

CURRICULUM VITAE

NAME

Yang, Hua

ADDRESS

Animal Sciences
College of Agricultural Sciences

PHONE

(970) 491-8272

OTHER POSITIONS

September 2013 - Present Assistant Professor, Colorado State University.

2010 - 2013 Food Microbiologist, Roka Bioscience Inc.

2007 - 2010 Post- Doctoral Fellow, Colorado State University.

2002 - 2006 Graduate Research Assistant, Clemson University.

1997 - 2000 Graduate Research Assistant, China Agricultural University.

PUBLISHED WORKS

Non-Refereed Journal Articles

Yang, X., Noyes, N. R., Doster, E., Martin, J., Linke, L. M., Magnuson, R. J., Yang, H., Geornaras, I., Woerner, D. R., Jones, K., Ruiz, J. G., Boucher, C. A., Morley, P. S., Belk, K. E. (2016). Use of metagenomic shotgun sequencing technology to detect foodborne pathogens within their microbiome in beef production chain. *Applied and environmental microbiology*.

Belk, K. E., Woerner, D. R., Delmore, R., Tatum, J. D., Yang, H., Sofos, J. N. (2014). The meat industry: do we think and behave globally or locally? *Meat science*, 98(3), 556-60.

Fouladkhah, A., Geornaras, I., Yang, H., Sofos, J. N. (2013). Lactic acid resistance of Shiga toxin-producing *Escherichia coli* and multidrug-resistant and susceptible *Salmonella* Typhimurium and *Salmonella* Newport in meat homogenate. *Food Microbiol.*, 36, 260-266.

Yang, H., Kruh-Garcia, N. A., Dobos, K. (2012). Purified protein derivatives of tuberculin--past, present, and future. *FEMS immunology and medical microbiology*, 66(3), 273-80.

Castillo, E. F., Dekonenko, A., Arko-Mensah, J., Mandell, M. A., Dupont, N., Jiang, S., Delgado-Vargas, M., Timmins, G. S., Bhattacharya, D., Yang, H., Hutt, J., Lyons, C. R., Dobos, K., Deretic, V. (2012). Autophagy protects against active tuberculosis by suppressing bacterial burden and inflammation. *Proceedings of the National Academy of Sciences of the United States of America*, 109(46), E3168-76.

Geornaras, I., Yang, H., Moschonas, G., Nunnally, M. C., Belk, K. E., Nightingale, K. K., Woerner, D. R., Smith, G. C., Sofos, J. N. (2012). Efficacy of chemical interventions against *Escherichia coli* O157:H7 and multidrug-resistant and antibiotic-susceptible *Salmonella* on inoculated beef trimmings. *Journal of food protection*, 75(11), 1960-7.

- Fouladkhah, A., Geornaras, I., Yang, H., Belk, K. E., Nightingale, K. K., Woerner, D. R., Smith, G. C., Sofos, J. N. (2012). Sensitivity of Shiga toxin-producing *Escherichia coli*, multidrug-resistant *Salmonella*, and antibiotic-susceptible *Salmonella* to lactic acid on inoculated beef trimmings. *Journal of food protection*, 75(10), 1751-8.
- Geornaras, I., Yang, H., Manios, S., Andritsos, N., Belk, K. E., Nightingale, K. K., Woerner, D. R., Smith, G. C., Sofos, J. N. (2012). Comparison of decontamination efficacy of antimicrobial treatments for beef trimmings against *Escherichia coli* O157:H7 and 6 non-O157 Shiga toxin-producing *E. coli* serogroups. *Journal of food science*, 77(9), M539-44.
- Cho, Y. S., Dobos, K., Prenni, J., Yang, H., Hess, A. M., Rosenkrands, I., Andersen, P., Ryoo, S. W., Bai, G. H., Brennan, M. J., Izzo, A. A., Bielefeldt-Ohmann, H., Belisle, J. T. (2012). Deciphering the proteome of the in vivo diagnostic reagent "purified protein derivative" from *Mycobacterium tuberculosis*. *Proteomics*, 12(7), 979-91.
- Cho, Y. S., Dobos, K., Prenni, J., Yang, H., Hess, A. M., Rosenkrands, I., Andersen, P., Ryoo, S. W., Bai, G. H., Brennan, M. J., Izzo, A. A., Bielefeldt-Ohmann, H., Belisle, J. T. (2012). Deciphering the proteome of the in vivo diagnostic reagent "purified protein derivative" from *Mycobacterium tuberculosis*. *Proteomics*, 12(7), 979-91.
- Yang, H., Troudt, J. M., Grover, A., Arnett, K. A., Lucas, M. C., Cho, Y. S., Bielefeldt-Ohmann, H., Taylor, J. L., Izzo, A. A., Dobos, K. (2011). Three protein cocktails mediate delayed-type hypersensitivity responses indistinguishable from that elicited by purified protein derivative in the guinea pig model of *Mycobacterium tuberculosis* infection. *Infection and immunity*, 79(2), 716-23.
- Yang, H., Byelashov, O. A., Geornaras, I., Goodridge, L., Nightingale, K. K., Belk, K. E., Smith, G. C., Sofos, J. N. (2010). Characterization and transferability of class 1 integrons in commensal bacteria isolated from farm and nonfarm environments. *Foodborne pathogens and disease*, 7(12), 1441-51.
- Yang, H., Byelashov, O. A., Geornaras, I., Goodridge, L., Nightingale, K. K., Belk, K. E., Smith, G. C., Sofos, J. N. (2010). Presence of antibiotic-resistant commensal bacteria in samples from agricultural, city, and national park environments evaluated by standard culture and real-time PCR methods. *Canadian journal of microbiology*, 56(9), 761-70.
- Deenadayalan, A., Heaslip, D., Rajendiran, A. A., Velayudham, B. V., Frederick, S., Yang, H., Dobos, K., Belisle, J. T., Raja, A. (2010). Immunoproteomic identification of human T cell antigens of *Mycobacterium tuberculosis* that differentiate healthy contacts from tuberculosis patients. *Molecular & cellular proteomics : MCP*, 9(3), 538-49.

