

CURRICULUM VITAE

DOJIN RYU, Ph.D.

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Application for the Director of the School of Food Science at the Washington State University

PROFILE

- Highly skilled in leading diverse & multi-disciplinary team with equality and equity in mind
- Innovative and engaging leader promoting creative collaboration to fulfill land-grant mission
- Internationally recognized expert in food safety research and outreach with 20 consecutive years of USDA/NIFA competitive grants

EDUCATION

Ph.D. 1997 Food Science and Technology, University of Nebraska-Lincoln.
 M.S. 1992 Food Science and Human Nutrition, University of Missouri-Columbia.
 B.S. 1989 Food Science and Technology, Korea University, Seoul, Korea.

ADDITIONAL EDUCATION

Environmental Toxicology & Carcinogenesis Graduate Program (1995-1997) University of Nebraska
 Medical Center, Omaha, NE

WORK EXPERIENCE**Term Director****07/2019 – 06/2020**

Bi-State School of Food Science, University of Idaho/Washington State University

Oversee and manage entire academic, research, and extension/outreach programs with a total budget of \$11 M within two land grant university systems. Direct oversight of personnel and other resources including spaces and facilities in eight locations in two states.

Notable Accomplishments:

- Established inclusive communication with faculty and staff to build cohesive unit
- Reorganized standing committees to achieve the goal of shared governance while delivering the same quality academic programs with 20% less teaching faculty
- Resolved the long-standing issue in course offering and scheduling between the two campuses and eliminated the students no longer required to travel back and forth
- Successfully executed 5% budget reduction while managing facilities and staffs in seven cities in two states at both UI and WSU separately.
- Managed voluntary separations and hiring of faculty and staff at UI and WSU
- Managed tenure and promotion as well as annual performance evaluation
- Strategically rebranded the unit with a new logo and redesigning websites
- Reorganized External Advisory Board to represent stakeholders including academia, industry and non-profit organization with diversity in mind
- Actively represented the unit to stakeholders in two states, Washington and Idaho, and beyond and increased visibility

Professor**08/2017 – Present**

Department of Animal, Veterinary and Food Sciences, University of Idaho, Moscow, ID
Bi-State School of Food Science, University of Idaho, Moscow, ID

Teaching (30%) and Research (65%). Develop and maintain nationally recognized research program in chemical food safety and food safety education.

Accomplishments:

- Developed and taught courses Introduction to Food Science; increased enrollment from 15 to >50 with innovative lecture and customer service. Also developed and taught Food Mycology lecture and lab.
- Established and maintained research program in food safety with continuous extramural funding (\$869K as PI, \$1.13 M total); published 20 peer-reviewed papers. Trained and advised 3 undergraduate and 4 graduate students 2 visiting scientists.

Associate Professor**09/2012 – 07/2017**

Bi-State School of Food Science, University of Idaho, Moscow, ID

Teaching (30%), Research (65%), and Outreach and Service (5%). Develop and maintain nationally recognized research program in chemical food safety.

Accomplishments:

- Developed and taught courses Introduction to Food Science; also reached out to high schools in the state of Idaho to offer this course as a part of Dual Credit Program.
- Successfully built and managed research program in chemical food safety and food safety education with additional extramural funding (\$1.1 M as PI) via multi-institutional and multidisciplinary collaboration; published 17 peer-reviewed papers. Trained and advised 5 undergraduate and 4 graduate students 1 visiting scientists.

Assistant & Associate Professor**09/2004 – 07/2008 & 08/2008 – 08/2012**

Department of Nutrition & Food Sciences, Texas Woman's University, Denton, TX

Teaching (50%), Research (50%). Teach food science courses and establish a nationally recognized research program in food safety.

Accomplishments:

- Developed and taught graduate/undergraduate courses including Introduction to Food Science, Cereal Science and Technology, Food Microbiology, and Food Toxicology.
- Successfully established research program in food safety with over \$3.4 M extramural funding (\$2.4 M as PI, \$1.0 M as Co-PI) through multi-institutional and multidisciplinary collaboration.

HONORS AND AWARDS

Science Board	2019-2023	U.S. Food and Drug Administration
Scientific Editor	2021-	Journal of Food Science, Toxicology section.
Tanner Award	2018	Most cited paper in <i>J. Food Sci./Toxicology</i> section, Institute of Food Technologists
Outstanding Research Award	2018	Gamma Sigma Delta, CALS/UI
Food Advisory Committee	2016-2017	U.S. Food and Drug Administration
Scholarship Award	2012	College of Health Sciences, TWU
Distinction in Scholarship	2009	Texas Woman's University

PUBLICATIONS

– 61 Peer-reviewed journal articles, 2 Book chapters

Journal Articles (Peer-reviewed)

