

## **H. K. Janaka P. Wickramasinghe**

Department of Animal Science

337B Kildee Hall, 806 Stange Rd, Iowa State University, Ames IA 50011-1178

+1 515-708-1476. janaka@iastate.edu/janakawick.1986@gmail.com

### **EDUCATION**

---

#### **Doctor of Philosophy (Animal Science) May 2022 (Expected)**

College of Agriculture and Life Sciences, Department of Animal Science, 1221 Kildee Hall, Iowa State University, Ames, IA 50011-3150, USA with cGPA of 3.96/4.00.

- Major Professor: Dr. Ranga Appuhamy Jayasooriya

#### **Master of Science (Animal Science) August 2019**

College of Agriculture and Life Sciences, Department of Animal Science, 1221 Kildee Hall, Iowa State University, Ames, IA 50011-3150, USA with cGPA of 3.96/4.00.

- Major Professor: Dr. Ranga Appuhamy Jayasooriya

#### **Bachelor of Science in Agricultural Technology and Management October 2012**

Faculty of Agriculture, University of Peradeniya, 20400, Peradeniya, Sri Lanka with cGPA of 3.67/4.00.

- Major Professor: Prof. J. K. Vidanarachchi

### **RESEARCH INTERESTS**

---

Exploring the impact of drinking water, and amino acid supplementations on growth, health, and gut microbiota composition in dairy heifer calves.

### **RESEARCH EXPERIENCE**

---

I have accumulated a strong background in animal research field and have developed a strong research foundation that will help to ensure my future success as an animal nutritionist.

#### **Graduate Student/Graduate Research Assistant 2017 – Present**

*College of Agriculture and Life Sciences, Department of Animal Science 1221 Kildee Hall, Iowa State University Ames, IA, USA*

- Investigating into the roles of drinking water, and amino acid supplementations in growth, health, and gut microbiota composition in dairy heifer calves.

#### **Undergraduate Research Student 2012**

*Department of Animal Science, Faculty of Agriculture, University of Peradeniya, Sri Lanka*

- Contributed to multi-disciplinary project aimed at finding the most suitable packing material that can be used to pack farm fresh chicken eggs for longer time, by the time gaining research experience in the three main areas of egg science: field research, laboratory techniques, and quality aspects
- Collaborated and coordinated with faculty, staff scientists, and fellow undergraduate students across departments

## **TEACHING AND MENTORING/ADVISING EXPERIENCE**

---

### **Teaching Assistant** **Spring/2019**

- Worked as a teaching assistant for AN S 319 (Animal Nutrition) at Iowa State University, Ames, IA, USA

### **Teaching Assistant** **Spring/2018**

- Participated in CELT Spring Semester Teaching Assistant (TA) Seminar on 11/29/2017 conducted by CELT, Iowa State University, Ames, IA, USA
- Worked as a teaching assistant for AN S 319 (Animal Nutrition) at Iowa State University, Ames, IA, USA

### **Lecturer, Animal Science** **July 2014 - May 2017**

*Department of Plantation Management, Faculty of Agriculture and Plantation Management, Wayamba University of Sri Lanka, Sri Lanka*

- Prepared lectures and class activities focusing on the more student participation in their classroom learning
- Created and graded course assessments to ensure students understood material and stayed on track
- Recognized as “List of Teachers Ranked Excellent by Their Students”

## **HONORS AND AWARDS**

---

### **Gamma Sigma Delta - The Honor Society of Agriculture (Iowa Beta Chapter - Iowa State University)** **2019**

- Awarded based on the character, leadership and academic excellence

### **Dr. and Mrs. M. E. Ensminger Scholarship** **2017/2018**

- Awarded by Department of Animal Science, Iowa State University based on the character, leadership and academic excellence

### **A. S. B. Rajaguru Memorial Gold Medal for Animal Science** **2012**

- Qualified by graduating with honors and ranking 1<sup>st</sup> among Animal Science majored students at Department of Animal Science, Faculty of Agriculture, University of Peradeniya, Sri Lanka

### **R. R. Appadurai Memorial Award for Best Performance in Animal Science** **2012**

- Qualified by graduating with honors and ranking 1<sup>st</sup> among Animal Science majored students at Department of Animal Science, Faculty of Agriculture, University of Peradeniya, Sri Lanka

## **PUBLICATIONS**

---

### **PEER REVIEWED JOURNAL ARTICLES - IN REVIEW (*Journal of Dairy Science*)**

**Wickramasinghe, H. K. J. P., Justin M. Anast, S. Schmitz-Esser, J. A. D. R. N. Appuhamy.** 2019. Beginning to offer drinking water at birth increases the species richness and the abundance of *Faecalibacterium* and *Bifidobacterium* in the gut of pre-weaned dairy calves.

