

SAIADA FARJANA
Assistant Research Professor
Department of Poultry Science
College of Agriculture
Auburn University, Auburn, AL36849, USA

EDUCATION

Ph.D. in Biomedical Sciences (2019)

Department of Pathobiology, College of Veterinary Medicine, Auburn University, AL, USA

M.S. in Microbiology (2007)

Department of Microbiology, University of Dhaka, Bangladesh

B.Sc. (Honors) in Microbiology (2005)

Department of Microbiology, University of Dhaka, Bangladesh

PROFESSIONAL EXPERIENCE

2024-Present: Assistant Research Professor, Auburn University Department of Poultry Science, Auburn, AL

20023-2024: Postdoctoral fellow at the College of Veterinary Medicine, Auburn University, Auburn, AL

2019-2022: Postdoctoral fellow at the School of Dentistry, Virginia Commonwealth University, Richmond, VA

FACULTY TEACHING EXPERIENCE AND SCHOLARLY ACTIVITY

Graduate Student – Committee member: Zubair Khalid, Ph.D., University Reader, College of Veterinary Medicine, Auburn University

Judge for graduate students' poster presentation at Auburn University College of Agriculture Annual Graduate Research Poster Showcase 2024

Judge for graduate and undergrad students' poster presentation at Auburn University Research Symposium 2023

HONORS AND AWARDS

2021: P.P. Levine Award, Best article 2020 (Avian Dis. 64:23-35), AAAP

2021: American Society for Virology Postdoctoral Scholar Travel Award

2021: VCU Postdoctoral Research Award, Research Day

2013: Auburn University Cellular and Molecular Biosciences (CMB) Fellowship

PROFESSIONAL AFFILIATIONS

2024-present: Member of the Reviewer Board of Journal of Applied Poultry Research

2019-present: Member of the American Association of Avian Pathologists

2021-2022: Member of Philips Institute Safety Committee, Virginia Commonwealth University

2008-Present: Member of Dhaka University Microbiology Alumni Association

PUBLICATIONS (PEER REVIEWED)

1. Sugiokto FG, **Saiada F**, Zhang K, and Li R. **2023.** SUMOylation of the m6A reader YTHDF2 by PIAS1 promotes viral RNA decay to restrict EBV replication. **mBio**, 15(2):e0316823. *Sugiokto FG and Saiada F contributed equally.*

2. **Saiada F**, Zhang K and Li R. **2021**. PIAS1 potentiates the anti-EBV activity of SAMHD1 through SUMOylation. **Cell Biosci**. 11: 127.
3. **Saiada F**, Gallardo RA, Shivaprasad HL, Corsiglia C, and van Santen. **2020**. Intestinal tropism of an infectious bronchitis virus isolate not explained by spike protein binding specificity. **Avian Dis**. 64:2335
4. **Saiada F**, Eldemery FE, Zegpi RA, Gulley SL, Mishra A, van Santen VL and Toro H. **2019**. Early vaccination of chickens induces suboptimal immunity against infectious bronchitis virus. **Avian Dis**. 63:38-47
5. Afrad MH, Hassan Z, **Saiada F**, Moni S, Barua S, Das SK, Faruque ASG, Azim T, Rahman M. **2013**. Changing profile of rotavirus genotypes in Bangladesh, 2006-2012. **BMC Infect Dis** 13:3203-3226
6. **Saiada F**, Rahman HN, Moni S, Karim MM, Pourkarim MR, Azim T, Rahman M. **2011**. Clinical presentation and molecular characterization of group B rotaviruses in diarrhoea patients in Bangladesh. **J Med Microbiol** 60:529-536
7. Rahman M, Alamgir ASM, **Saiada F**, Hassan Z, Faruque ASG, Cravioto A, Azim T, Mahmudur R. **2011**. Co-circulation of G1, G2 and G9 rotaviruses in hospitalized patients in Bangladesh during 2006-2009. **Hum Vaccin** 7 (9):929-933
8. Rahman M, Matthijnssens J, **Saiada F**, Hassan Z, Heylen E, Azim T, Van Ranst M. **2010**. Complete genomic analysis of a Bangladeshi G1P[8] rotavirus strain detected in 2003 reveals a close evolutionary relationship with contemporary human Wa-like strains. **Infect Genet Evol** 10 (6):746-754
9. Rahman M, Sultana R, Ahmed G, Nahar S, Hassan ZM, **Saiada F**, Podder G, Faruque ASG, Siddique AK, Sack DA, Matthijnssens J, Van Ranst M, and Azim T. **2007**. Prevalence of G2P[4] and G12P[6] Rotavirus, Bangladesh. **Emerg Infect Dis** 13:18-24
10. Rahman M, Hassan ZM, Zafrul H, **Saiada F**, Banik S, Faruque ASG, Thomas Delbeke T, Matthijnssen, J, Van Ranst M, and Azim T. **2007**. Sequence analysis and evolution of group B rotaviruses. **Virus Res** 125(2):219-225.

