

## Curriculum vita

# Sabin Poudel, PhD

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### CAREER OBJECTIVE

- To enhance poultry production via research and innovation.

### SELECTED HIGHLIGHTS

- More than 7 years' experience in poultry research, with hand-on experience in raising broiler and laying hens.
- Expertise in gastrointestinal physiology and enteric pathogen studies, leading *in vivo* and *in vitro* challenge models for *Campylobacter jejuni*, *Salmonella*, *E. coli*, *Coccidiosis*, and *Clostridium perfringens*.
- Extensive molecular and microbiology expertise, including whole-genome sequencing, RNA-seq, and metagenomics, for poultry pathogens and host response studies.
- Proven research productivity and grant experience, with 21 peer-reviewed publications, 43+ conference abstracts, and seven pending USDA-NIFA, successful AAES, and MAFES grant involvement.
- Strong teaching, mentorship, and leadership, supervising students, guest lecturing, and coordinating student organizations while collaborating with faculty and industry partners.
- Outstanding presentation and knowledge sharing skills. Won PSA oral presentation, MPA international paper award, and PSA Hatchery Student of the Year award.
- Leadership achievement Regional Director and University Ambassador, PSA Hatchery

### EDUCATION

- **PhD.** Poultry Science, Mississippi State University 2023
- **M.S.** Poultry Science, Mississippi State University 2020
- **DVM** (degree as certified by ECFVG/AVMA), Tribhuvan University, Nepal 2016

### PROFESSIONAL EXPERIENCE

- **2024-Present** Assistant Research Professor, Poultry Science, Auburn University, Auburn
- **2023-2024** Postdoc, Poultry Science, Auburn University, Auburn,
- **2018-2023** Graduate Research Assistant, Mississippi State University

### ACHIEVEMENTS AND AWARDS

#### Academic Awards

1. MSU Collage of Life Sciences “Research Ambassador” 2023
2. MAFES “Excellent Researcher Award” Graduate Student 2023
3. PSA Hatchery “Student of the Year” 2022
4. Mississippi Poultry Association “International Paper Scholarship” 2022

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| 5. PSA “ <u>Excellent Oral Presentation</u> ”                                 | 2021      |
| 6. Mississippi Poultry Association “ <u>International Paper Scholarship</u> ” | 2021      |
| 7. “ <u>Government scholarship</u> ” to pursue Veterinary School              | 2011-2016 |

### **Membership and Leadership**

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| 1. PSA Hatchery, Regional Coordinator                  | 2021-2022    |
| 2. PSA Hatchery, University Ambassador                 | 2020-2021    |
| 3. Member, Poultry Science Association (PSA)           | 2018-present |
| 4. Member, World Poultry Science Association (WPSA)    | 2018-present |
| 5. Licensed Veterinarian, Nepal Veterinary Association | 2016-present |
| 6. Member, Nepal Veterinary Association                | 2011-present |

### **TEACHING EXPERIENCE**

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|---|-------------|
| 1. Guest lecturer, Mississippi State University<br>Course: Poultry Production Safety and Sanitation by Dr. Li Zhang<br>Responsibility: Invited to teach three lectures to graduate and undergraduate students   | Spring 2023 |
| 2. Guest lecturer, Mississippi State University<br>Course: Poultry Nutrition by Dr. Wei Zhai<br>Responsibility: Invited to teach one lecture on my work to graduate and undergraduate students. Probiotics as an alternative to antibiotics.  | Fall 2019   |
| 3. Teaching Assistant, Mississippi State University<br>Course: Poultry Nutrition by Dr. Wei Zhai<br>Responsibility: Facilitated a laboratory class where I provided instruction, demonstrated techniques, and guided students through the process of conducting and successfully completing their project work. | Fall 2019   |