1. García-Pérez, E., D. Ryu, H.Y. Kim, H. Kim, H.J. Lee. 2021. Human proximal tubule epithelial cells (HK-2) as a sensitive in vitro system for ochratoxin A induced oxidative stress. *Toxins* 2021, 13(11):787 <https://doi.org/10.3390/toxins13110787>
2. García-Pérez, E., D. Ryu, C. Lee, H.J. Lee. 2021. Ochratoxin A induces oxidative stress in HepG2 cells by impairing the gene expression of antioxidant enzymes. *Toxins* 2021, 13(4):271. <https://doi.org/10.3390/toxins13040271>.
3. Lee, H.J., S. Lee, K. Gu, D. Ryu. 2021. Reduction of ochratoxin A during the preparation of porridge with sodium bicarbonate and fructose. *Toxins* 13(3):224. <https://doi.org/10.3390/toxins13030224>.
4. Hua, Z., F. Younce, J. Tang, D. Ryu, B. Rasco, I. Hanrah, and M. Zhu. 2021. Efficacy of saturated steam against *Listeria innocua* biofilm on common food-contact surfaces. *Food Control* 125:107988. <https://doi.org/10.1016/j.foodcont.2021.107988>
5. Gu, K, D. Ryu, and H.J. Lee. 2021. Ochratoxin A and its reaction products affected by sugars during heat processing. *Food Chem.*348:129038. <https://doi.org/10.1016/j.foodchem.2021.129038>
6. Lee, H.J., C. Lee, and D. Ryu. 2020. Effects of baking soda and fructose in reduction of ochratoxin A in rice and oat porridge during retorting process. *Food Control* 116:107325. <https://doi.org/10.1016/j.foodcont.2020.107325>
7. Song, M., J. Park, J. Lee, H. Suh, H. Lee, D. Ryu, and C. Lee. 2020. New analytical approach for the determination of calcium phosphate dibasic and tribasic in processed food by comparison of ion chromatography with high-performance liquid chromatography. *Foods* 9:248. <https://doi.org/10.3390/foods9030248>
8. Ryu, D., R.J. Kowalski, G. Ganjyal, and H.J. Lee. 2019. Reduction of ochratoxin A in oats and rice by twin-screw extrusion processing with baking soda. *Food Control* 105:21-28.
9. Shin, H.S., H.J. Lee, M.C., Pyo, D. Ryu, K.W. Lee. 2019. Ochratoxin A-induced hepatotoxicity through phase I and phase II reactions regulated by AhR in liver cells. *Toxins* 11:377 (1-15).
10. Robinson, A., D. Ryu, and H.J. Lee. 2019. Utility of a multilevel modelling approach to investigate differences in isolation frequency of *Fusarium culmorum* in agricultural soil across the Inland Pacific Northwest. *Phytopathology* 109:1062-1073.
11. Lee, H.J., B.J. Gu, G. Ganjyal, and D. Ryu. 2019. Reduction of ochratoxin A in direct steam injected oat-based infant cereals with baking soda. *Food Control* 96:441-444.
12. Lee, H.J., S. Kim, H.J. Suh, and D. Ryu. 2019. Effects of explosive puffing process on the reduction of ochratoxin A in rice and oats. *Food Control* 95:334-338.
13. Lee, H.J., M.C. Pyo, H.S. Shin, D. Ryu, and K.W. Lee. 2018 Renal toxicity through AhR, PXR, and Nrf2 signaling pathway activation of ochratoxin A-induced oxidative stress in kidney cells. *Food Chem. Toxicol.* 122:59-68.
14. Pérez-Rodríguez, F., J. Kwon, A. Bolíva, K. Sauer, D. Ryu, and E. Todd. 2018. Probabilistic risk model of norovirus transmission during handling and preparation of fresh produce in school foodservice operations. *Int. J. Food. Microbiol.* 290:159-169.
15. Lee, H.J., S. Dahal, E.G. Perez, R.J. Kowalski, G. Ganjyal, and D. Ryu. 2017. Reduction of ochratoxin A in oat flakes by twin-screw extrusion processing. *J. Food Prot.* 80:1628-1634.

