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Research interest	Veterinary Pathology, functional genomics of intracellular bacteria, infection model, food safety, molecular epidemiological survey of livestock and zoonotic pathogen especially on vector-borne diseases.
Experience with techniques and instruments	Gene cloning technique, Gene knockout technique, Cell culture maintenance and infection assay (J774, THP-1 and Hela cell etc.), Confocal microscopy, Western blotting, Conventional PCR and Real time PCR, RFLP, Histopathology, Isolation and identification of micro-organisms, Serological techniques, Laboratory animal infection assay (e.g., Mouse, silkworm) etc.
Professional experiences	<ul style="list-style-type: none"> ▪ Faculty member (Joined as a Professor since 01.11.2020) of Patuakhali Science and Technology University since November/2009 to till now. ▪ Having ONE YEAR working experience as a “Veterinary Surgeon” of Upazila Livestock Office of Daulatkhan, Bhola under the Department of Livestock Services (DLS) of People’s Republic of Bangladesh (GoB) from Nov/2008 to Oct/2009. ▪ Having ELEVEN MONTH working experience as a “Laboratory Associate” for “Regional Coordination of Avian Influenza Control and Prevention in Asia - OSRO/RAS/601/ASB Project” of FAO (Food and Agricultural Organization); working station at National Avian Influenza Reference Laboratory in BLRI (Bangladesh Livestock Research Institute), Savar, Dhaka- 1341 from Dec/2007 to Oct/2008. ▪ Having TEN MONTHS working experiences as a “Supervising Veterinarian” of “Immediate Technical Assistance to Strengthen Emergency Preparedness for Highly Pathogenic Avian Influenza (HPAI) - OSRO/RAS/605/USA” in PROSHIKA which was assisted technically by FAO and DLS and funded by USAID from Feb/2007 to Nov/2007. ▪ Having ONE YEAR working experience as a “Scientific Officer” in “Preliminary surveillance of BSE in Bangladesh” funded by Global Capsules Ltd. from Jan/2006 to Dec/2006.
List of publications	<ul style="list-style-type: none"> ▪ Sajal, S. S. Saha, S. Rani, M. M. Rahman, A. Mondal, K. J. Alam. Sero-pathological Investigation of Newcastle Disease in Sonali Chicken in Narsingdi District in Bangladesh. <i>J. Patuakhali Sci. & Tech. Uni.</i> (2024), 14(1&2). ▪ M. R. Uddin, S. S. Saha, K. J. Alam, M. S. Alam, S. Rani. Hemoprotzoal Infections in Cattle in the Barishal Division of Coastal Region of Bangladesh: Epidemiology, Hematology, and Tick Vector Insights. <i>Veterinary Sciences: Research and Reviews</i> (2025) 11(1): 26-38. ▪ S. Imran, S. S. Saha, M. M. Rahman, S. Rani, M. S. Alam, K. J. Alam, M. M. R. Chowdhury. Prevalence and etiopathology of aspergillosis in broiler chickens: Analysis of risk factors in coastal Bangladesh. <i>Journal of Research in Veterinary Sciences</i> (2025) 5(1): 11-20. ▪ M. A. Islam, A. K. Talukder, S. A. Rahman, M. S. Alam, M. S. Islam, M. A. Rahman, S. S. Saha. Gastrointestinal helminths in local (Black Bengal) and Jamunapari goats of Barishal sadar, southern Bangladesh. <i>World Vet J.</i> (2024) 14(2): 247-256.

- S. Rani, K. J. Alam, S. S. Saha, M. M. Rahman, S. Alam. Seroprevalence, Identification, and Pathology of Salmonellosis in Selected Poultry Farms at Barishal District of Bangladesh. *Turkish Journal of Agriculture - Food Science and Technology*, (2022) 10(6): 1158-1164. doi: 10.24925/turjaf.v10i6.1158-1164.4980.