### **MENTORING EXPERIENCE**

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| 1. Major Advisor, Ruby Paudel (MS-student), Visiting Scholar (Farazi Abinash Rahaman)  | 2025 |
| 2. Graduate Committee Member, Thomos Stokes  | 2025 |
| 3. Facilitated and mentored for Mary Elizabeth Tingle, Ungraduated Researcher<br>Research project: Investigating the effectiveness of 405 nm light on controlling the proliferation of avian pathogenic <i>E. coli</i> | 2023 |
| 4. Facilitated and mentored for Deepa Chaudhary, MS Student<br>Thesis title: Development of a novel loop-mediated isothermal amplification (LAMP) assay for the rapid detection of <i>Clostridium perfringens</i> .    | 2022 |
| 5. Facilitated and mentored for Priyanka Devkota, MS Student<br>Thesis title: Molecular and phenotypic characterization of <i>Escherichia coli</i> isolated from broiler chicken flocks in Mississippi.                | 2022 |
| 6. Facilitated and mentored for Makenzie Ripper, Ungraduated Researcher<br>Research project: Establishment of on-site diagnostic procedures for the detection of <i>Campylobacter jejuni</i> in poultry.               | 2021 |

## TECHNICAL EXPERTIES

- **Microbiology:** Host-pathogen interaction assay, Mammalian cell culture, Bacterial culture, antimicrobial susceptibility assay
- **Molecular Biology:** DNA, RNA-extraction, PCR, RT-PCR, RT-qPCR, Genome Sequencing (WGS, RNA-seq, 16S rRNA amplicon sequencing, shotgun metagenomics), Primer designing, and molecular cloning, ELISA, and other immunoassay
- **Animals Skills:** Broiler and laying hens handling, Vaccination, Necropsy, Blood Collection, Blood counting technique, Intestinal histology analysis
- **Data Processing and Bioinformatics:** SAS, R, GraphPad, Genious, Bio tools, QIIME Bio python

## PREVIOUS JOB EXPERIENCES

### 1. PREVIOUS JOB EXPERIENCES

a. **Technical Consultant at Sun Feed Pvt Ltd** July 2017- July 2018

- Worked as technical head leading the group of ten field technicians to provide medical assistance to farmers and diagnose the disease of birds
- Analyze the performance data from the different types of poultry and alter feed formulation whenever necessary.

b. **Production Manager at Khilung Kalika Agro Farm** June 2016-June, 2017

- Worked as the technical assistant and supervised more than 70 works to take care of birds
- Supervised birds health conditions and day-to-day activities on farms
- Keep the recorders and advise therapeutic and preventive medicine.

2. **RESEARCH ASSISTANCE** Jan 2016- April, 2016

National Avian Disease Diagnostic Laboratory, Chitwan

Advisor: Lal Kumar Rai and Shailesh Bhandari

- Performed pathological test for common bacterial and viral diseases.
- Conducted lab cultures of *E. coli*, *Salmonella*, and *Clostridium* for identification of susceptible antibiotics.
- Participated in the Avian Influenza and *Mycoplasma* surveillance and sample collection.

3. **VETERINARY INTERN**

Center Veterinary Laboratory

July, 2015- Dec, 2016

Advisor: Pragya Koirala

- Participated in different epidemiological studies related to poultry and animal diseases  
Conducted ELISA and hematological analysis for disease identification.

## GRANTS AND CONTRACTS

### **USDA-NIFA**

1. **Sabin Poudel**, Dianna Bourassa, Sam Rochell, Michael Rothrock. Microbiota-based Intervention for pre-harvest control of *Salmonella* in poultry. USDA-NIFA, Ranked High Priority, Not Funded Role PI, 2024. Resubmitted 2025.
2. **Sabin Poudel**, Dianna Bourassa, Laura Huber. Assessing Poultry litter amendments for mitigating AMR gene dynamics in foodborne pathogens. USDA-NIFA, Ranked Medium Priority, Not Funded Role PI, 2024. Resubmitted 2025.