16. Mitchell, N.J., C. Chen, J. Palumbo, A. Bianchini, J. Stratton, J. Cappozzo, D. Ryu, and F. Wu. 2017. A risk assessment of dietary ochratoxin A in the United States. *Food Chem. Toxicol.* 100:265-273.
17. Cappozzo, J., L.S. Jackson, H.J. Lee, W. Zhou, F. Al-Taher, J. Zweigenbaum, and D. Ryu. 2017. Occurrence of ochratoxin A in baby foods in United States. *J. Food Prot.* 80:251-256.
18. Lee, H.J. and D. Ryu. 2017. Worldwide occurrence of mycotoxins in cereals and cereal-derived food products: Public health perspectives of their co-occurrence. *J. Agric. Food Chem.* 65:7034-7051.
19. Al-Taher, F., J. Cappozzo, J. Zweigenbaum, H.J. Lee, L.S. Jackson, and D. Ryu. 2017. Detection and quantitation of mycotoxins in infant cereals in the U.S. market by LC-MS/MS using a stable isotope dilution assay. *Food Control* 72:27-35.
20. Robinson, A.L., H.J. Lee, and D. Ryu. 2017. Polyvinylpyrrolidone reduces cross-reactions between antibodies and phenolic compounds in an enzyme-linked immunosorbent assay for the detection of ochratoxin A. *Food Chem.* 214:47-52.
21. Dahal, S., H.J. Lee, K. Gu, and D. Ryu. 2016. Heat stability of ochratoxin A in an aqueous buffered model system. *J. Food Prot.* 79(10):1748-1752.
22. Robinson, A.L., H.J. Lee, J. Kwon, E. Todd, F. Rodriguez, and Dojin Ryu. 2016. Adequate hand washing and glove use are necessary to reduce cross-contamination from hands with high bacterial loads. *J. Food Prot.* 79(2):304-308.
23. Lee, H.J. and D. Ryu. 2015. Advances in mycotoxin research: Public health perspectives. *J. Food Sci.* 80(12):T2970-2983.
24. Kuruc, J.A., J. Hegstad, H.J. Lee, K. Simons, D. Ryu, and C. Wolf-Hall. 2015. Infestation and quantification of ochratoxigenic fungi in barley and wheat naturally contaminated with ochratoxin A. *J. Food Prot.* 78(7):1350-1356.
25. Bianchini, A., R. Horsley, M.M. Jack, B. Kobiush, D. Ryu, S. Tittlemier, W.W. Wilson, H.K. Abbas, S. Abel, G. Harrison, J.D. Miller, W.T. Shier, and G. Weaver. 2015. DON Occurrence in Grains: A North American Perspective. *Cereal Foods World* 60(1):32-56.
26. Lee, H.J. and D. Ryu. 2015. Significance of ochratoxin A in breakfast cereals from the United States. *J. Agric. Food Chem.* 63(43):9404-9409.
27. Liu, X., Y. Xu, D.B. Wan, Y.H. Xiong, Z.Y. He, X.X. Wang, S.J. Gee, D. Ryu, and B.D. Hammock. 2015. Development of a nanobody-alkaline phosphatase fusion protein and its application in a highly sensitive direct competitive fluorescence enzyme immunoassay for detection of ochratoxin A in cereal. *Anal. Chem.* 87(2):1387-1394.
28. Nguyen, K.T.N. and D. Ryu. 2014. Ultrasonic extraction with liquid chromatography-tandem mass spectrometry for the analysis of ochratoxin A in processed cereal products. *J. AOAC Int.* 97(5):1384-1386.
29. Lee, H.J., Z. Anderson, and D. Ryu. 2014. Gluten contamination in foods labeled as 'gluten-free' in the United States. *J. Food Prot.* 77(10):1830-1833.
30. Lee, H.J., A.D. Meldrum, N. Rivera, and D. Ryu. 2014. Cross-reactivity of antibodies with phenolic compounds in pistachios during quantification of ochratoxin A by commercial ELISA kits. *J. Food Prot.* 77(10):1754-1759.
31. Nguyen, K.T.N. and D. Ryu. 2014. Development of a stir bar sorptive extraction method for analysis of ochratoxin A in beer. *J. AOAC Int.* 97(4):1092-1096.

32. Nguyen, K.T.N. and D. Ryu. 2014. Concentration of ochratoxin A in breakfast cereals and snacks consumed in the United States. *Food Control* 40:140-144.
33. Kwon, J., L. Zottarelli, S. Kwon, Y.M. Lee, and D. Ryu. 2013. Food safety training needs at evacuation shelters operated by faith-based organizations. *J. Environ. Health* 76(2):14-21.
34. Al-TaHER, F., K. Banaszewski, L.S. Jackson, J. Zweigenbaum, D. Ryu, and J. Cappozzo. 2013. A rapid method for the determination of multi-mycotoxins in wines and beers by LC-MS/MS using a stable isotope dilution assay. *J. Agric. Food Chem.* 61(10):2378-2384.
35. Jackson, L.S., K.A. Voss, and D. Ryu. 2012. Effects of different extrusion conditions on the chemical and toxicological fate of fumonisin B₁ in maize: A short review. *World Mycotoxin J.* 5(3): 251-260.
36. Voss, K.A., R.T. Riley, L.S. Jackson, J.E. Jablonski, A. Bianchini, L.B. Bullerman, M.A. Hanna, and D. Ryu. 2011. Extrusion cooking with glucose supplementation of fumonisin-contaminated corn grits protects against nephrotoxicity and disrupted sphingolipid metabolism in rats. *Mol. Nutr. Food Res.* 55:S312-S320.
37. Jackson, L.S., J. Jablonski, L.B. Bullerman, A. Bianchini, M.A. Hanna, K.A. Voss, A.D. Hollub, and D. Ryu. 2011. Reduction of fumonisin B₁ in corn grits during twin-screw extrusion. *J. Food Sci.* 76:T150-T155.
38. Ryu, D., A. Bianchini, L.B. Bullerman. 2008. Effects of Processing on Mycotoxins. *Stewart Postharvest Rev.* 4(6):1-7.
39. Voss, K.A., L.B. Bullerman, A. Bianchini, M.A. Hanna, and D. Ryu. 2008. Reduced toxicity of fumonisin B₁ in corn grits by single-screw extrusion. *J. Food Prot.* 71(10):2036-2041.
40. Obritsch, J.A., D. Ryu, L.E. Lampila, and L.B. Bullerman. 2008. Antibacterial effects of long-chain polyphosphates on selected spoilage and pathogenic bacteria. *J. Food Prot.* 71(7):1401-1405.
41. Bullerman, L.B., A. Bianchini, M.A. Hanna, L.S. Jackson, J. Jablonski, and D. Ryu. 2008. Reduction of fumonisin B₁ in corn grits by single-screw extrusion. *J. Agric. Food Chem.* 56(7):2400-2405.
42. Kwon, J., D. Ryu, and L.K. Zottarelli. 2007. Food handling practices and operators' attitudes toward food safety at faith-based organizations in Louisiana where hurricane evacuee shelters were provided in 2005. *Food Prot. Trends*, 27(2):84-89.
43. Bullerman, L.B., M. Giesova, Y. Hassan, D. Deibert and D. Ryu. 2006. Antifungal activity of sourdough bread cultures. *Adv. Exp. Med. Biol.* 571:307-316.
44. Chung, S.H., D. Ryu, E.K. Kim, and L.B. Bullerman. 2005. Enzyme-assisted extraction of moniliformin from extruded corn grits. *J. Agric. Food Chem.* 53(13):5074-5078.
45. Ryu, D., M.A. Hanna, K.A. Eskridge, and L.B. Bullerman. 2003. Heat stability of zearalenone in an aqueous buffered model system. *J. Agric. Food Chem.* 51(6):1746-1748
46. Pineda-Valdes, G., D. Ryu, M.A. Jackson, and L.B. Bullerman. 2003. Reduction of moniliformin in corn by heat processing. *J. Food Sci.* 68(3):1031-1035.
47. Park, J.W., B.S. Song, D. Ryu, C. Lee, and Y.B. Kim. 2002. *In vitro* bactericidal and anticancer activity of new metabolite, ARK42, isolated from *Aspergillus repens* K42. *J. Microbiol. Biotechnol.* 12(6): 1017-1021.

