

## ***CURRICULUM VITAE***

**Name: Dr. Indranil Samanta**

**Affiliation:** Associate Professor, Department of Veterinary Microbiology, West Bengal University of Animal & Fishery Sciences; 37, K. B. Sarani, Belgachia, Kolkata- 700037, India; e-mail: isamanta76 @ gmail.com; No: +91-9062918679

### **Research Domain**

- Exploration of Indian livestock (cattle, buffalo, sheep, goat, yak), poultry or their products and pet/companion animals as a source of food-borne pathogens such as *Escherichia coli* pathotypes, *Salmonella*, *Klebsiella*, *Cryptococcus* and dermatophytes
- Characterization of multi-drug resistant bacteria in food/companion animals and birds (cattle, buffalo, sheep, goat, yak, poultry and ducks) such as extended spectrum  $\beta$ -lactamase (ESBL) or AmpC type  $\beta$ -lactamase (ACBL) producing *Enterobacteriaceae*, methicillin or vancomycin resistant *Staphylococcus aureus* (MRSA/VRSA), antifungal resistant *Cryptococcus neoformans* in India, along with their virulence gene repertoire and linkage with other antibiotic resistance genes.
- Collaborative studies have explored yeast cell wall extract, beta glucan of edible mushroom, spices (cinnamaldehyde, black cumin) and essential oils in diet of poultry as growth promoter and immunomodulator with the replacement of antibiotics.
- Investigation of the social drivers for misuse /overuse of antibiotics in livestock in India with special emphasis on cross-over usage with the human antibiotics, preparation of symptom-specific antibiotic use guideline at local level in collaboration with London School of Hygiene and Tropical Medicine (LSHTM) and Royal Veterinary College (RVC, UK)

### **Grants (As Principal Investigator)**

1. **Title:** A multi-stakeholder approach towards operationalizing antibiotic stewardship in India's pluralistic rural health system  
**Status:** PI of the University center  
**Funding agency:** Medical Research Council (UK)  
Period: 2019-2022
2. **Title:** Potentiality of phytobiotics to counter prevalent bacteria *vis-a-vis* to replace use of antibiotics in poultry diet in West Bengal  
**Status:** Principal Investigator

Funding agency: West Bengal Council of Science and Technology, Government of West Bengal, India (WB-DST)  
Period: 2017-2021

### **Fellowships / Award**

- ✧ Best Oral Presentation Award (Outstanding Paper) in 5<sup>th</sup> Regional Science and Technology Congress (2023) Organized by Department of Science and Technology and Biotechnology, Government of West Bengal (India)
- ✧ SKOCH Order of Merit award (2021)
- ✧ Elected as Member, Royal Society of Biology (2021)
- ✧ Member, Royal Society of Tropical Medicine and Hygiene (2021)
- ✧ ‘Certified Publons Academy supervisor-2021’, a Clarivate Analytics initiative
- ✧ Global Eminent Scientist Award (2021) conferred by Vij Trust, TN, India
- ✧ ‘Best Teacher Award-2019’ (University level), West Bengal University of Animal and Fishery Sciences, Kolkata, India
- ✧ ‘P. Madhusudan Gold Medal’ (2019) conferred in 19<sup>th</sup> Indian Veterinary Congress organized by WBUAFS and IAAVR during 1<sup>st</sup>-2<sup>nd</sup> February 2019.
- ✧ Best Oral Presentation Award (2<sup>nd</sup>) in International symposium and 8<sup>th</sup> Conference of Indian Meat Science Association at West Bengal University of Animal and Fishery Sciences, Kolkata on 22-24 November 2018
- ✧ Elsevier certificate of ‘Outstanding contribution in reviewing’ for *Journal of Infection and Public Health* conferred on October 2018.
- ✧ Indian Academy of Sciences-Indian National Science Academy-The National Academy of Sciences, India-Summer Research Fellowship-2018 (for teachers)
- ✧ Best Oral Presentation Award (Co-author) in 31<sup>st</sup> Annual Convention of IAVMI and national symposium on ‘Innovation in animal health-current challenges and future perspective’ at Sri Venkateswara Veterinary University, Tirupati, Andhra Pradesh on 29<sup>th</sup> 31<sup>st</sup> January 2018
- ✧ Best Teacher Award-2016 (below 45 category) of F/O Veterinary and Animal Sciences, West Bengal University of Animal and Fishery Sciences, Kolkata, India (award provided in 2017)