3. **Sabin Poudel**, Wilmer Pacheco, Jinquan Wang. Mitigating *Salmonella* in litter by linking and understanding epidemiology, developing microbiome-driven solutions, and extension education. USDA-NIFA CARE, PI, 2025.
4. Jinquan Wang, **Sabin Poudel**, Dianna Bourassa Woo Kyun Kim. Bone-Associated *Salmonella* as a driver of cross-contamination in poultry parts: risk evaluation and intervention strategies. USDA-NIFA, Role Co-PI, 2025.
5. Shijinaraj Manjankattil, Dianna Bourassa, Sungeun Chao, **Sabin Poudel**, Jinquan Wang, Muhammad Naeem. Antimicrobial interventions at grinding and packaging to control salmonella and spoilage bacteria in ground turkey meat. USDA-NIFA, Role Co-PI, 2025.
6. Shijinaraj Manjankattil, Dianna Bourassa, **Sabin Poudel**, Jinquan Wang, Yagya Adhikari. Targeted antimicrobial interventions to control *salmonella* in litter during the broiler grow-out period. USDA-NIFA CARE, PI, 2025.
7. **Sabin Poudel**, Dianna Bourassa. Monitoring the prevalence and antimicrobial resistance in retail meat and seafood across Alabama. FDA CVM NARMS, Role PI, 2025.

### ***US Poultry & Egg***

8. **Sabin Poudel**, Wei Zhai. Effects of probiotic *Clostridium butyricum* on growth performance and gut health of necrotic enteritis challenged broilers. US Poultry & Egg, Full-Proposal, Not Funded, Role Co-PI, 2019.
9. **Sabin Poudel**, Shabarinath Srikumar, Dianna Bourassa. Enhancing food safety via optimization of chicken carcass microbiome. US Poultry & Egg, Pre-Proposal, Not Funded, Role PI, 2024.
10. Jinquan Wang, **Sabin Poudel**, Dianna Bourassa, Duarte Neves. Develop a rapid, non-destructive and cost-effective eggshell sampling method to determine the egg microbiological quality in both hatching and table eggs. USPoultry & Egg, Not Funded, Role Co-PI, Full proposal submitted 2025.
11. **Sabin Poudel**, Jinquan Wang, Dianna Bourassa. Developing rapid assay for accurately quantifying live *Salmonella* in poultry. US Poultry & Egg, Pre-Proposal, Not Funded, Role PI, 2025.
12. **Sabin Poudel**. Understanding the cross-resistance mechanism between hydrogen peroxide exposure on Peroxyacetic acid resistance in *Salmonella*. US Poultry & Egg, Pre-Proposal, Not Funded, Role PI, 2025.
13. **Sabin Poudel**. Use of reverse vaccinology and an *in vitro* screening approach to identify universal vaccine candidate for the food-borne pathogen *Salmonella*. US Poultry & Egg, Pre-Proposal, Not Funded, Role PI, 2025.
14. Yagya Adhikari, Shabarinath Srikumar, **Sabin Poudel**, Dianna Bourassa. Identifying possible sources of *Salmonella* to reduce its contamination in final raw products in poultry processing facilities. US Poultry & Egg, Pre-Proposal, Not Funded, Role Co-PI, 2025.

### ***Others Agency***

15. Jaquan Wang, **Sabin Poudel**, Dianna Bourassa, Harshavardhan Thippareddi. Optimize and validate the Rapid *Salmonella* quantification methods in ground beef at low

- contamination levels. Foundation for Meat and Poultry Research Education, Not Funded, Role Co-PI, 2024.
16. **Sabin Poudel**, Dianna Bourassa, Jinquan Wang, Lola Crespo. Devising microbiome-based methods to control *Salmonella* in ground turkey. MTRPC. Not Funded. Role PI.
  17. Shijinaraj Manjankattil, Dianna Bourassa, **Sabin Poudel**, Jinquan Wang. Identifying the mechanism of myopathies and role of probiotic as a mitigation strategy. Cobb Research. Not Funded, Role Co-PI, 2024.
  18. Sabin Poudel Dianna Bourassa. Understanding *Campylobacter* Transmission Mechanism in Poultry. Auburn University, AAES. **Funded.**
  19. Shijinaraj Manjankattil, Dianna Bourassa, **Sabin Poudel**, Jinquan Wang, Muhammad Naeem, Yagya Adhikari. Comparative efficacy of antimicrobials against *Salmonella* biofilms isolated from poultry production. Auburn University, AAES PEER. Postdoctoral Fellow. **Funded.**
  20. Jinquan Wang, Dianna Bourassa, **Sabin Poudel**, Samuel Rochell. Evaluation of Organic acid intervention delivery route (Feed Vs Water) With Eastman Organic Acids. Eastman Chemical Co. **Funded.**