48. Bullerman, L.B., D. Ryu, and L.S. Jackson. 2002. Stability of fumonisins in food processing. *Adv. Exp. Med. Biol.* 504:195-204.
49. Ryu, D., L.S. Jackson, and L.B. Bullerman. 2002. Effects of processing on zearalenone. *Adv. Exp. Med. Biol.* 504:205-216.
50. Pineda-Valdes, G., D. Ryu, D.S. Jackson, L.B. Bullerman. 2002. Reduction of moniliformin during alkaline cooking of corn. *Cereal Chem.* 79(6):779-782.
51. Kim, E.K., D.H. Shon, J.Y. Yoo, D. Ryu, C. Lee, and Y.B. Kim, 2001. Natural occurrence of aflatoxins in Korean *meju*. *Food Addit. Contam.* 18(2):151-156.
52. Kim, E.K., D.H. Shon, D. Ryu, J.W. Park, H.J. Hwang, and Y.B. Kim. 2000. Occurrence of aflatoxin M₁ in Korean dairy products determined by ELISA and HPLC. *Food Addit. Contam.* 17(1):59-64.
53. Ryu, D and L.B. Bullerman. 1999. Measurement of the estrogenic activity of zearalenone by cell culture technique. *Food Sci. Biotech.* 8(4):227-231.
54. Ryu, D. and L.B. Bullerman. 1999. Effect of cycling temperatures on the production of deoxynivalenol and zearalenone by *Fusarium graminearum* NRRL 5883. *J. Food Prot.* 62(12):1451-1455.
55. Ryu, D., C. Munimbazi, and L.B. Bullerman. 1999. Fumonisin B₁ production by *Fusarium moniliforme* and *Fusarium proliferatum* as affected by cycling temperatures. *J. Food Prot.* 62(12):1456-1460.
56. Ryu, D., M. A. Hanna and L. B. Bullerman. 1999. Stability of zearalenone during extrusion of corn grits. *J. Food Prot.* 62(12):1482-1484.
57. Ryu, D and L.B. Bullerman. 1998. Incidence of *Fusarium* and other molds in Korean field crops. *J. Food Sci. Nutr.* 3(1):44-48.
58. Choi, W. J., D. Ryu, J. W. Lee, M.H. So, and Y.B. Kim. 1998. Production of *Streptomyces albus* KSM-35 amylase from *Bacillus subtilis* LKS88 harboring the recombinant plasmid pASA240. *Korean J. Food Nutr.* 11(4):381-387.
59. Kim, E.K., D. Ryu, D.H. Shon, S.H. Chung and Y.B. Kim. 1998. Natural occurrence of fumonisin B₁ in Korean polished rice and its processed foods by enzyme-linked immunosorbent assay. *Food Sci. Biotechnol.* 7(3):221-224.
60. Ryu, D., S. K. Katta, L. B. Bullerman, M. A. Hanna, and A. Gennadios. 1996. Viability in methyl soyate of microbial contaminants from farm fuel storage tanks. *Trans. ASAE.* 39(6):1200-1203.
61. Ryu, D. and D.L. Holt.1993. Growth inhibition of *Penicillium expansum* by several commonly used food ingredients. *J. Food Prot.* 56(10):862-867.

Book Chapters (Peer-reviewed)

- Ryu, D. and C. Wolf-Hall. 2015. Yeast and Molds. *In: Compendium of Microbiological Examination of Foods*, 5th Edition. American Public Health Association, Washington, DC.
- Ryu, D. and L.B. Bullerman. 2009. Mycotoxins of concern in imported grains. *In: Intentional and Unintentional Contaminants in Food and Feed*, F. Al-Taher, L. Jackson, and J.W. DeVries (Eds). pp 79-90. American Chemical Society, Washington, DC.