- E.H. Chowdhury, P. Kundu, J.A. Begum, T. Chowdhury, M. Rahman, A. Khatun, S.S. Saha, M. Nooruzzaman, R. Parvin, M.R. Islam. Peste des petits ruminants virus antibodies in domestic large ruminants in Bangladesh. *The Journal of Infection in Developing Countries*. (2022). 16(2):369-373. doi: 10.3855/jidc.15189.
- T. Nakamura, T. Shimizu, F. Inagaki, S. Okazaki, S. S. Saha, A. Uda, K. Watanabe and M. Watarai. Identification of Membrane-Bound Lytic MureinTransglycosylase A (MltA) as a Growth Factor for *Francisella novicida* in a Silkworm Infection Model. *Frontiers in Cellular and Infection Microbiology* (2021) Volume 10; doi: 10.3389/fcimb.2020.581864.
- M. S. Islam, S. S. Saha, M. M. Rahman, S. M. Rahman, S. M. Alam, M. S. Ahmed, K. J. Alam. Pathological investigation of hydatidosis in goats of selected abattoirs at Barishal metropolitan area in Bangladesh. *Annals of Veterinary and Animal Science* (2020) 6(3).
- D. Biswas, S.S. Saha, S. Biswas and M.A. Sayeed. Outbreak of lumpy skin disease of cattle in south-west part of Bangladesh and its clinical management. *Veterinary Sciences: Research and Reviews*. (2020) 6(2).
- S. M. Rahman and S. S. Saha. Evaluation of three non-invasive pregnancy diagnosis tests (modified seed germination inhibition test, urine bariumchloride test and milk copper sulphate test) in buffalo. *Advances in Animal and Veterinary Sciences*. (2020)8(11).
- T. K. Paul, M. K. Rahman, M.S. Haider and S.S. Saha. Fatal haemonchosis (H. contortus) in Garole sheep at coastal region of Bangladesh. *Research in Agriculture, Livestock and Fisheries*. (2020)7(1).
- S. S. Saha, A. Uda, K. Watanabe, T. Shimizu, M. Watarai. RtxA like protein contributes to infection of *Francisella novicida* in silkworm and human macrophage THP-1. *Microbial Pathogenesis*(2018) 123: 74-81; doi.org/10.1016/j.micpath.2018.06.046.
- S. S. Saha, J Suzuki, A. Uda, K. Watanabe, T. Shimizu, M. Watarai. Silkworm model for *Francisellanovaicida* infection. *Microbial Pathogenesis* (2017) 113: 94-101; doi.org/10.1016/j.micpath.2017.10.036.
- S. S. Saha, M. Hashino, J Suzuki, A. Uda, K. Watanabe, T. Shimizu, M. Watarai. Contribution of methionine sulfoxidereductase B (MsrB) to *Francisellatularensis* infection in mice. *FEMS Microbiology Letters* (2016) 364 (fnw260); doi.org/10.1093/femsle/fnw260.
- S. S. Saha, D. R. Bhowmik and M. M. R. Chowdhury. Prevalence of gastrointestinal helminthes in buffaloes in Barishal district of Bangladesh. *Bangl. J. Vet. Med.* (2013) 11 (2): 131-135.
- S. Sultana, E. H. Chowdhury, R. Parvin, S. S. Saha, S. M. Rahman, M. G. Haider, A. S. M. Arif, S. Rahman, Hee-Jong Song. *Escherichia coli* septicemia concurrent with mycotic infection in captive salt water crocodiles in Bangladesh, *Korean J Vet Serv* (2012) 35(1): 47-52.
- M. M. T. Razu, M. Mostofa, P. K. Dutta, D. R. Bhowmik, S. S. Saha and M. A. Awal. Comparative efficacy of ivermectin (pour on) and a medicinal plant Ata (*Annona reticulata*) against ectoparasites in calves. *Int. J. Bio Res.* (2010) 2 (7): 07-11.