## RESEARCH AND PUBLICATION

### ***Published (\*Corresponding author)***

1. Paudel, R., D. Bourassa, and **S. Poudel\***. 2025. Assessing transcriptomic responses of *Salmonella* Infantis in presence of poultry litter. ASM Spectrum. Under review.
2. **Poudel, S.\***, J. Wang, and D. Bourassa. 2025. Population dynamics and genomic characterization of *Salmonella* Infantis reveal poultry as a major reservoir of antimicrobial resistance genes and pESI mega plasmid. ASM Spectrum. Under review.
3. **Poudel, S.\***, F. A. Rahaman, E. A. F. Granados, Y. Adhikari, M. Naeem, S. J. Rochell, and D. Bourassa. 2025. Assessing the impact of broiler genotype on cecal and tracheal microbiome composition using full-length 16S rRNA sequencing. Poultry Science:106072. <https://doi.org/10.1016/j.psj.2025.106072>
4. Wang, J., B. Mallavarapu, D. Subedi, P. S. Patil, S. Bhumanapalli, S. Vaddu, A. K. Singh, W. K. Kim, S. Kumar, **S. Poudel**, D. V. Bourassa, S. Manjankattil, M. Naeem, Y. Adhikari, and H. Thippareddi. 2025. A Systematic Review and Meta-analysis of the Efficacy of Organic Acids in Reducing *Salmonella* Colonization in the Crop and Ceca of Broilers. Poultry Science:106075 <https://doi.org/10.1016/j.psj.2025.106075>.
5. Manjankattil, S., J. Wang, **S. Poudel**, M. Bailey, Y. Adhikari, K. C. Gomez, A. Fatima, R. Raut, F. A. Rahman, S. Rochell, and D. Bourassa. 2025. Survival and clearance dynamics of *Salmonella* in litter, carcasses, and internal organs of chickens fed different dietary fat sources. Poultry Science 104:105819 <https://doi.org/10.1016/j.psj.2025.105819>.
6. Adhikari, Y., M. A. Bailey, D. V. Bourassa, **S. Poudel**, R. J. Buhr, and K. S. Macklin. 2025. A Longitudinal Study on *Campylobacter* spp. in an Integrated Broiler Complex in the Southeast Region of the United States: Prevalence and Phylogenetic Analysis. Journal of Food Protection 88:100420 <https://doi.org/10.1016/j.jfp.2024.100420>.
7. Adhikari, Y., D. V. Bourassa, **S. Poudel**, M. A. Bailey, R. J. Buhr, and K. S. Macklin. 2025. Genotypic and phenotypic characterization of antimicrobial resistance in

*Salmonella* strains isolated from both No-Antibiotics-Ever (NAE) and conventional broiler complexes. Poultry Science 104:104855  
<https://doi.org/10.1016/j.psj.2025.104855>.