INVITED LECTURES AND PRESENTATIONS

- Ryu, D. Overview of mycotoxins. Pre-meeting workshop on Grain and Grain-Based Food Safety. Cereals & Grains Association (formerly AACC) Annual Meeting, Denver, CO, November 2, 2019.
- Ryu, D. Significance of mycotoxins in foods: Public health perspectives. The Korean Society of Food and Nutrition Annual Meeting, Pusan, Korea, October 31 – November 2, 2018.
- Ryu, D. Occurrence of ochratoxin A in the U.S. International Association for Food Protection Annual Meeting, Tampa, FL, July 9-12, 2017.
- Ryu, D. and J. Hunter. Food safety education and behavioral changes among deaf and hard of hearing population. International Association for Food Protection Annual Meeting, St. Louis, MO, July 31-August 3, 2016.
- Ryu, D. Effect of extrusion on ochratoxin A in oats. USDA-NIFA Project Directors Meeting, St. Louis, MO, July 30, 2016.
- Ryu, D., A.L. Robinson, and H.J. Lee. Occurrence of ochratoxin A-producing fungi in green coffee from different origins. International Commission on Food Mycology, Freising, Germany, June 2016.
- Ryu, D. and H.J. Lee. Distribution of deoxynivalenol in wheat during milling. World Mycotoxin Forum, Winnipeg, Canada, June 6-9, 2016.
- Ryu, D. and H.J. Lee. Worldwide occurrence of mycotoxins in cereals and cereal-based products. 251st American Chemical Society Meeting, San Diego, CA, March 13-17, 2016.
- Ryu, D. Risk assessment and intervention strategies for the emerging food safety threat of ochratoxin in the United States. USDA-NIFA Project Directors Meeting, Portland, OR, July 24, 2015.
- Ryu, D. Significance of mycotoxins in food safety. Agricultural and Food Chemistry Division Symposium, American Chemical Society, Bangkok, Thailand, March 4-5, 2014.
- Ryu, D. The emerging food safety concern of ochratoxin A in the United States. Annual Midwest AOAC Meeting & Expo, St. Louis, MO, June 4-6, 2012.
- Ryu, D. Mycotoxin Issues Associated with Nuts. International Association for Food Protection Annual Meeting, Anaheim, CA, August 2010.
- Ryu, D., L.B. Bullerman, A. Bianchini, M.A. Hanna, L.S. Jackson, J. Jablonski, and Voss, K.A. Chemical and Toxicological Fate of Fumonisin B₁ during Extrusion Processing. International Commission on Food Mycology, Freising, Germany, June 3-5, 2010.
- Ryu, D. Molds and Mycotoxins in Foods, Texas Environmental Health Association, Plano, TX, May 6, 2010.
- Ryu, D. Molds and Mycotoxins in Food, Feed, and the Environment Workshop, University of Nebraska-Lincoln, Lincoln, NE, March 17-19, 2009.
- Ryu, D. Mycotoxins of concern in imported grains. Symposium on Intentional and Unintentional Contaminants in Food and Feed, American Chemical Society 235th National Meeting & Exposition, New Orleans, LA, April 6-10, 2008.
- Ryu, D. Molds and Mycotoxins in Food, Feed, and the Environment Workshop, Hilton Hotel and Convention Center, Omaha, NE, February 21-23, 2008.

- Ryu, D., L.S. Jackson, K.A. Voss, M.A. Hanna, and L.B. Bullerman. Effects of extrusion processing on reduction of fumonisins in corn. International Commission on Food Mycology, Key West, FL, June 4-6, 2007.
- Ryu, D., L.S. Jackson, K.A. Voss, M.A. Hanna, and L.B. Bullerman. Fate of fumonisins in corn during extrusion processing. The 48th Annual Corn Dry Milling Conference. Peoria, IL, May 31 – June 1, 2007.
- Ryu, D. Molds and Mycotoxins Workshop, University of Nebraska-Lincoln, Lincoln, NE, March 13-15, 2007.
- Ryu, D. Molds and Mycotoxins Workshop, University of Nebraska-Lincoln, Lincoln, NE, May 16-18, 2006.
- Ryu, D. Effects of extrusion processing on reduction of fumonisins, deoxynivalenol and zearalenone in corn grits. Annual Midwest AOAC Meeting, Kansas City, MO, May 23-26, 2005.
- Ryu, D. Mycotoxins in Food – Mycotoxins associated with human diseases. Workshop for Triggers and Environmental Determinants of Diabetes in the Young (TEDDY), NIH. Reston, VA, August 11, 2003.
- Ryu, D. Mold Growth and Bakery Foods – Origin, effects and prevention. Short Course: Extending Shelf Life of Bakery Foods, American Institute of Baking. Manhattan, KS, May 21-22, 2001.
- Ryu, D., L. S. Jackson, and L. B. Bullerman. Effects of processing on zearalenone. American Chemical Society Symposium - Mycotoxins in Foods. Washington, DC, August 20-24, 2000.

Other Invited Lectures and Presentations

- Lee, H.J. and D. Ryu. Reduction of ochratoxin a in rice and oat porridge by indirect steaming process with baking soda. 2019 Annual Meeting of International Association for Food Protection, Louisville, KY, July 21-24. (poster)
- Lee, H.J., F. Wu, and D. Ryu. Effects of ochratoxin A and aristolochic acid on the kidney in diabetic animal model. 2019 IUTOX 15th International Congress of Toxicology, Honolulu, HI, July 15-18. (poster)
- Lee, H.J., E.G. Perez, and D. Ryu. The role of oxidative stress in the ochratoxin A-mediated toxicity in liver and kidney cell lines. 2019 IUTOX 15th International Congress of Toxicology, Honolulu, HI, July 15-18. (poster)
- Lee, H.J. and D. Ryu. Reduction of ochratoxin A in oats during roasting with reducing sugars. 2019 International Commission on Food Mycology, Freising, Germany, June 3-5. (poster)
- Lee, H.J. and D. Ryu. Reduction of ochratoxin A during food processing. AOAC International Annual Meeting and Exposition, Toronto, Canada, August 26–29, 2018.
- Lee, H.J., H.J. Suh, H.S. Lee, J.M. Bae, M.S. Park, J.Y. Han, and D. Ryu. Effect of explosive puffing on the reduction of ochratoxin A in rice and oats. Korean Society for Food Engineering Spring Meeting and Symposium, Seoul, Korea, April 24, 2018. (poster)
- Lee, H.J., H.S. Lee, J.M. Bae, M.S. Park, J.Y. Han, and D. Ryu. Reduction of ochratoxin A in rice and oat porridge by retorting process. Korean Society for Food Engineering Spring Meeting and Symposium, Seoul, Korea, April 24, 2018. (poster)