- ✪ Best Oral Presentation Award (Co-author) in 12<sup>th</sup> national conference of APHV and national symposium on 'One Health: approaches towards practice and future challenges' at Chattisgarh Kamdhenu Viswavidyalaya, Durg, Chattisgarh on 2-3 December, 2016
- ✪ American society of Microbiology (ASM, 2015) travel grant to attend ASM-ICAR-SBS Biosafety workshop at National Institute of High Security Animal Diseases, Bhopal, India
- ✪ Best Young Faculty Award (2014) in Faculty Branding award-2014 by EET-CRS, Research wing for excellence in professional education and industry, India
- ✪ Selected as 'Vet of the Month' (May, 2014) by Dogs and Pups - a bimonthly Technical Magazine for pet owners and practitioners, published from New Delhi, India.
- ✪ Selected as National Academy of Agricultural Sciences (NAAS) Associate (2013)
- ✪ Best paper presentation award (award for excellence) in 20<sup>th</sup> West Bengal State Science Congress (2013) organized by Department of Science & Technology, Government of West Bengal at BESU, Shibpur
- ✪ Awarded Junior Research Fellowship by Indian Council of Agricultural Research for M.V.Sc degree programme
- ✪ National Scholarship by Govt. of West Bengal, India for Higher Secondary & Secondary Examination

## Publications

Scopus h-index: 24, Google scholar h-index: 30; Total citations: > 2500

### Full publication list:

<https://www.scopus.com/authid/detail.uri?authorId=6603197827>

<https://scholar.google.co.in/citations?user=6i3FueQAAAAJ&hl=en>

### Few best cited publications

Sl No	Names of all the authors as they appear in each paper	Title of the paper	Name of the journal, volume, year and page
1	I Samanta, SN Joardar, A Mahanti, S Bandyopadhyay, TK Sar, TK Dutta	Approaches to characterize extended spectrum beta-lactamase/beta-lactamase producing <i>Escherichia coli</i> in healthy organized vis-a-vis backyard farmed pigs in India	<i>Infection, Genetics and Evolution</i> 36; 2015; pp. 224-230 (IF: 3.342)

