

# CURRICULUM VITAE

## BASANTA RAJ WAGLE

### CONTACTS:

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### EDUCATIONS:

Degree	Institute	Year
Ph.D. Poultry Science	University of Arkansas, Fayetteville, AR	2015-Present
M.S Poultry Science	University of Arkansas, Fayetteville, AR	2013-2015
Bachelor of Veterinary Science and Animal Husbandry	Tribhuvan University, Chitwan, Nepal	2005-2010

### PROFESSIONAL EXPERIENCE:

1. Graduate Research Assistant, University of Arkansas, Fayetteville, 2013-present
  - 2016-2017: Evaluating the effect of phytochemicals to reduce biofilm formation and to inactivate mature biofilm of *Campylobacter jejuni*.
  - 2015-2016: Testing the effect of chitosan based eugenol coating on poultry products
  - 2014-2015: Examining  $\beta$ -resorcylic acid as wash treatment to reduce *C. jejuni* in the post-harvest poultry.
  - 2013-2014: Investigating the efficacy of  $\beta$ -resorcylic acid to reduce *C. jejuni* colonization in birds.
2. Poultry Veterinarian, Practical Action Consulting Asia, Nepal, supported by World Bank Group, 2011-2013
  - Involved in delivering trainings to the broiler farmers and local service providers in coordination with the leading poultry industry (Avinash and Nimbus) of Nepal
3. Veterinarian surgeon, Himalayan Animal Rescue Trust, Nepal, funded by Himalayan Animal Treatment Center, UK, 2010-2011
  - Engaged in animal welfare through anti-rabies vaccination and spaying campaign in the street dogs

## PUBLICATIONS:

- Wagle, B. R., A. Upadhyay, K. Arsi, S. Shrestha, K. Venkitanarayanan, A. M. Donoghue, and D. J. Donoghue. 2017. Application of  $\beta$ -resorcylic acid as Potential Antimicrobial Feed Additive to Reduce *Campylobacter* Colonization in Broiler Chickens. *Frontiers in Microbiology*. Doi: <http://dx.doi.org/10.3389/fmicb.2017.00599>.
- Shrestha, S., K. Arsi, B. R. Wagle, A. M. Donoghue, and D. J. Donoghue. 2017. Ability of select probiotics to reduce enteric *Campylobacter* colonization in broiler chickens. *International Journal of Poultry Science*. Doi: <http://dx.doi.org/10.3923/ijps.2017.37.42>
- Regmi, B. and B. R. Wagle. 2017. Habitat type and climatic zone correlate with genome size variation in Osteichthyes fishes. *International Journal of Zoology and Research*. pp 7-12.
- Wagle, B. R., K. Arsi, A. Upadhyay, S. Shrestha, K. Venkitanarayanan, A. M. Donoghue, and D. J. Donoghue. 2017.  $\beta$ -resorcylic acid, a phytophenolic compounds, reduces *Campylobacter* in post-harvest poultry. *Journal of Food Protection* (In Press).
- Upadhyay, A., K. Arsi, B. R. Wagle, S. Shrestha, A. M. Donoghue, and D. J. Donoghue. 2017. Phytochemicals reduce *Campylobacter jejuni* colonization factors and expression of virulence genes in vitro. *Frontiers in Microbiology* (Under review).

- Arsi, K., A. M. Donoghue, I. Upadhyaya, A. Upadhyay, B. R. Wagle, S. Shrestha, K. Venkitanarayanan, et al., 2017. Alternatives to Antibiotics: Novel Strategies to Reduce Foodborne Pathogens in Organic Poultry. Proceeding paper-Midwest Poultry Federation. [http://midwestpoultry.com/wp-content/uploads/Komala\\_Midwest-Poultry-Federation.pdf](http://midwestpoultry.com/wp-content/uploads/Komala_Midwest-Poultry-Federation.pdf).