	<ul style="list-style-type: none"> ▪ S. Halder, E. H. Chowdhury, R. Parvin, M. M. Rahaman, S. M. Rahman, S. S. Saha, S. Sultana, N. Marium, A. Islam, S. Rahman, Hee-Jong Song. Active and passive surveillance of bovine spongiform encephalopathy in Bangladesh, Korean J Vet Serv (2009) 32(4): 307-314. ▪ S. Sultana, E.H. Chowdhury, S. S. Saha, S. M. Rahman, M. G. Haider and M. M. Hossain, Mycoplasma infections in chickens: Isolation, PCR detection, RFLP analysis and pathology, Bangladesh Vet J (2008) 42 (1-4): 29-37. ▪ M. H. Rahman, E. H. Chowdhury, S. S. Saha, A. Islam, and M. G. S. Alam. Abattoir study of reproductive diseases in goats, The Bangladesh Veterinarian (2008) 25 (2): 88-90. ▪ A. Islam, E. H. Chowdhury, S. S. Saha, and M. R. Islam. Avian leukosis in chickens: retrospective histopathology and antibody prevalence in some selected layer farms, J. Bangladesh Agril. Univ (2008) 6(1): 33-37. ▪ S. M. Rahman, E.H.Chowdhury, S. S. Saha, S. Sultana, M.G. Haider and P. M. Das. RAPD analysis of locally isolated <i>Salmonella pullorum</i> in Bangladesh, Bangladesh Vet J (2008) 42 (1-4): 38-47. ▪ S. S. Saha, E. H. Chowdhury, S. M. Rahman, M.G. Haider, S. Sultana, M. R. Islam. Standardization of polymerase chain reaction for the detection of <i>Salmonella gallinarum</i>, Bangladesh Vet J (2007) 41 (1-4): 49-58.
Academic Qualifications	<ul style="list-style-type: none"> ▪ Ph.D. in Veterinary Public Health (Bacterial pathogenesis) Passing year: 2018 Dissertation/Thesis title: Analysis of molecular mechanism of <i>Francisella</i> pathogenesis using mouse and silkworm infection model Institute: United graduate School of Veterinary Science, Yamaguchi University, Japan ▪ M.S. in Pathology Passing Year: 2007 Dissertation/ Thesis Title: Detection of <i>Salmonella gallinarum</i> using Polymerase Chain Reaction. Institute: Bangladesh Agricultural University, Mymensingh, Bangladesh Result: Grade A ▪ Doctor of Veterinary Medicine (D.V.M) Passing Year: 2003 (Exam. held in 2004-05) Institute: Bangladesh Agricultural University, Mymensingh, Bangladesh Result: First Class ▪ Higher Secondary Certificate (H.S.C) Passing Year: 1999 College: Rajbari Govt. College, Rajbari, Bangladesh. Result: First Division ▪ Secondary School Certificate (S.S.C) Passing Year: 1997 School: Liakat Ali Smriti High School, Narua Result: First Division
Participation in seminars and conferences	<ul style="list-style-type: none"> ▪ Attended at 31st Annual Scientific Conference of Bangladesh Society for Veterinary Education and Research (BSVER) presented two posters entitled “Effect of prebiotic and probiotic supplementation on growth performance of broilers infected with coccidiosis” and “Standardization of FAMACHA Technique for management of anemia in small ruminants” in Bangladesh Agricultural University, Bangladesh on February 01-02, 2025.

