

Curriculum Vitae

Poonam Vinayamohan

D.V.M., Ph.D.

17 Manter Road, Storrs, CT 06269

(860) 617-6856 | Poonam.vinayamohan@uconn.edu; poonamgopika@gmail.com

Assistant Research Professor

Department of Animal Science

University of Connecticut, Storrs, CT

Education

- 2020 Ph.D., Animal Science | Food Microbiology and Safety
University of Connecticut, Storrs, CT
- 2015 B.V.Sc. & A.H. (equivalent to D.V.M.)
Kerala Veterinary and Animal Sciences University, Wayanad, India

Research and Professional Experience

- 2020 - 2022 Postdoctoral Research Scholar,
College of Veterinary Medicine,
Ohio State University, Columbus, OH
- 2016 - 2020 Graduate Research Assistant,
Department of Animal Science,
University of Connecticut, Storrs, CT
- 2015 - 2016 Research Assistant,
Department of Veterinary Microbiology,
Kerala Veterinary and Animal Sciences University, Mannuthy, India

Honors and Awards

- 2019 Outstanding graduate student award
Department of Animal Science,
University of Connecticut, Storrs, CT
- 2019 Fall 2019 doctoral dissertation fellowship
University of Connecticut, Storrs, CT
- 2019 Fall 2019 doctoral student travel fellowship
University of Connecticut, Storrs, CT
- 2018 Certificate of excellence
“Inhibiting Horizontal Transfer of Antibiotic Resistance gene between *Salmonella* Heidelberg and *E. coli* by Phytochemicals”; Poultry Science Association Annual Meeting; San Antonio, TX; July 26, 2018
- 2018 Award for best presentation

- 2015 “Inhibiting Horizontal gene transfer in *Salmonella* using phytochemicals”; CAHNR Graduate Research Forum; Storrs, CT; March 24, 2018
First prize in oral presentation
- 2015 “Production performance of cattle in Kerala”; Monitoring and Evaluation Cell Workshop, Kerala Veterinary and animal sciences university; Pookode, India; January 31, 2015
- 2013 Second prize in oral presentation
“Pigeon malaria and its therapeutic management”; 5th International Clinical Case Conference on Farm and Companion Animal Practice for Veterinary students; Chennai, India; July 9-10, 2013

Grants

- Biocidal stress adaptation and horizontal transfer of antibiotic resistant genes between multidrug resistant *Salmonella* and *E. coli*. OSU USDA/ANIMAL HEALTH/ FORMULA FUNDS 2021 \$26,252

Book chapter

- Pellissery, A.J., **Vinayamohan, P.**, Amalaradjou, M. A., Venkitanarayanan, K. (2020) Spoilage bacteria and meat quality. *Meat Quality Analysis*, 307-334.

Publications in Peer-Reviewed Journals

- **Vinayamohan, P.**, Pellissery, A. J., and Venkitanarayanan, K., (2022). Role of Horizontal Gene Transfer in the Dissemination of Antimicrobial Resistance in Food Animal Production. *Current Opinions in Food Science*, 47, 100882.
- **Vinayamohan, P.**, Locke., S., Gonzalez, R., Renaud, D. L., and Habing, G. (2022). Antimicrobial use and resistance in surplus dairy calf production, *Microorganisms*, 10(8), 1652
- Pellissery, A. J., **Vinayamohan, P.**, and Venkitanarayanan. K., (2022). Clostridioides difficile infection: An emerging zoonotic disease. *Journal of Veterinary and Animal Sciences*, 53(2), 129-142.
- Pellissery, A. J., **Vinayamohan, P.**, Xue, J., Wang, X., Vijju, L. S., Joseph, D., Luo, Y., Donoghue, A. M., Venkitanarayanan, K., (2022). Efficacy of pectin-based caproic acid, caprylic acid, linalool, and cuminaldehyde coatings in reducing *Salmonella* Heidelberg on chicken eggs. *Frontiers in Sustainable Food Systems*, 301.
- Pellissery, A. J., **Vinayamohan, P.**, Kuttappan, D. A., Valipe, N. M., Fragomeni, B. D., Mass, K., Mooyottu, S., Venkitanarayanan. K., (2021). Protective Effect of baicalin against *Clostridioides difficile* infection in Mice. *Antibiotics*, 10(8), 926.
- Pellissery, A. J., **Vinayamohan, P.**, and Venkitanarayanan, K., (2020). In vitro antivirulence activity of baicalin against *Clostridioides difficile*. *Journal of Medical Microbiology*, 69(4), 631-639.
- Pellissery, A. J., **Vinayamohan, P.**, Yin, H., Mooyottu, S., and Venkitanarayanan, K., (2019). In vitro efficacy of sodium selenite on toxin production, spore outgrowth and antibiotic resistance in hypervirulent *Clostridium difficile*. *Journal of Medical Microbiology*, 68(7), 1118-1128.