ABSTRACT

1. van Santen VL, **Saiada F**, Joiner KS, Toro H. (2016). Embryonic kidney cell-adapted infectious bronchitis virus spike protein shows reduced host cell binding spectrum. Proceedings of the 9th Int. Symp. Avian Corona & Pneumoviruses & Complicating Pathogens, Leusden, The Netherlands, 111-5.

RESEARCH EXPERIENCE

September 2024-present Assistant Research Professor

Department of Poultry Science, College of Agriculture, Auburn University

RESEARCH FOCUS: Avian enteric immune system and immunosuppressive viruses.

2023-2024 Postdoctoral Fellow

Department of Pathobiology, College of Veterinary Medicine, Auburn University

RESEARCH FOCUS: Understand the mechanisms of Newcastle disease virus (NDV)

evolution and adaptation and predict pathogenic potential of circulating NDVs for chickens.

2019-2022 Postdoctoral research Fellow

Department of Oral & Craniofacial Molecular Biology, Virginia Commonwealth University

RESEARCH FOCUS: Investigate protein post-translational modification and host restriction factors in Epstein-Barr virus (EBV) life cycle.

Determined interaction between anti-EBV SAMHD1 and PIAS1 host proteins and discovered that PIAS1 SUMOylates m6A reader YTHDF2 and promotes viral RNA decay to restrict EBV replication.

2014-2019 Graduate Research Assistant

Department of Pathobiology, College of Veterinary Medicine, Auburn University

RESEARCH FOCUS: Host-virus interaction of avian infectious bronchitis virus (IBV) and its spike protein, and IBV vaccines

Demonstrated that early vaccination of chickens induces suboptimal immune responses at both mucosal and systemic levels against IBV, and IBV field strain evade vaccine induced immune responses through point mutations in the spike protein.

2013-2014 Graduate Research Assistant (Cellular and Molecular biology Fellowship)

Immunology Lab at the Scott-Ritchey Research Center, Auburn University

RESEARCH FOCUS: IBV specific immune responses in different aged chicken after vaccination

Measured IBV specific antibody producing cells and humoral antibodies in different mucosal and systemic fluids/tissues

2008-2011 Research Officer (Virology)

International Centre for Diarrheal Disease Research, Bangladesh (ICDDR,B)

RESEARCH FOCUS: Influenza A virus vaccine development & Emergence of virulent strains.

Involved in human and avian influenza surveillance studies in Bangladesh funded and patronized by CDC, USA. The lab protocols included epidemiological study, drug trial efficacy. The overall goal of these studies was to provide information for vaccine development and intervention programs.

2007-2008 Research Officer (Microbiology)

Matlab Hospital branch, ICDDR,B

RESEARCH FOCUS: Involved in rotavirus vaccine trial entitled "Efficacy, Safety and Immunogenicity of RotaTeq™ among Infants in Asia and Africa". Maintained vaccine accountability and cold chain. Processed stool and blood samples from diarrheal patients for shipment to CDC, USA.

2004-2006 Graduate Research Assistant

Virology Laboratory, ICDDR,B

RESEARCH FOCUS: Emergence of rotavirus strains & Evolutionary relationship of rotavirus.

Tried to find the evolutionary relationship/origin of circulating rotavirus stains through complete genome analysis. Analyzed the distribution pattern & diversity of rotavirus strains from 2000-2009.

2003-2004 Undergraduate Research Assistant

Department of Microbiology, University of Dhaka, Bangladesh

RESEARCH FOCUS: Detection and characterization of drug sensitivity pattern of pathogenic bacteria isolated from wound infections.