	<ul style="list-style-type: none"> ▪ Attended at “The 6th World Veterinary Poultry Association (WVPA) ASIA MEETING” and presented a topic entitled “Characterization of clinical aspergillosis in broiler farms in coastal Bangladesh” on October 17-18, 2024 in Marriott Hotel Manila, Pasay City, Philippines. ▪ Attended a seminar organized by Ministry of Science and Technology to present research findings entitled “Molecular Characterization of hard ticks of livestock in Bangladesh” at BCSIR, Dhaka on 2nd May, 2024. ▪ Attended a seminar on the occasion of “World Veterinary Day- 2024” as keynote speaker on the theme entitled “Veterinarians are essential health workers” organized by Veterinary Students’ Association at Patuakhali Science and Technology University, Babuganj, Barishal on 27th April, 2024. ▪ Presented a poster entitled “Molecular characterization of hard ticks of livestock in coastal areas of Bangladesh” in the 6th National Scientific Conference on Food safety and health at IUBAT-International University of Business Agriculture and Technology, Uttara, Dhaka, Bangladesh on 2nd March 2024. ▪ Attended at 6th Annual Scientific Conference of Coastal Vet Society Bangladesh (CVS-BD) having an oral presentation entitled “Role of cold shock protein in <i>Francisella</i> pathogenesis” in Bangladesh Development Society (BDS), Bangladesh on 25th November, 2023. ▪ Attended Asia meeting 2022 of 5th world veterinary poultry association (WVPA) at Radission Blu, Dhaka, Bangladesh on 22-23 October 2022. ▪ Attended at 25th Annual Scientific Conference of Bangladesh Society for Veterinary Education and Research (BSVER) having an oral presentation entitled “A non-mammalian infection model (silkworm-<i>Francisella novicida</i>) for bacterial pathogenesis study” in Bangladesh Agricultural University, Bangladesh on February 23-24, 2019. ▪ Attended at 2nd Annual Scientific Conference of Coastal Vet Society Bangladesh (CVS-BD) having an oral presentation entitled “Functional interaction of methionine sulfoxidereductases A, B and B/A of <i>Francisella tularensis</i> LVS strain under oxidative stress condition” in Patuakhali Science and Technology University (Barishal campus), Bangladesh on February 16, 2019. ▪ Attended at “The 9th Joint Symposium of Veterinary Research in East Asia” presenting a topic entitled “Development of silkworm infection model for <i>Francisella novicida</i> pathogenesis study” on February 22-24, 2018 in Schofield Hall, College of Veterinary Medicine, Seoul National University (SNU), Seoul, Korea. ▪ Participated at “Microbiology symposium” in Yamaguchi University of Japan having a poster entitled “RtxA is an essential factor for <i>Francisellanovaicida</i> pathogenesis” on 22th December 2017. ▪ Attended Veterinary Science Seminar 2017 in Tottori University of Japan organized by United Graduate School of Veterinary Science having an oral presentation entitled “Significance of three methionine sulfoxide reductases (MsrA, MsrB and msrA/B) of <i>Francisella tularensis</i> in oxidative stress tolerance” dated 23th to 26th August 2017. ▪ Attended at “The 8th Joint Symposium of Veterinary Research among Universities of Veterinary Medicine in East Asia” presenting a topic entitled “Role of methionine sulfoxide reductases on <i>Francisella tularensis</i> infection in mice” on February 19-21, 2017 in National Chung-Hsing University, Taichung, Taiwan. ▪ Attended Veterinary Science Seminar 2016 in Yamaguchi University of Japan organized by United Graduate School of Veterinary Science, Yamaguchi University having a poster entitled “Role of methionine sulfoxidereductases (MsrA and MsrB) of
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	<p><i>Francisellatularensis</i> in oxidative stress and intracellular growth" dated 24th to 27th August 2016.</p> <ul style="list-style-type: none"> Participated at "Microbiology symposium" in Yamaguchi University of Japan having a poster entitled "Antioxidant enzyme MsrB of <i>Francisellatularensis</i> is required for intracellular growth" on 25th December 2015. Attended summer seminar in Kagoshima University of Japan organized by United Graduate School of Veterinary Science, Yamaguchi University dated 19th to 22th August 2015. Participated at "Microbiology symposium" in Yamaguchi University of Japan having a poster entitled "Effect of zinc uptake system on <i>Francisellatularensis</i> pathogenesis" on 16th December 2014. Participated at 12th, 13th, 14th, 15th& 16th Annual Scientific Conference (Ascon) Of Bangladesh Society for Veterinary Education And Research (BSVER).