Book Chapter under Internal Review

- Pellissery, A. J., **Vinayamohan, P.**, Viju, L.S., Joseph, D., Venkitanarayan, K. Application of Urinary Metabolomics as a Marker in Health and Disease. ("Advances and challenges in Urinary in Urinary Laboratory Analysis", IntechOpen)

Abstracts of Conference Presentations

Oral presentations

- **Vinayamohan, P.**, Locke, S., MacLeod, T., Piela, M., and Habing, G. Prevalence and characterization of *Salmonella* in mesenteric lymph nodes of bob veal calves. (CRWAD), Chicago, January 24, 2023
- **Vinayamohan, P.**, Locke, S., and Habing, G. Impact of sublethal biocide exposure on antibiotic gene transfer in *Salmonella*. (CRWAD), Chicago, January 23, 2023
- Locke, S., **Vinayamohan, P.**, and Habing, G. Biofilm formation ability of *Salmonella* serovars isolated from clinically ill livestock. Conference of Research Workers in Animal Diseases (CRWAD), Chicago, December 6, 2021.
- **Vinayamohan, P.**, Pellissery, A. J., Perrine, O. G., Zeran, A., A.M. Donoghue and Venkitanarayanan, K. Effect of plant derived antimicrobials in disrupting horizontal transfer of antibiotic resistance gene between multidrug resistant *Salmonella* and commensal *E. coli* in broiler chickens *ex vivo* and *in vivo*. Poultry Science Association (PSA), Online, July 20, 2020.
- **Vinayamohan, P.**, Pellissery, A. J., Donoghue, A.M., and Venkitanarayanan, K. Inhibiting Horizontal Transfer of Antibiotic Resistance gene between multi-drug resistant *Salmonella* Heidelberg and *E. coli* by select Lactic acid Bacteria. Poultry Science Association (PSA), Montreal, Canada; July 15, 2019.
- **Vinayamohan, P.**, Pellissery, A. J., and Venkitanarayanan, K. Reducing horizontal gene transfer between multi-drug resistant *Salmonella* and commensal bacteria using lactic acid bacterial supernatants. CAHNR graduate research forum, Storrs, CT; April 9, 2019.
- **Vinayamohan, P.**, Pellissery, A. J., Nair, M. S., Muiyarakandy, M.S., Darre, M., Donoghue, A. M., and Venkitanarayanan, K. Inhibiting Horizontal Transfer of Antibiotic Resistance gene between *Salmonella* Heidelberg and *E. coli* by Phytochemicals. PSA, San Antonio, TX; July 26, 2018.
- **Vinayamohan, P.**, Pellissery, A. J., and Venkitanarayanan, K. Inhibiting Horizontal gene transfer in *Salmonella* using phytochemicals; CAHNR Graduate Research Forum, Storrs, CT; March 24, 2018.
- **Vinayamohan, P.** "Production performance of cattle in Kerala"; Monitoring and Evaluation Cell Workshop, Kerala Veterinary and animal sciences university, Pookode, India; January 31, 2015.
- **Vinayamohan, P.**, Anu A. P., Nimisha, M, Umesh, C. G., Reghuravindran., and Ajithkumar, S. "Pigeon malaria and its therapeutic management"; 5th International Clinical Case Conference on Farm and Companion Animal Practice for Veterinary students, Chennai, India; July 10, 2013.
- Meenuja, M.S, **Vinayamohan, P.**, Falgunan, D., Johns, J., Jose, C., Sooryadas, S. Cut injury of Achilles tendon and its repair in a German shepherd dog, Compendium of 5th international clinical case conference on farm and companion animal practice for veterinary students, Chennai, India; July 9, 2013.

Poster Presentations

- Marczuk, S., Pellissery, A. J., **Vinayamohan, P.**, and K. Venkitanarayanan In vitro Efficacy of Clostridioides Difficile. American Society for Microbiology (ASM), Washington, D. C., June 17, 2022.
- Pellissery, A. J., **Vinayamohan, P.**, Perrine, O. G., Zeran, A., Upadhyay, A. Donoghue, A. M. and Venkitanarayan, Efficacy of caproic acid, caprylic acid and cuminaldehyde in reducing *Salmonella* Heidelberg on chicken eggs. Poultry Science Association (PSA), Online, July 20, 2020.
- Pellissery, A. J., **Vinayamohan, P.**, Perrine, O. G., Zeran, A., Upadhyay, A. Donoghue, A. M. and Venkitanarayanan, K. Efficacy of sodium selenite and sodium picolinate in reducing *Salmonella* Heidelberg on chicken eggs. Poultry Science Association (PSA), Montreal, Canada; July 15, 2019.
- **Vinayamohan, P.**, Pellissery, A. J., Nair, M. S., Muiyariikkandy, M.S., and Venkitanarayanan, K. Inhibiting Horizontal Gene Transfer of Antibiotic Resistance between MDR *S. Typhimurium* and *E. coli* by Phytochemicals. American Society for Microbiology (ASM), Atlanta, Georgia; June 6, 2018.
- Pellissery, A. J., **Vinayamohan, P.**, Nair, M. S., Upadhyay, A., and Venkitanarayanan, K. Reducing *Salmonella* on cantaloupe surface using select lactic acid bacteria. Institute of Food Technologists (IFT), Illinois, Chicago; July 15, 2018.
- Nishimura, C. R., Pellissery, A. J., Nair, M. S., **Vinayamohan, P.**, and Venkitanarayanan, K. Antibiotic Resistance Profiles of *Escherichia coli* and *Enterococci* Isolated from Retail Meat in Connecticut. American Society for Microbiology (ASM), Atlanta, Georgia; June 6, 2018.
- **Vinayamohan, P.**, and Venkitanarayanan, K. Inhibiting horizontal gene transfer of antibiotic resistance in *Salmonella* using phytochemicals. UConn's distinguished microbiologist lecture and poster. Storrs, CT; April 25, 2018.
- Meenuja, M.S, **Vinayamohan, P.**, Falgunan, D., Johns, J., Jose, C., Sooryadas, S. Cut injury of Achilles tendon and its repair in a German shepherd dog. 5th international clinical case conference on farm and companion animal practice for veterinary students, Chennai, India; July 9, 2013.

