12. Doering, S., M. Thomas, E.J. **Lee** and J. Grant, 2015, Phosvitin antimicrobial potential and isolation of bioactive peptides from egg yolk. **Poster** presentation at 2015 UW-Stout Research Day, Menomonie, WI. April 28, 2015.
13. Mandal, Mamta and E.J. **Lee**, 2014, Effects of different extraction methods on the chemical properties of cranberry seed oils, **Poster** presentation at IFT Annual Conference, June 21-24, 2014, New Orleans, LA.
14. Doering, S., E.J. **Lee**, J. Burritt and J.E. Grant, 2014, Potential Antimicrobial Effect of Phosphopeptides from Phosvitin, **Poster** presentation at 2014 UW-Stout Research Day, Menomonie, WI. April 29, 2014.
15. Mandal, Mamta and E.J. **Lee**, 2014, Effects of different extraction methods on the chemical properties of cranberry seed oils, **Poster** presentation at 2014 UW-Stout Research Day, Menomonie, WI. April 29, 2014.
16. Marchiafava, M., S. Doering, P. Mullen, M. Svejda, M. Thomas, J. Fouks, E.J. Lee and J. Grant**,** 2014, Separation of Phosvitin Peptides through Chromatography, **Poster** presentation at 2014 UW-Stout Research Day, Menomonie, WI. April 29, 2014.
17. Mandal, Mamta, 2013. Effects of Different Extraction Methods on the Chemical Properties of Cranberry Seed Oils. **Master thesis**, University of Wisconsin-Stout. December 2013
18. Jellal, Younes, Jeffrey Sindelar, Naveen Chikthmmah, Cynthia Rohrer and E.J. **Lee**, 2013. Physical, Sensory and Microbial Attributes of Reduced-Sodium All-Beef Frankfurters. **Poster** presentation at **IFT** Annual Conference. July 13 - 16, 2013, Chicago, IL.
19. Leuer, Emily and Eun Joo **Lee**, 2013. Effect of antioxidants on the oxidation of isohumulones (bitter compounds) in beer, **Poster** presentation at **IFT** Annual Conference. July 13 - 16, 2013, Chicago, IL.
20. Jellal, Younes, 2013. Physical, Sensory and Microbial Attributes of Reduced-Sodium All-Beef Frankfurters. **Master thesis**, University of Wisconsin-Stout. May 2013.
21. Fouks, J.R., S. Doering, E.J. Lee, and J.E. Grant, 2013. Peptide Mass Figerprinting of Digests of Phosvitin from Egg Yolk. **Poster** presentation at 2013 UW-Stout Research Day, Menomonie, WI. April 30, 2013.
22. Jellal, Younes, Jeffrey Sindelar, Naveen Chikthmmah, Cynthia Rohrer and E.J. **Lee**, 2013. Physical, Sensory and Microbial Attributes of Reduced-Sodium All-Beef Frankfurters. **Poster** presentation at 2013 UW-Stout Research Day, Menomonie, WI. April 30, 2013
23. Patel, P.V., J.B. Patel, and E.J. **Lee**, 2013, The Effect of Potassium Chloride as a Salt Replacer on the Qualities of Processed Cheese. **Journal of Student Research (JSR)**, University of Wisconsin-Stout, Vol (XII): p313-329.
24. Shrestha, Bimala, Cynthia Rohrer, and E. J. **Lee**, 2012. Effects of feeding flaxseed mix on the content of omega-3 fatty acids in cheese curd and cheese during cheese-making process and storage. 2012 **Poster** presentation at **Polytechnic Summit**, Marietta, GA. June 6-8, 2012

25. Leuer, Emily, N. Chikthimmah, M. Miller-Rodeberg, and E. J. **Lee**, 2012 Effect of antioxidants on photooxidation kinetics in beer. **Poster** presentation at 2012 UW-Stout Research Day, Menomonie, WI. April 24, 2012
26. Shrestha, Bimala, Cynthia Rohrer, and E. J. **Lee**, 2012. Effects of feeding flaxseed mix on the content of omega-3 fatty acids in cheese curd during cheese-making process. **Poster** presentation at 2012 UW-Stout Research Day, Menomonie, WI. April 24, 2012
27. Patel, Jayjanmejay B., 2012. Effect of Potassium Chloride and Potassium-Based Emulsifying Salts as a Salt (Sodium chloride) Replacer on the Sensory and Textural Properties of Pasteurized Process Cheese, **Master thesis**, University of Wisconsin-Stout. August 2012.
28. Patel, Pranaykumar V., 2012. Effect of Potassium Chloride and Potassium-Based Emulsifying Salts as a Salt (Sodium chloride) Replacer on the Chemical and Microbiological Characteristics of Pasteurized Process Cheese, **Master thesis**, University of Wisconsin-Stout. May 2012.