- Robinson, A. L. and Dojin Ryu. 2017. Predicting seasonal soil populations of *Fusarium culmorum* using site-specific climate data. Washington Association for Food Protection Annual Meeting, Chelan, WA, September 21-22, 2017. (poster)
- Dahal, S, Z. Anderson, H.J. Lee, and Dojin Ryu. Heat stability of ochratoxin a in an aqueous buffered model system. International Association for Food Protection Annual Meeting, Portland, OR, July 25-28, 2015. (poster)
- Robinson, A.L., H.J. Lee, and D. Ryu. Polyvinylpyrrolidone reduces cross-reactions between antibodies and phenolic compounds in an enzyme-linked immunosorbent assay for the detection of ochratoxin A. International Association for Food Protection Annual Meeting, Portland, OR, July 25-28, 2015. (poster)
- Hunter, J, H.J. Lee, and Dojin Ryu. Development and evaluation of a food safety survey for the deaf and hard of hearing. International Association for Food Protection Annual Meeting, Portland, OR, July 25-28, 2015. (poster)
- Lee, H.J., Z. Anderson, and D. Ryu. Gluten contamination in foodstuff labeled as 'gluten-free' in the United States; a pilot study. International Association for Food Protection Annual Meeting, Indianapolis, IN, August 3-6, 2014. (poster)
- Zottarelli, L.K. and D Ryu. Menu labeling of common food allergens in independently operated restaurants: Knowledge and attitude. Institute of Food Technologists Annual Meeting, Chicago, IL, July 13-16, 2013.
- Ryu, D., L. S. Jackson, J. C. Cappozzo, J. D. Palumbo, A. Bianchini, J. E. Stratton, C. Wolf-Hall, and F. Wu. Occurrence of ochratoxin A in foods in the United States. Gordon Research Conference on Mycotoxins & Phycotoxins, Easton, MA, June 16-21, 2013. (poster)
- Nguyen, K. and D. Ryu. Determination of ochratoxin A in breakfast cereals and snacks from the United States by HPLC-FLD. International Commission on Food Mycology, Freising, Germany, June 3-5, 2013. (poster)
- Zottarelli, L.K., C. Bednar, J. O'Donnell, M. Wofford, G. Hower, and D. Ryu. The association between menu labeling of common allergens and food safety knowledge and attitudes: A study of independently-operated restaurants. *J. Food Prot.* 74(Supp.): International Association for Food Protection Annual Meeting, Providence, RI, July 2012. (poster)
- Kwon, J., Liu, P., Lee, Y. M., Zottarelli, L., & Ryu, D. Retention of food safety knowledge after faith-based organization volunteer training. *J Food Prot.* 74(Supp.):109. International Association for Food Protection Annual Meeting, Providence, RI, July 2012. (poster)
- Kwon, J., Sauer, K., Lee, Y. M., Liu, P., Choi, J. W., Todd, E., & Ryu, D. Produce handlers' handwashing behaviors in secondary school foodservice facilities. *J Food Prot.* 74(Supp.):50. International Association for Food Protection Annual Meeting, Providence, RI, July 2012. (poster)
- Kwon, J, D. Ryu, L. Zottarelli, Y.M. Lee, and P. Liu. Effectiveness of food safety training video for volunteers in faith-based organizations. *J Food Prot.* 74(Supp.):109. International Association for Food Protection Annual Meeting, Milwaukee, WI, August 2011. (poster)
- Jackson, L.S., J. Jablonski, L.B. Bullerman, A. Bianchini, M.A. Hanna, K.A. Voss, A.D. Hollub, and D. Ryu. Reduction of fumonisin B₁ in corn grits by twin-screw extrusion. Institute of Food Technologists Annual Meeting, New Orleans, LA, June 2011. (poster)