8. Adhikari, Y., D. V. Bourassa, **S. Poudel**, M. A. Bailey, L. Zhang, R. J. Buhr, and K. S. Macklin. 2025. Antimicrobial resistance pattern in *Campylobacter* strains isolated from both no-antibiotics-ever (NAE) and conventional broiler complexes: Genotypic and phenotypic characterization. Poultry Science 104:105516  
<https://doi.org/10.1016/j.psj.2025.105516>.
9. Chaudhary, D., **S. Poudel**, C.-Y. Hsu, L. Jia, A. T. Sukumaran, X. Zhang, W.-H. Cheng, A. S. Kiess, K. S. Macklin, and L. Zhang. 2025. Evaluation of different DNA extraction methods for the detection of *Clostridium perfringens* by loop-mediated isothermal amplification (LAMP) assay. Journal of Applied Poultry Research 34:100600  
<https://doi.org/10.1016/j.japr.2025.100600>.
10. Chaudhary, D., **S. Poudel**, L. Jia, A. T. Sukumaran, X. Zhang, W.-H. Cheng, A. S. Kiess, K. S. Macklin, and L. Zhang. 2025. Optimization of a loop-mediated isothermal amplification (lamp) assay for the rapid detection of *Clostridium perfringens*. Journal of Applied Poultry Research 34:100513 <https://doi.org/10.1016/j.japr.2024.100513>.  
McConnell, A. D., M. R. Riggs, S. Manjankattil, **S. Poudel**, M. M. Jennings, M. B. Hughes, L. Huber, J. Wang, I. Rawson, S. Srikumar, R. J. Buhr, and D. V. Bourassa. 2025. Efficacy of a Novel Two-sided Drop-through Photonic Decontamination System on *Salmonella* and *Campylobacter* Reduction on Broiler Parts. Journal of Food Protection 88:100574 <https://doi.org/10.1016/j.jfp.2025.100574>.
11. Naem, M., Z. Jia, J. Wang, **S. Poudel**, S. Manjankattil, Y. Adhikari, M. Bailey, and D. Bourassa. 2025. Advancements in machine learning applications in poultry farming: a literature review. Journal of Applied Poultry Research:100602  
<https://doi.org/10.1016/j.japr.2025.100602>.
12. Fatemi, S. A., K. S. Macklin, L. Zhang, A. Mousstaid, **S. Poudel**, I. Poudel, and E. D. Peebles. 2022. Improvement in the Immunity- and Vitamin D3-Activity-Related Gene Expression of Coccidiosis-Challenged Ross 708 Broilers in Response to the In Ovo Injection of 25-Hydroxyvitamin D3. Animals 12:2517  
<https://doi.org/10.3390/ani12192517>.
13. Fatemi, S. A., A. Mousstaid, C. J. Williams, J. Deines, **S. Poudel**, I. Poudel, K. E. C. Elliott, E. R. Walters, N. Forcier, and E. D. Peebles. 2024a. In ovo administration of the Marek's disease vaccine in conjunction with 25-hydroxyvitamin D3 and its subsequent effects on the performance and immunity-related characteristics of Ross 708 broiler hatchlings<sup>1,2,3</sup>. Poultry Science 103:103199 <https://doi.org/10.1016/j.psj.2023.103199>.
14. Fatemi, S. A., A. Mousstaid, C. J. Williams, J. Deines, **S. Poudel**, I. Poudel, E. R. Walters, A. W. Levy, and E. D. Peebles. 2024b. Effects of the Marek's Disease Vaccine on the Performance, Meat Yield, and Incidence of Woody Breast Myopathy in Ross 708 Broilers When Administered Alone or in Conjunction with In ovo and Dietary Supplemental 25-Hydroxycholecalciferol. Animals 14:1308  
<https://doi.org/10.3390/ani14091308>.