## PEER REVIEWED JOURNAL ARTICLES - *PUBLISHED*

**Wickramasinghe, H. K. J. P.,** A. J. Kramer and J. A. D. R. N. Appuhamy. 2019. Drinking water intake of newborn dairy calves and its effects on feed intake, growth performance, health status, and nutrient digestibility. *J. Dairy Sci.* 102: 377-387 (<https://doi.org/10.3168/jds.2018-15579>).

## ANIMAL INDUSTRY REPORTS - *IN REVIEW*

**Wickramasinghe, Janaka** and Appuhamy, Ranga. 2019. "Effects of L-Glutamine Supplementation on Growth, Starter Intake and Health of Early-Weaned Dairy Heifer Calves" Animal Industry Report, Iowa State University, Ames, IA, USA.

## ANIMAL INDUSTRY REPORTS - *PUBLISHED*

**Wickramasinghe, Janaka** and Appuhamy, Ranga. 2018. "Effects of Age of Dairy Calves First Offered Free Drinking Water on Feed Intake, Growth, and Health," Animal Industry Report: AS 664, ASL R3233. ([https://doi.org/10.31274/ans\\_air-180814-372](https://doi.org/10.31274/ans_air-180814-372))

## CONFERENCE PROCEEDINGS - *PUBLISHED*

S. M. S. D. Senanayake, K. H. M. I. Karunarathne and **H. K. J. P. Wickramasinghe.** 2016. Preservation of Quality Indices of Commercial Eggs in Different Packaging Materials at Control Temperature in Sri Lanka. Paper presented at the Proceedings of the 15th Agricultural Research Symposium, Faculty of Agriculture and Plantation Management, Wayamba University of Sri Lanka, Makandura, Gonawila (NWP), Sri Lanka.

T. M. C. Perera and **H. K. J. P. Wickramasinghe.** 2016. Effect of Edible Oil Coating on Physico-Functional Properties and Shelf Life of Chicken Eggs Stored at Room Temperature. Paper presented at the Proceedings of the 15th Agricultural Research Symposium, Faculty of Agriculture and Plantation Management, Wayamba University of Sri Lanka, Makandura, Gonawila (NWP), Sri Lanka.

S. R. H. L. K. Senanayake, K. A. H. T. Kodithuwakku and **H. K. J. P. Wickramasinghe.** 2016. Effect of Polythene film on grass silage quality as investigated under ambient conditions. Paper presented at the Proceedings of the 15th Agricultural Research Symposium, Faculty of Agriculture and Plantation Management, Wayamba University of Sri Lanka, Makandura, Gonawila (NWP), Sri Lanka.

G. L. V. M. Liyanage, S. P. G. S. Pathirana, L.M. Rankoth and **H. K. J. P. Wickramasinghe.** 2016. Evaluation of Growth, Yield and Nutritional Characteristics of Selected Rice (*Oryza sativa L.*) varieties under Organic Farming Conditions. Paper presented at the Proceedings of the 15th Agricultural Research Symposium, Faculty of Agriculture and Plantation Management, Wayamba University of Sri Lanka, Makandura, Gonawila (NWP), Sri Lanka.

K. Chithrani, G. G. C. Premalal and **H. K. J. P. Wickramasinghe.** 2015. Effect of 'Calcite Foliar Fertilizer' on Growth, Yield and Nutritional Composition of Sorghum (*Sorghum*

*bicolor* L. Moench) Cultivated under Field Condition as a Fodder for Dairy Cattle. Paper presented at the Proceedings of the 14th Agricultural Research Symposium, Faculty of Agriculture and Plantation Management, Wayamba University of Sri Lanka, Makandura, Gonawila (NWP), Sri Lanka.

R. D. P. D. Harischandra, G. G. C. Premalal and **H. K. J. P. Wickramasinghe**. 2015. Effect of Integrated Organic and Inorganic Fertilizers on Soil Chemical Properties, Yield and Fodder Quality of Sorghum (*Sorghum bicolor* L. Moench). Paper presented at the Proceedings of the 14th Agricultural Research Symposium, Faculty of Agriculture and Plantation Management, Wayamba University of Sri Lanka, Makandura, Gonawila (NWP), Sri Lanka.

**H. K. Janaka P. Wickramasinghe**, Janak K. Vidanarachchi, S. M. Chandima Himali, and Palika S, Fernando. 2013. Effect of Different Packaging Materials on Quality Characteristics of Chicken Eggs during Storage at Room Temperature in Sri Lanka. Paper presented at the Proceedings of the 13<sup>th</sup> ASEAN Food Conference, Max Atria, Singapore Expo, Singapore.