- Zottarelli, L.K., J. Kwon, D. Ryu, E. Rider, and A. Deane. Shelter in the Storm: A Sociopolitical Ecology Analysis of Faith-Based Organizations Providing Food and Shelter during Large Scale Evacuations of the United States Gulf Coast. International Sociological Association World Congress, Gothenburg, Sweden, July 11-17, 2010.
- Ryu, D., L.B. Bullerman, A. Bianchini, M.A. Hanna, L.S. Jackson, J. Jablonski, and K.A. Voss. Chemical and toxicological fate of fumonisin B₁ during extrusion processing. International Commission on Food Mycology, Freising, Germany, June 2010.
- Voss, K.A., L.S. Jackson, J. Jablonski, A. Bianchini, M.A. Hanna, L.B. Bullerman, D. Ryu. Concentrations and toxicity of fumonisin B₁ in fermented corn grits are reduced by extrusion cooking with glucose supplementation. Joint Panel on Toxic Microorganisms, US Japan Cooperative Program on Development and Utilization of Natural Resources Annual Scientific Sessions, Tokyo, Japan, November, 2009.
- Kwon, J., D. Ryu, L. Zottarelli, L., S. Kwon. Food safety training needs for evacuation shelters operated by faith-based organizations. American Dietetic Association Food and Nutrition Conference and Expo, Denver, CO, October 17-20, 2009. (poster)
- Zottarelli, L.K., J. Kwon, D. Ryu, E. Rider. Heeding the Call: Faith-Based Organization Volunteers' Experiences Providing Evacuation Shelter and Support. Association for Applied and Clinical Sociology San Antonio Texas October 8-10, 2009.
- Kwon, J., D. Ryu, L. Zottarelli, S. Kwon. Food safety training priorities for evacuation shelters operated by faith-based organizations: An expert survey using discrete selections. International Association for Food Protection, Grapevine, TX, July 12-15, 2009. (poster)
- Voss, K.A., T.D. Burns, D. Ryu, L.S. Jackson, L.B. Bullerman, R.T. Riley, J.B. Gelineau-van Waes. A bioassay approach for determining the effect of cooking on fumonisin toxicity. German Society for Mycotoxin Research Annual Workshop, Muenster, Germany, June, 2009.
- Voss, K.A., T.D. Burns, D. Ryu, L.S. Jackson, R.T. Riley, L.B. Bullerman. Mycotoxin research at TMRU: processing, cooking, and toxicity. University of Muenster, Muenster, Germany, June, 2009.
- Voss, K.A., D. Ryu, A. Bianchini, L.B. Bullerman, L. Wu, M.E. Snook, J. Barach. Effects of processing and cooking on mycotoxins: lessons from studies on fumonisin B₁ and deoxynivalenol. American Chemical Society Division of Agricultural and Food Chemistry, April, 2008.
- Voss, K.A., D. Ryu, T. Burns, R.T. Riley, L.S. Jackson, A. Bianchini, L.B. Bullerman. A bioassay approach for determining the effect of cooking on fumonisin toxicity. American Chemical Society Division of Agricultural and Food Chemistry, April, 2008.
- Voss, K.A., L.S. Jackson, J. Jablonski, A. Bianchini, L.B. Bullerman, M. A. Hanna, and D. Ryu. The effect of extrusion on the fumonisin content and toxicity of corn grits. Gordon Research Conference, Waterville, ME, June 17-21, 2007. (poster)
- Bianchini, A., D. Ryu, L.S. Jackson, K.A. Voss, M.A. Hanna, and L.B. Bullerman. Toxicity of fumonisin degradation products produced by extrusion. Fourth Annual Nebraska Food Research Symposium, Lincoln, NE, April 14, 2007.
- Voss, K.A., L.S. Jackson, A. Bianchini, L.B. Bullerman, M.A. Hanna, D. Ryu. Chemical and toxicological evaluation of fumonisin B₁ in extruded corn grits. Toxicol. Sci. (Suppl. The

Toxicologist) 96:149. Abstr. 725. Society of Toxicology Meeting, Charlotte, NC, March 25-29, 2007. (poster)

Voss, K.A., L.S. Jackson, J. Jablonski, A. Bianchini, L.B. Bullerman, M.A. Hanna, D. Ryu. Effect of extrusion cooking, with and without glucose, on fumonisin B₁ in corn grits. Proceedings of the annual meeting of the Center for Food Safety, University of Georgia, Atlanta, GA, February, 2007.

GRANTSMANSHIP [\$5,786,636 Total; \$4,400,030 as PI]