Manuscript

- Yang, H., Troudt, J. M., Grover, A., Arnett, K. A., Lucas, M. C., Cho, Y., Bielefeldt-Ohmann, H., Taylor, J. L., Izzo, A. A., Dobos, K. (2011). *Three protein-cocktails mediate DTH responses indistinguishable from PPD in the guinea pig model of Mycobacterium*. *Infect Immunology*.

PAPERS PRESENTED/SYMPOSIA/INVITED LECTURES/PROFESSIONAL MEETINGS/WORKSHOPS

- December 2015, "Draft Genome Sequence of a Shiga Toxin-Negative *Escherichia coli* O157:H7 Strain C1-057 Isolated from Feedlot Cattle", (Presenter) Yang, H., peer-reviewed/refereed.
- 2015, "Using metagenomics to unlock the ecology of antimicrobial resistance in cattle production systems."
- December 15, 2015, "Determining process lethality of *Escherichia coli* O157:H7 and *Salmonella* spp. in heat treated, rendered oil", Beef Industry Food Safety Council, National Cattleman's Beef Association.

- March 2015, "In plant validation of high and low pH Centron™ (AFTEC 3000) for use as a whole carcass antimicrobial intervention.", Beef Industry Food Safety Council (BIFSCO).
- March 2015, "Shotgun metagenomic sequencing reveals lack of antimicrobial resistance in beef.", Beef Industry Food Safety Council (BIFSCO).
- March 2015, "Use of next-generation sequencing and robust bioinformatics to detect and identify foodborne pathogen genes in cattle and their environments.", Beef Industry Food Safety Council (BIFSCO).
- March 2015, "Validation of Centron and lactic acid for use as an antimicrobial intervention on beef cheek meat and thermal pasteurization as a whole carcass antimicrobial intervention.", Beef Industry Food Safety Council (BIFSCO).
- March 2015, "Use of metagenomic high-throughput sequencing to detect foodborne pathogens in cattle and their environ", BIFSCO, (Presenter) Yang, X., Dallas, TX, peer-reviewed/refereed.
- March 2015, "Evaluation of Direct-fed Microorganisms for Their Competitive Exclusionary Activities in Inhibiting Pathogenic Bacteria Adhesion to Caco-2 cells", Dallas, TX, peer-reviewed/refereed.
- February 2, 2015, "Using metagenomics to unlock the ecology of antimicrobial resistance in cattle production systems", Scientific Proceedings of the 16th annual CVMBS Research Day, (Presenter) Noyes, N., Fort Collins, CO.
- January 15, 2015, "Developing a methodology for the microbiological evaluation of rendered oils", Institute of Food Technologists, peer-reviewed/refereed.
- January 14, 2015, "Effects of sulfuric acid sodium sulfate on natural spoilage microflora, lean discoloration and off-odors of pork boneless loins and back ribs", IFT 16, Institute of Food Technologists, peer-reviewed/refereed.
- December 2014, "Using metagenomics to unlock the ecology of antimicrobial resistance in cattle production systems.", Proceedings of the 95th Annual Conference of Research Workers in Animal Diseases, (Presenter) Noyes, N., Chicago, IL.
- March 2014, "Use of metagenomic high-throughput sequencing technology and robust bioinformatics to assess the microbiome of cattle, their environments, and beef products to determine the degree of antimicrobial resistance", (Presenter) Yang, X., Lincoln, Nebraska, peer-reviewed/refereed.

OTHER ACTIVITIES/ACCOMPLISHMENTS – PUBLICATIONS/SCHOLARLY RECORD

(February 20, 2015). Seminar, "Finding Funding for Your Research and Programs," Colorado State University, Fort Collins, CO, United States. Number of Credit Hours: 1.5.

TEACHING:

<u>Year</u>	<u>Semester</u>	<u>Course No./Title</u>	<u>Cr. Hrs.</u>	<u>Enrollment</u>
2015	Fall	ANEQ676 - Molecular Approaches to Food Safety	3	8
2015	Fall	ANEQ676 - Molecular Approaches to Food Safety - Lab	0	8
2015	Spring	ANEQ799 - Dissertation	18	7
2014	Fall	ANEQ676 - Molecular Approaches to Food Safety	3	8
2014	Fall	ANEQ676 - Molecular Approaches to Food Safety - Lab	0	8
2013	Fall	ANEQ460 - Meat Safety	2	26
2013	Fall	ANEQ460 - Meat Safety	2	26

COMMITTEES

The 6th Annual Public Health Symposium at Colorado State University, (April 15, 2015).

PROFESSIONAL AFFILIATIONS AND ACTIVITIES

Institute of Food Technologists. (2007 - Present).

International Association for Food Protection. (2007 - Present).

American Society for Microbiology. (2002 - Present).

Colorado State University, College of Agricultural Sciences, International Programs. (October 2015).