SERVICE ACTIVITIES

1. University

(1) Department

a. Department Personnel Committee, since Fall 2017
   i. Personnel Committee (Role: Chair), 2020-2021
   ii. Post-Tenure Review Committee (Role: Chair), 2020-2021
   iii. Exceptional Promotion Committee (Role: Vice chair), 2020-2021
b. Department By-law Revision Committee (Role: committee member), 2017-2018
c. Course Revision
   i. GLP revision of FN-123 (Science of Food) to meet the new University Global Perspective (GLP) requirements: submitted by March 27, 2018, approved by June 4, 2018 (Role: Proposer of course revision)
d. Program Revision and Accreditation
   i. IFT program approval of B.S. Food Science and Technology (FST) program: submitted by October 31, 2019, approved by Dec. 17, 2019 (Role: Department Chair)
   ii. The Classification of Instructional Programs (CIP) code revision of B.S. Food Science and Technology and M.S. Food and Nutritional Sciences programs, submitted to the Academic Programs and Educational Innovation (APEI)-UW System, submitted by April 2, 2019, approved by April 16, 2019 (Role: Proposer of CIP code revision)
   iii. B.S. Food Science & Technology (FST) Minor program revision: submitted by Jan. 25, 2016, approved by April 7, 2016 (Role: Proposer of Minor program revision)
   iv. IFT program approval of B.S. Food Science and Technology (FST) program: submitted by August 28, 2014, approved by Dec. 8, 2014 (Role: faculty member)
   v. M.S. Food and Nutritional Sciences (FNS) program revision; submitted by Feb. 27, 2013, approved by May 7, 2013 (Role: faculty member)
   vi. B.S. Food Science and Technology (FST) program revision; submitted by Nov. 8, 2012, approved by Jan. 8, 2013 (Role: faculty member)
e. New Course Development
   i. FN 125 (Science of Food Lab): submitted by Oct. 13, 2019, approved by Dec. 19, 2019 (Role: Proposer of course development)
   ii. FN 123 (Science of Food): submitted by Nov. 15, 2013, approved by Dec. 13, 2013 (Role: Proposer of course development)
   iii. FN 425/625 (Food Chemistry): submitted by Sept. 9, 2013, approved by Nov. 20, 2013 (Role: Proposer of course development)

iv. FN 725 (Flavor Chemistry): submitted by May 9, 2013, approved by Oct. 2013 (Role: Proposer of course development)
v. FN 435/635 (Food Analysis): submitted by Dec. 7, 2012, approved by Feb. 2013 (Role: Proposer of course development)

f. Food and Nutrition Departmental Search and Screen Committees
i. Food Engineering position (Committee Chair), Summer & Fall 2016
ii. Food Microbiology position (Committee member), Spring 2016
iii. Nutrition position (Committee member), Fall 2013-Spring 2014
iv. Lab manager position, (Co-Chair), Spring 2012
v. Dietitian Internship Director position (Committee member), Fall 2011–Spring 2012
vi. Food Engineering position (Committee member), Fall 2011
vii. Department Chair position (Committee member), Fall 2011

g. Food and Nutrition Department Promotion Committee (Co-Chair), 2011-2012
h. Food Science & Technology (FST) program Advisory Board Member

(2) College and University

a. Graduate Education Committee (CEHHHS representative, alternate), 2020-2023
b. Search Committee for Food Instructor position, Hospitality Program, CEHHHS, Spring 2021
c. Member of UW-Stout Discovery Institute Stakeholder Group, 2018-2019
d. College (CEHHHS) Promotion Committee for Associate Professor level, 2015-2017
e. Faculty Senate Committee as a Food and Nutrition Department representative, 2013-2016

2. National

(1) Extension Services

- Member of Scholarship Committee, Minnesota (MN) IFT, 2017-2021
- Judge for "Speedy Science", Phi Tau Sigma: The honor society of food science and technology-University of Minnesota Chapter, Mar. 25-26, 2021.
- Member of the Stephen S. Chang Award Jury, Institute of Food Technologists (IFT), 2019-2020
- Division Chair of Food Chemistry Division, Institute of Food Technologists (IFT), 2017-2018
- Reviewer of Session Proposals and Technical Research Paper (TRP) of IFT Annual Meeting Scientific Program, Food Chemistry Track and Food Health & Nutrition Track, 2013-2020.
- Judge of Student Oral Competition of Food Chemistry Division, IFT Annual Meeting, 2013-2020
- Iowa Cured Meats Competition (Iowa Meat Processors Association (IMPA), serving as a judge). Ames, IA, 2004-2019.
- Committee Member of Research Paper Competition of KAFTA (Korean-American Food Technologist Association), 2014-2018.
- Competition Chair of Student Oral Competition of Food Chemistry Division, IFT16 Annual Meeting, July 17-19, 2016, Chicago, IL.
- Content Chair of Food Chemistry Division, Institute of Food Technologists (IFT), 2014-2016
- Event Supervisor of Wisconsin Science Olympiad (WSO), West Regional & State Tournament (Food Science event), 2013-2015
- Editorial board member, The Korean Journal of Food and Nutrition, 2015-2018
- Advisory board member of Scientific & Human Health/Nutrition, Rembrandt Enterprises, Inc., 2014-2015
- Committee Member of Leadership Team in IFT Food Chemistry Division, 2013-2020
- Panel of NC1199 multistate research project (N-3 polyunsaturated fatty acids and human health and disease), NIMSS (National Information Management and Support System), 2012-2013

- Translation and audio recording of "Value-added Aspect of USA Purebred Swine into Korean" for use in international education and marketing program, Swine Research Center, Iowa State University, May 2007.

(2) Reviewing

- A peer reviewer for many scientific journals including Journal of Food Science, Meat Science, Carbohydrate Research, Food Chemistry, Poultry Science, and LWT-Food Science & Technology. Reviewed 7-8 articles/year, since 2001.

(3) Professional Association

- Institute of Food Technologists (IFT) since 2002.
- American Chemical Society (ACS) since 2012.
- Korean-American Scientists and Engineers Association (KSEA) since 2007.
- American Society for Mass Spectrometry (ASMS), 2012-2014.