- Lee, H.J., D. Ryu, J. Ball, and S. Smith. [10/1/21 – 9/30/24] \$544,158. Collaborative Food Safety Education and Training for the Deaf and Hard of Hearing Farmers in the Pacific Northwest. Food Safety Outreach Program (FSOP), National Institute of Food and Agriculture, USDA.
- Achour, A, H. Lee, and D. Ryu [5/1/2020 – 4/30/2023] \$260,000. Detect Sources of Patulin Contaminations in Processed Apple Products. Washington Tree Fruit Research Commission.
- Ryu, D., O. Balemba, H.J. Lee. [3/1/19 – 2/28/23] \$324,578. Protective Effect of Antioxidants against Ochratoxin A in Infant Cereals. Agriculture and Food Research Initiative, National Institute of Food and Agriculture, USDA.
- Ryu, D. and H.J. Lee [11/16/16 – 11/15/19] \$226,000. Research on Practical Techniques for Reduction of Mycotoxin in Cereal-based Products, Foodpolis, Korea.
- Ryu, D., A.J. Paszczyński, G.M. Ganjyal. [11/1/15 – 10/31/19] \$474,864. Chemical and Toxicological Fate of Ochratoxin A in Infant Cereals during Processing. Agriculture and Food Research Initiative, National Institute of Food and Agriculture, USDA.
- Ryu, D., K.M. Killinger, R.E. Magnan, D.J. Mercaldo, G. Unlu. [10/1/13 – 9/30/16] \$424,930. Food safety education and behavioral changes among deaf and hard of hearing population: A model Study. Agriculture and Food Research Initiative, National Institute of Food and Agriculture, USDA.
- Ryu, D., J.C. Cappozzo, L.S. Jackson, J.D. Palumbo, J.E. Stratton, A. Bianchini, C. Wolf-Hall, F. Wu. [3/1/11 – 2/28/17] \$1,499,608. Risk assessment and intervention strategies for the emerging food safety threat of ochratoxin in the United States. Agriculture and Food Research Initiative, National Institute of Food and Agriculture, USDA.
- Ryu, D., C.M. Bednar, L.K. Zottarelli, and J.L. Baumert. [10/1/10 – 9/30/13] \$600,000. Integrated strategies to reduce foodborne illness and food allergic reactions associated with independently operated restaurants. National Integrated Food Safety Initiative, National Institute of Food and Agriculture, USDA.
- Kwon, J., D. Ryu, K. Sauer, and E. Todd. [10/1/10 – 9/30/13] \$600,000. Assessment and reduction of produce food safety risks in the school foodservice system. National Integrated Food Safety Initiative, National Institute of Food and Agriculture, USDA.
- Kwon, J., D. Ryu, and L.K. Zottarelli. [9/1/07 – 8/30/10] \$456,606. Food safety risk assessment and development of education program for evacuation shelters operated by faith-based organizations. Integrated Research, Education, and Extension Competitive Grants Program – National Integrated Food Safety Initiative, USDA.
- Ryu, D., Bullerman, L.B., Hanna, M.A., and Voss, K.A. [9/1/05 – 8/31/08] \$260,000. Chemical and toxicological evaluation of fumonisin B₁ in extruded corn grits. National Research Initiative Competitive Grant Program, USDA.

- Ryu, D. [9/1/07 – 8/31/08] \$4,500. Promotion of food safety by using probiotics. Chancellor's Research Fellows Program, TWU.
- Ryu, D. [1/1/07 – 8/31/07] \$6,000. Effect of hydroxy fatty acids on the growth and aflatoxin B₁ production of *Aspergillus flavus*. Research Enhancement Award. Texas Woman's University.
- Ryu, D. [1/1/2006 – 8/31/2006] \$6,000. Determination of matrix-bound fumonisins in food products. Research Enhancement Award. Texas Woman's University.
- Ryu, D. [1/1/2006 – 8/31/2006] \$3,000. Effect of selected food ingredients on the stability of moniliformin. Human Nutrition Research Funds.
- Ryu, D. [9/1/05 – 8/31/06] \$4,000. Fate of *Fusarium* toxins in grains and processed grain-based foods. Chancellor's Research Fellows Program, TWU.
- Ryu, D. [1/1/2005 – 8/31/2005] \$6,000. Heat stability of moniliformin in an aqueous buffered model system. Human Nutrition Research Funds.
- Ryu, D. [1/1/2005 – 8/31/2005] \$6,000. Heat stability of moniliformin in an aqueous buffered model system. Research Enhancement Award. Texas Woman's University.
- Ryu, D. [7/1/2004 – 6/30/2005] \$10,000. Reduction of neural tube defect risk from corn by extrusion processing. Layman Award, University of Nebraska-Lincoln.
- Bullerman, Lloyd B. and Ryu, D. [1/1/2004-12/31/2005] \$40,000. Biological evaluation of reduction of fumonisin B₁ toxicity by extrusion processing. The Anderson Research Grant Program (NC-213).
- Bullerman, Lloyd B. and Ryu, D. [9/1/2003-8/31/2004] \$25,000. Naturally occurring antifungal agents from lactic acid bacteria. Midwest Advanced Food Manufacturing Alliance.
- Bullerman, Lloyd B. and Ryu, D. [5/1/2003-4/31/2004] \$5,000. Inhibition of *Fusarium graminearum* and Fusarium Head Blight by *Bacillus pumilus*. U.S. Wheat and Barley Scab Initiative, USDA.

PROFESSIONAL AFFILIATIONS

American Chemical Society (ACS)
 AACC International (formerly American Association of Cereal Chemists)
 AOAC International (formerly Association of Official Analytical Chemists)
 Institute of Food Technologists (IFT, Professional member, Certified Food Scientist)
 International Association for Food Protection
 International Commission on Food Mycology (Commissioner)
 Society of Toxicology (Full member)

NOTABLE SERVICE & RECOGNITION

Science Board, U.S. Food and Drug Administration (2019-2023)
 Food Advisory Committee, U.S. Food and Drug Administration (2016-2017)
 Board of Trustees, International Food Information Council (2020-2022)
 Food Safety & Toxicology Research Area Committee, U.S. Wheat & Barley Scab Initiative (2020-2023)
 Scientific Editor, Journal of Food Science, Toxicology and Chemical Food Safety section (2021-Present)
 Associate Editor, Editorial Board, Journal of Food Science (2011-2021)
 Editorial Board, Journal of Food Protection (2010-Present)
 Editorial Board, Journal of Food Science and Nutrition (2008-2012)
 Member-at-large, Toxicology & Safety Evaluation Division, IFT (2015-2017)

Chair, Toxicology & Safety Evaluation Division, IFT (2020-2021)

Chair, Toxicology & Safety Evaluation Division, IFT (2010-2011)

Founder and President, TWU Chapter, Society of the Phi Tau Sigma (2006-12)

Member, Food Safety and Microbiology Technical Committee, AACCI (2015-Present)