15. Li, G., X. Hui, Y. Zhao, W. Zhai, J. L. Purswell, Z. Porter, **S. Poudel**, L. Jia, B. Zhang, and G. D. Chesser. 2022. Effects of ground robot manipulation on hen floor egg reduction, production performance, stress response, bone quality, and behavior. *PLOS ONE* 17:e0267568 <https://doi.org/10.1371/journal.pone.0267568>.
16. **Poudel, S.**, L. Jia, M. A. Arick, C.-Y. Hsu, A. Thrash, A. T. Sukumaran, P. Adhikari, A. S. Kiess, and L. Zhang. 2023. In silico prediction and expression analysis of vaccine candidate genes of *Campylobacter jejuni*. *Poultry Science* 102:102592 <https://doi.org/10.1016/j.psj.2023.102592>.
17. **Poudel, S.**, T. Li, M. A. Arick, C.-Y. Hsu, A. Thrash, A. T. Sukumaran, P. Adhikari, A. S. Kiess, and L. Zhang. 2022a. Complete Genome Sequences of Four *Campylobacter jejuni* Strains Isolated from Retail Chicken Meat and Broiler Feces. *Microbiology Resource Announcements* 11:e00898-22 <https://doi.org/10.1128/mra.00898-22>.
18. **Poudel, S.**, T. Li, S. Chen, X. Zhang, W.-H. Cheng, A. T. Sukumaran, A. S. Kiess, and L. Zhang. 2022b. Prevalence, Antimicrobial Resistance, and Molecular Characterization of *Campylobacter* Isolated from Broilers and Broiler Meat Raised without Antibiotics. *Microbiology Spectrum* 10:e00251-22 <https://doi.org/10.1128/spectrum.00251-22>.
19. **Poudel, S.**, D. Pokhrel, X. Zhang, A. T. Sukumaran, P. Adhikari, A. S. Kiess, K. S. Macklin, and L. Zhang. 2024a. *Campylobacter jejuni* from no antibiotics ever (NAE) broilers: prevalence, antibiotic resistance, and virulence genes analysis. *Poultry Science* 103:104380 <https://doi.org/10.1016/j.psj.2024.104380>.
20. **Poudel, S.**, G. T. Tabler, J. Lin, W. Zhai, and L. Zhang. 2022c. Riboflavin and *Bacillus subtilis* effects on growth performance and woody-breast of Ross 708 broilers with or without *Eimeria* spp. challenge. *J Anim Sci Technol* 64:443–461 <https://doi.org/10.5187/jast.2022.e24>.
21. **Poudel, S.**, X. Zeng, J. Lin, W.-H. Cheng, A. T. Sukumaran, P. Adhikari, A. S. Kiess, K. S. Macklin, and L. Zhang. 2024b. Recent advances and challenges in developing vaccines for *Campylobacter jejuni*: a comprehensive review. *World's Poultry Science Journal* 80:767–790 <https://doi.org/10.1080/00439339.2024.2368819>.
22. **Poudel, S.**, L. Zhang, G. T. Tabler, J. Lin, and W. Zhai. 2021. Effects of riboflavin and *Bacillus subtilis* on internal organ development and intestinal health of Ross 708 male broilers with or without coccidial challenge. *Poultry Science* 100:100973 <https://doi.org/10.1016/j.psj.2020.12.070>.

### ***Presentations, Abstracts, and conference proceedings***

**(\*Corresponding author, #Presenting author)**

1. Farazi Abinash Rahman, Erasmo Alexander Flores Granados, Samuel Rochell, Dianna Bourassa, **Sabin Poudel\***. Temporal and Sex-Linked Variation of the Broiler Tracheal Microbiome at Species Resolution. SEB-ASM 2025.
2. **Sabin Poudel\*#**, Jinquan Wang, Dianna Bourassa Assessing Population Dynamics and ARGs Trends in *Salmonella enterica* 4,[5],12:i:-. SEB-ASM. 2025.
3. Shijinaraj Manjankattil Rajan, Dianna Bourassa, Farazi Abinash Rahman, **Sabin Poudel\***. Effect of dietary fat source on cecal microflora of broiler chicken challenged with *Salmonella*. SEB-ASM. 2025.