Teaching and Mentoring Experience

2021-2022	Teaching staff	VETPREV 7722 Foodborne Diseases, Food Animal Production Systems, and food safety (class of ~40 MPH students) The Ohio State University, Columbus, OH
2022	Mentor	Masters in Public health Student, The Ohio State University, Columbus, OH Jamie Rudolfo
2022	Mentor	Undergraduate student, The Ohio State University, Columbus, OH Emma
2021-2022	Mentor	Undergraduate student, The Ohio State University, Columbus, OH MacLeod Victoria
2021-2022	Mentor	Undergraduate student, The Ohio state University, Columbus, OH Molly Piela
2021-2022	Mentor	Undergraduate student, The Ohio state University, Columbus, OH Alex Dunmyre
2021	Mentor	Undergraduate student, The Ohio state University, Columbus, OH Katie Girourd

Vinayamohan, P.

2018	Teaching Assistant	ANSC 3272 Laboratory Animal Science (class of ~40), University of Connecticut, Storrs, CT Assist undergraduate students in general surgical procedures such as general anesthesia, sham implant and castration
2017	Teaching Assistant	ANSC 1111/SAAS 113 Principles of animal Nutrition and Feeding (class of ~50), University of Connecticut, Storrs, CT Conduct practical classes on nutrient analysis in animal feed, forage analysis, teaching digestive anatomy and ration balancing. Grade tests, assignments. Assist during farm visits.
2017 - 2019	Mentor	Undergraduate student, University of Connecticut, Storrs, CT Sophia Anderson
2017-2020	Mentor	Undergraduate student, University of Connecticut, Storrs, CT Nivedha Natchiappan
2019-2020	Mentor	Undergraduate student, University of Connecticut, Storrs, CT Oliver Perrine
2019 - 2020	Mentor	Undergraduate student, University of Connecticut, Storrs, CT Atacan Zeran
2019 - 2020	Mentor	Undergraduate student, University of Connecticut, Storrs, CT Jamie Georgelos
2015	Lecturer	Government Vocational Higher Secondary School, Pulingome, India (class of ~ 60) Deliver lectures on basic animal husbandry practices including restraining, identification and age determination of animals, rearing and housing of animals. Introduction about various breeds of livestock, anatomy and physiology of animals, preparing tests and exams for students

Grant Review

1. North-east SARE (USDA) Role: Technical committee member
Years: 2021, 2022
Panel: 2 (Graduate student grant – 1, Innovation grant -1)
Number of grants reviewed: 37

Peer Review and Judging

1. Plos One
Number of reviews completed: 3
2. Plos Global Public Health
Number of reviews completed: 1
3. Antibiotics
Number of reviews completed: 4
4. Journal of Dairy Science
Number of reviews completed: 1

5. Meat and Muscle Biology
Number of reviews completed: 1
6. Infection and Drug resistance
Number of reviews completed: 1

Volunteering Services

- 2018 - President,
2019 Institute of Food Technologists Students' Association, University of Connecticut
2018 - Vice President,
2019 Institute of Food Technologists Students' Association, University of Connecticut
2017 - Treasurer,
2018 Institute of Food Technologists Students' Association, University of Connecticut
2017 - Treasurer,
2018 Animal Science Graduate Student Association, University of Connecticut
2014 Student volunteer,
Kerala Science Congress

Training and Workshops

- 2022 Microbiome and Whole Genome Sequencing Workshop, ASM Microbe 2022
2017 Introduction to R, University of Connecticut

Professional Affiliations

- Poultry Science Association
- American Society for Microbiology
- World Poultry Science Association
- Institute of Food Technologists
- Kerala State Veterinary Council
- Veterinary Council of India

Certifications

- 2019 Poultry HACCP

Software Skills

- Graphpad PRISM
- R
- Galaxy
- Microsoft office