## ABSTRACTS:

- Wagle, B.R\*, A. M. Donoghue, K. Arsi, A. Upadhyay, S. Shrestha, I. Upadhyaya, P. J. Blore, K. Venkitanarayanan, and D. J. Donoghue. Eugenol wash and chitosan based coating reduces *Campylobacter jejuni* counts on poultry products. Poster presentation at the Annual Meeting of Arkansas Association of Food Protection, Fayetteville, AR, September 2016.
- Wagle, B.R\*, A. M. Donoghue, K. Arsi, A. Upadhyay, S. Shrestha, P. J. Blore, K. Venkitanarayanan, and D. J. Donoghue. Eugenol wash and chitosan based coating reduces *Campylobacter jejuni* counts on poultry products. Oral presentation at the Annual Meeting of Poultry Science Association, New Orleans, LA, July 2016.
- Shrestha, S., A. M. Donoghue, K. Arsi, A. Upadhyay, B. R. Wagle, P. J. Blore, K. Venkitanarayanan, and D. J. Donoghue. Carvacrol reduces both *Campylobacter jejuni* and aerobic counts on broiler chicken skin. Oral presentation at the Annual Meeting of Poultry Science Association, New Orleans, LA, July 2016.
- Upadhyay, A., K. Arsi, A. M. Donoghue, B. R. Wagle, S. Shrestha, P. J. Blore, and D. J. Donoghue. Phytochemicals reduce *Campylobacter jejuni* virulence factors in vitro and down-regulate expression of virulence genes. Oral presentation at the Annual Meeting of Poultry Science Association, New Orleans, LA, July 2016.
- Arsi, K., A. Woo-Ming, B. R. Wagle, S. Shrestha, P. J. Blore, A. M. Donoghue, K. Venkitanarayanan, and D. J. Donoghue. The application of cultures of *Lactobacillus* spp. isolates with or without a chitosan coating reduce *Campylobacter jejuni* on chicken wingettes. Poster presentation at the Annual Meeting of Poultry Science Association, New Orleans, LA, July 2016.
- Wagle, B. R\*, A. M. Donoghue, K. Arsi, A. Woo-Ming, S. Shrestha, P. J. Blore, K. Venkitanarayanan, and D. J. Donoghue.  $\beta$ -resorcylic acid reduces *Campylobacter jejuni* in post-harvest poultry. Oral presentation at the Annual Meeting of Poultry Science Association, Louisville, KY, July 2015.
- Shrestha, S., A. M. Donoghue, K. Arsi, A. Woo-Ming, B. R. Wagle, P. J. Blore, and D. J. Donoghue. The ability of select probiotics to reduce enteric *Campylobacter* colonization in broiler chickens. Oral presentation at the Annual Meeting of Poultry

Science Association, Louisville, KY, July 2015.

- Wagle, B. R\*, A. M. Donoghue, K. Arsi, A. Woo-Ming, H. R. Arambel, S. Shrestha, P. J. Blore, K. Venkitanarayanan, and D. J. Donoghue. Efficacy of the natural compound,  $\beta$ -resorcylic acid, against *Campylobacter* colonization in poultry. Oral presentation at the Annual Meeting of Poultry Science Association, Corpus Christi, TX, July 2014.
- Woo-Ming, A., A. M. Donoghue, K. Arsi, A. Woo-Ming, H. R. Arambel, B. R. Wagle, S. Shrestha, P. J. Blore, K. Venkitanarayanan, and D. J. Donoghue. Investigating the reduction of *Campylobacter jejuni* on raw retail chicken skin using trans-cinnamaldehyde or sodium octanoate. Oral presentation at the Annual Meeting of Poultry Science Association, Corpus Christi, TX, July 2014.

\*Presenting author

## LEADERSHIP ACTIVITIES:

**Judge**, 2016, 2017

Northwest Arkansas Regional Science and Engineering Fair, Fayetteville, AR.

**Secretary**, August 2015- June 2016

Poultry Science Graduate Association, University of Arkansas, Fayetteville, AR

**Vice-President**, August 2015-Present

Nepali Association of Northwest Arkansas, a registered student organization at University of Arkansas, Fayetteville

**Secretary**, August 2014-August 2015

Nepali Association of Northwest Arkansas, a registered student organization at University of Arkansas, Fayetteville