4. Shijinaraj Manjankattil Rajan, Jinquan Wang, **Sabin Poudel**, Karla Valeria Casco Gomez, Muhammad Naem1, Olivia Lockyear, Samuel Rochell, Dianna Bourassa. Effect of dietary fat sources on performance, carcass yield and intestinal histomorphometry of broiler chickens. PSA 2025.
5. **Sabin Poudel**<sup>\*,#</sup>, Erasmo A. Flores Granados, Samuel Rochel, Dianna Bourassa. Breed-specific variations in tracheal microbiome of broiler chickens. PSA 2025
6. Farazi Rahman, Erasmo A. Flores Granados, Samuel Rochell, Dianna Bourassa, **Sabin Poudel**<sup>\*</sup>. Longitudinal analysis of broiler cecal microbiome: unraveling the species level dynamics across age and sex. PSA 2025.
7. **Sabin Poudel**<sup>\*,#</sup>, Dianna Bourassa, Jinquan Wang. Assessing population dynamics and AMR trends in *Salmonella* Infantis. PSA 2025.
8. Ruby Paudel, Dianna Bourassa, **Sabin Poudel**<sup>\*</sup>. Assessing transcriptomic responses of *Salmonella* Infantis in litter. PSA 2025.
9. Rabin Raut, Farazi Rahman, Dianna Bourassa, **Sabin Poudel**<sup>\*</sup>. Impact of *Salmonella* Infantis inoculation on poultry litter microbiome. PSA 2025.
10. Shijinaraj Manjankattil, Jinquan Wang, **Sabin Poudel**, Matthew Bailey, Yagya Adhikari, Karal V. Casco, Samuel J. Rochell, Dianna Bourassa. Effect of dietary fat sources on colonization and dissemination of *Salmonella* in broiler chickens. IPSF 2025.
11. Jinquan Wang, Bharath Mallavarapu, Prantia Patil, Deepak Subedi, Harshavardhan Thippareddi, Amit K Singh, Dianna Bourassa, **Sabin Poudel**. A systemic review and meta-analysis on the efficacy of organic acid to reduce Salmonella colonization in crop and ceca of broilers. IPSF 2025.
12. Karla V. Casco, Maria V. Baca, **Sabin Poudel**, Richard Buhr, Dianna Bourassa. Molecular characterization of *Salmonella* spp. from retail broiler meat. IPSF 2025.
13. **Sabin Poudel**<sup>\*,#</sup>, Fanny Abigail Contreras Zelaya, Eva G. Guzman, Wilmer J. Pacheco, Ruediger Hauck, Dianna Bourassa, Kenneth Macklin. Impact of Organic acid supplementation on cecal microbiome of broiler chicks inoculated with *Salmonella*. IPSF 2025.
14. Yagya Adhikari, **Sabin Poudel**, Matthew Bailey, Richard Buhr, Kenneth Macklin. Antimicrobial resistance profiling of *Salmonella* recovered from environments of No-Antibiotics-Ever (NAE) and Conventional broiler complexes. IPSF 2025.
15. **Sabin Poudel**<sup>\*,#</sup>, Dianna Bourassa. Impact of spray vaccination in tracheal and cecal microbiome of broiler chicks. SEB-ASM 2024.
16. **Sabin Poudel**<sup>\*,#</sup>, Shijinaraj Manjankattil, Yagya Adhikari, Ken Macklin, Dianna Bourassa. Aerotolerance of *Campylobacter coli* isolated from commercial poultry production system. PSA 2024.
17. Shijinaraj Manjankattil, **Sabin Poudel**, Maria Veronica Baca Alaina, Karla Valeria Casco Gomez, Fanny Abigail Contreras Zelaya, Dianna Bourassa. Effects of n-alkyl dimethyl benzyl ammonium chloride and peracetic acid in chilling water against different Salmonella serotypes inoculated to chicken flats. PSA 2024.
18. Abigail McConnell, Montana Riggs, Shijinaraj Manjankattil, **Sabin Poudel**, Madalyn Jennings, Matthew Hughes, Ian Rawson, Jeff, Buhr and Dianna Bourassa. Efficacy if a