2	I Samanta, SN Joardar, PK Das, TK Sar, S Bandyopadhyay, TK Dutta, U Sarkar	Prevalence and antibiotic resistance profiles of <i>Salmonella</i> serotypes isolated from backyard poultry flocks in West Bengal, India	<i>Journal of Applied Poultry Research</i> 23; 2014; pp. 536-545 (IF: 2.162)
3	I Samanta, SN Joardar, PK Das, P Das, TK Sar, TK Dutta, S Bandyopadhyay, S Batabyal, DP Isore	Virulence Repertoire, Characterization and Antibiotic Resistance Pattern analysis of <i>Escherichia coli</i> isolated from Backyard Layers and their Environment in India	<i>Avian Diseases</i> 58; 2014; pp. 39-45 (IF: 1.734)
4	Mahanti, A., Ghosh, P., Samanta, I., Joardar, S.N., Bandyopadhyay, S., Bhattacharyya, D., Banerjee, J., Batabyal, S., Sar, T.K. and Dutta, T.K.	Prevalence of CTX-M-Producing <i>Klebsiella</i> spp. in Broiler, Kuroiler, and Indigenous Poultry in West Bengal State, India	<i>Microbial Drug Resistance</i> 24(3); 2018; 299-306 (IF: 2.706)
5	S. Chowdhury, G.P. Mandal, A.K. Patra, P. Kumar, I. Samanta, S. Pradhan, A.K. Samanta	Different essential oils in diets of broiler chickens: 2. Gut microbes and morphology, immune response, and some blood profile and antioxidant enzymes	<i>Animal Feed Science and Technology</i> 236; 2018; 39-47 (IF: 2.706)
6	A. Banerjee, R. Bardhan, M. Chowdhury, S.N. Joardar, D.P. Isore, K. Batabayl, S. Dey, T.K. Sar, S. Bandyopadhyay, T.K. Dutta, I Samanta	Characterization of beta-lactamase and biofilm producing <i>Enterobacteriaceae</i> isolated from organized and backyard farm ducks	<i>Letters in applied microbiology</i> 69; 2019; 110-115 (IF: 2.813)
7	J.C. Arnold, D. Day, M. Hennessey, P. Alarcon, M. Gautham, I. Samanta, A. Mateus	"If It Works in People, Why Not Animals?": A Qualitative Investigation of Antibiotic Use in Smallholder Livestock Settings in Rural West Bengal, India	<i>Antibiotics</i> , 10(12), 2021:1433 (IF: 5.222)
8	M. Chowdhury, R. Bardhan, S. Pal, A. Banerjee, K. Batabyal, S.N. Joardar, G.P. Mandal, S. Bandyopadhyay, T.K. Dutta, T.K. Sar, I. Samanta	Comparative occurrence of ESBL/AmpC beta-lactamase-producing <i>Escherichia coli</i> and <i>Salmonella</i> in contract farm and backyard broilers	<i>Letters in Applied Microbiology</i> 74 (1) (2022): 53-62 (IF: 2.813)
9	A. Banejee, S. Pal, P. Goswami, K. Batabyal, S.N. Joardar, S. Dey, D.P. Isore, T.K. Dutta, S. Bandyopadhyay, I. Samanta	Docking analysis of circulating CTX-M variants in multi-drug resistant, beta-lactamase and biofilm-producing <i>E. coli</i> isolated from pet animals and backyard livestock	<i>Microbial Pathogenesis</i> 170 (2022): 105700 (IF: 3.848)
10	S. Bhowmick, S. Pal, Jai Sunder, T. Sujatha, A.K. De, T. Mondal, A.D. Singh, S.N. Joardar, K. Batabyal, T.K. Dutta, S. Bandyopadhyay, A. Tiwari, I. Samanta	Exploring broilers and native fowls of Andaman and Nicobar Islands as a source of $\beta$ -lactamase-producing <i>Enterobacteriaceae</i> even with limited anthropogenic activities and docking-based identification of catalytic domains in novel $\beta$ -lactamase variants	<i>Frontiers in Veterinary Science</i> 9 (2023):1075133 (IF: 3.471)

### Books:

1. 'Veterinary Bacteriology' (2013), New India Publishing Agency, New Delhi, India (ISBN 13: 9789381450550; ISBN 10: 9381450552)
2. 'Veterinary Mycology' (2015), Springer (ISBN: 978-81-322-2279-8)  
[‘Recommended by Indian Council of Agricultural Research for PG/PhD study]

3. 'Pet bird diseases and care' (2017), Springer Nature Singapore Private Limited (ISBN: 978-981-10-3673-6) (displayed in OIE Library) ['Most Popular book' by thriftbooks.com, largest online book seller]
4. 'Antimicrobial Resistance in agriculture: Perspective, policy and mitigation' (2019), Academic Press, Elsevier (ISBN: 9780128157701) ['Most Popular book' by thriftbooks.com, largest online book seller]
5. '**Veterinary Bacteriology: Second Fully Revised Edition**' (2022), New India Publishing Agency, New Delhi, India (ISBN 13: 9789390591329)
6. Book Chapter entitled 'Knowledge-Intensive Livestock Resource Management in a Changing Environment in the edited book 'Sustainable Agriculture Systems and Technologies' (2022), Wiley (ISBN: 9781119808541)