## ABSTRACTS

### ORAL PRESENTATIONS - PRESENTED

**Wickramasinghe, H. K. J. P.**, Can Ayhan Kaya, J. A. D. R. N. Appuhamy. 2019. L-glutamine improves weight gain and starter intake in Holstein heifer calves weaned early from a high volume of milk. J. Dairy Sci. (E-Suppl. 1):167. (Abstr.). Held from 23<sup>rd</sup> to 26<sup>th</sup>, June 2019.

**Wickramasinghe, H. K. J. P.**, A. J. Kramer, J. A. D. R. N. Appuhamy. 2018. Offering drinking water at birth could improve growth performance and fiber digestibility in Holstein heifer calves. J. Dairy Sci. (E-Suppl. 2):391. (Abstr.). Held from 24<sup>th</sup> to 27<sup>th</sup>, June 2018.

**Janaka Wickramasinghe**, Janak K. Vidanarachchi, S. M. Chandima Himali and Palika S. Fernando. 2013. Effect of Different Packaging Materials on Quality Characteristics of Chicken Eggs during Storage at Room Temperature in Sri Lanka. Programme and Abstracts Book, 13<sup>th</sup> ASEAN Food Conference, Max Atria, Singapore Expo, Singapore, pp. 83.

**Wickramasinghe, H. K. J. P.**, Vidanarachchi, Janak., Himali, S. M. C. and Fernando, P. S. 2013. Effect of Different Packaging Materials on Quality Characteristics of Chicken Eggs during Storage at Room Temperature (32°C). Proceedings of the International Symposium on Agriculture and Environment 2013, Faculty of Agriculture, University of Ruhuna, Sri Lanka, pp. 151-154.

### POSTER PRESENTATIONS - PRESENTED

**Wickramasinghe, H. K. J. P.**, Justin M. Anast, S. Schmitz-Esser, J. A. D. R. N. Appuhamy. 2019. Offering drinking water from birth increased species richness in the

gut of neonate dairy heifer calves. *J. Dairy Sci. (E-Suppl. 1):62. (Abstr.)*. Held from 23<sup>rd</sup> to 26<sup>th</sup>, June 2019.

Silva, J. V. V., S. Ganesan, C. A. Kaya, **H. K. J. P. Wickramasinghe**, and J. A. D. R. N. Appuhamy. 2019. Effects of extracellular branched-chain amino acid availability on the abundance of glucose transporter 1 (GLUT1) in bovine mammary epithelial cells. *J. Dairy Sci. (E-Suppl. 1):339. (Abstr.)*. Held from 23<sup>rd</sup> to 26<sup>th</sup>, June 2019.

Ganesan, S., J. V. V. Silva, C. A. Kaya, **H. K. J. P. Wickramasinghe**, and J. A. D. R. N. Appuhamy. Effects of extracellular branched-chain amino acid availability on the abundance of proteins regulating fat synthesis in bovine mammary cells: A proteomics analysis. *J. Dairy Sci. (E-Suppl. 1):342. (Abstr.)*. Held from 23<sup>rd</sup> to 26<sup>th</sup>, June 2019.

Appuhamy, J. A. D. R. N., E. A. Horst, S. K. Kvidera, **H. K. J. P. Wickramasinghe**, A. J. Kramer, and L. H. Baumgard. 2018. Immunoactivation is related to low plasma arginine and branched-chain amino acid concentrations in lactating dairy cows. *J. Dairy Sci. (E-Suppl. 2):112. (Abstr.)*. Held from 24<sup>th</sup> to 27<sup>th</sup>, June 2018.

## **PROFESSIONAL EXPERIENCE**

---

### **International Inspector**

**August 2013 – July 2014**

*Organic Inspection and Certification Department, Control Union Inspections (PVT) Ltd, 36/2A, Sir Marcus Fernando Mawatha, Colombo 07, Sri Lanka*

- Participated in inspection and assessing of organic plant production units and processing plants in Sri Lanka and outside Sri Lanka and prepared Assessment Reports of progress of organic farming

### **Internship**

**April, May 2012**

*Keells Food Products PLC, Ekala, Ja-Ela, Sri Lanka*

- Understood different operational practices undertaking at the Keells Food Products PLC, Sri Lanka. In addition, a broad knowledge on different quality assurance practices, laboratory practices (microbiological tests and chemical analysis) and waste management system of the factory was obtained

## **PROFESSIONAL MEMBERSHIPS**

---

### **Full Life Member**

**2012 - Present**

*ALUMNI Association of University of Peradeniya, University of Peradeniya, Peradeniya, Sri Lanka (F/L/1453)*

### **Life Member**

**2012 - Present**

*ALUMNI Association of Faculty of Agriculture, University of Peradeniya, Peradeniya, Sri Lanka (LM 610)*

### **ADSA Graduate Student Membership**

**2018 – Present**

*American Dairy Science Association (Member ID # 134999)*