- novel two-sided drop-through photonic decontamination system on *Campylobacter* reduction on poultry parts. PSA 2024.
19. Abigail McConnell, Montana Riggs, Shijinaraj Manjankattil, **Sabin Poudel**, Madalyn Jennings, Matthew Hughes, Ian Rawson, Jeff, Buhr and Dianna Bourassa. Evaluating the efficacy of novel two-sided drop-through photonic decontamination system on *Salmonella* reduction. IPSF 2024.
  20. Jiddu Joseph, Reshma Ramachandran, Linan Jia, **Sabin Poudel**, Pratima Adhikari, and Li Zhang. *In vitro* virulence characterization of avian pathogenic *Escherichia coli* isolates from broiler breeders with colibacillosis using HD11 cells. IPSF 2024 Submitted.
  21. **Sabin Poudel**<sup>#</sup>, Mark A. Arick II, Chuan-Yu Hsu, Pratima Adhikari, Anuraj T. Sukumaran, Aaron S. Kiess, and Li Zhang. Complete genome sequences of *Campylobacter jejuni* strains isolated from broiler reveal the presence of antimicrobial resistance and virulence genes. PSA 2023.
  22. **Sabin Poudel**<sup>#</sup>, Linan Jia, Xue Zhang, Anuraj T. Sukumaran, M. Wes Schilling, Li Zhang. Efficacy of 405 nm light in inactivating *Campylobacter jejuni* and its impact on broiler meat quality. PSA 2023.
  23. Mary Elizabeth Tingle, **Sabin Poudel**, and Li Zhang. Investigating the effectiveness of 405 nm light on controlling the proliferation of avian pathogenic *E. coli*. URSP MSU 2023. (Received **Best Poster Presentation Award**)
  24. **Sabin Poudel**<sup>#</sup>, Linan Jia, W-H Cheng, Chuan-Yu Hsu, Pratima Adhikari, Aaron S. Kiess and Li Zhang. *Campylobacter jejuni* infection induces immune responses in HD11 avian macrophage cells. IPSF 2023.
  25. **Sabin Poudel**<sup>#</sup>, Linan Jia, Chuan-Yu Hsu, Pratima Adhikari, Aaron S. Kiess, Li Zhang. Expression analysis of novel vaccine candidate genes of *Campylobacter jejuni* in a cell line infection study. PSA 2022. (Received **Mississippi Poultry Association Award**)
  26. Linan Jia, **Sabin Poudel**, Priyanka Devkota, Mark A. Arick II, Chuan-Yu Hsu, Daniel G. Peterson, Jeffrey Evans, Li Zhang. *In silico* prediction of vaccine candidates against colibacillosis in poultry using reverse vaccinology. PSA 2022
  27. Priyanka Devkota, **Sabin Poudel**, Linan Jia, Anuraj T. Sukumaran, Aaron S. Kiess, Jeffery Evans, Pratima Adhikari, Li Zhang. Investigation of virulence factors in avian pathogenic *Escherichia coli* isolated from asymptomatic and diseased birds. PSA 2022. (Received **Mississippi Poultry Association Award** and **Certificate of Excellence for Best Poster Presentation**).
  28. **Sabin Poudel**<sup>#</sup>, Anuraj T. Sukumaran, Aaron S. Kiess, Li Zhang. Isolation and characterization of *Campylobacter jejuni* from ‘no antibiotics ever’ raised broiler. IPSF 2022.
  29. Priyanka Devkota, **Sabin Poudel**, Xue Zhang, Reshman Ramachandran, Anuraj T. Sukumaran, Partima Adhikari, Aaron S. Kiess, Li Zhang. Genotypic-phenotypic discrepancies between the antimicrobial resistance characteristics of *Escherichia coli* isolated from asymptomatic and diseased broilers. IPSF 2022.
  30. **Sabin Poudel**<sup>#</sup>, Mark A. Arick II, Chuan-Yu Hsu, Wei Zhai, Anuraj T. Sukumaran, Aaron S. Kiess, Li Zhang *In silico* prediction of novel vaccine candidates to reduce *Campylobacter jejuni* in chickens. PSA 2021. (Received Mississippi Poultry Association Award and Certificate of Excellence for Best Oral Presentation).
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