Project implementation experience	<ul style="list-style-type: none"> Analyzing post freezing broiler meat quality and development of sustainable technology for improvement (Phase 1) funded by Research and Training Center, PSTU during 2024-2025. Standardization of FAMACHA© technique for management of anemia in small ruminant funded by Research and Training Center, PSTU during 2023-2024. Experienced as a Principal Investigator on the project 'Etiopathological study of clinical form of Aspergillosis (Brooder pneumonia) in broiler farms' funded by Research and Training Center, PSTU during 2022-2023. Having one year working experience as a Project Director in "Molecular Characterization of hard ticks of livestock in Bangladesh" funded by Ministry of Science and Technology (MOST), Bangladesh Secretariat, Dhaka (Project Id: SRG-221288) during 2022-2023. Experienced as a Principal Investigator on the project 'Seroprevalence and pathological investigation of mycoplasmosis and Newcastle disease in quail' funded by PSTU during 2021-2022. Having one year working experience as a Project Director in "Identification and genetic characterization of blood feeding ticks acting as vector of hemo-protozoan diseases in livestock at selected coastal areas of Bangladesh" funded by University Grant Commission (UGC), Bangladesh during March 2021 to Feb 2022. Experienced as a Principal Investigator on the project 'Seroprevalence and pathological investigation of mycoplasmosis in turkey in selected coastal areas (Barishal and Bhola district) of Bangladesh' funded by PSTU during 2020-2021. Experienced as a Principal Investigator on the project 'Identification of haemoprotezoa with collection and preservation of associated tick vectors from cattle in selected coastal areas of Bangladesh' funded by PSTU during 2019-2020. Experienced as a Principal Investigator on the project 'Prevalence of gastrointestinal helminthes in buffaloes in Barisal district' funded by PSTU during 2012-2013.
Ongoing project	<ul style="list-style-type: none"> Analyzing post freezing broiler meat quality and development of sustainable technology for improvement (Phase 2) which is funded by RTC, PSTU. Vector borne diseases
Research supervising experience	<p>As a supervisor (MS Thesis-04):</p> <ul style="list-style-type: none"> Standardization of FAMACHA Technique for Assessing Parasite Induced Anaemia in Small Ruminant

	<ul style="list-style-type: none"> ▪ Etiopathological study of clinical form of aspergillosis (brooder pneumonia) in broiler farms. ▪ Pathology of haemoprotozoal diseases with identification of associated tick vectors. ▪ Sero-pathological investigation of Newcastle disease in Sonali chicken. <p>As a co-supervisor (MS Thesis-05):</p> <ul style="list-style-type: none"> ▪ Seroprevalence, pathology and identification of <i>Salmonella</i> sp. in selected poultry farms of coastal areas of Bangladesh. ▪ Community evaluation on the abundance and diversity of Arboviral vectors in Barishal city of Bangladesh. ▪ Effect of prebiotic and probiotic supplementation on growth performance of broilers against coccidiosis in selected broiler farms in Cumilla Districts in Bangladesh. ▪ Clinico-pathological Investigation of Coccidiosis in Poultry in Selected Areas of Barishal and Pirojpur district ▪ Epidemiological Studies of Gastrointestinal Parasites of Small Ruminants in Selected Areas of Rangpur District
Administrative And Organizational/ Professional Experience	<ul style="list-style-type: none"> ▪ Having working experience as a Head (Chairman) of the Department of Pathology and Parasitology of Patuakhali Science and Technology University since 13.10.2022 to 12.10.2025. ▪ Currently working as a Member Secretary of the Institutional Ethical committee of the Patuakhali Science and Technology University since 15.05.2024. ▪ Currently working as a Joint Secretary of the executive committee of the Bangladesh Society for Veterinary Education and Research (BSVER) for 2024-2025. ▪ Currently working as a President of Shanatan Shongho of the Patuakhali Science and Technology University (Barishal Campus) for 2024-2025. ▪ Having working experience as an Assistant Provost in “Birshreshtha Captain Mohiuddin Jahangir Hall” of Patuakhali Science and Technology University from 01.03.2010 to 27.05.2013. ▪ Having working experience as a Head (Chairman) of the Department of Pathology and Parasitology of Patuakhali Science and Technology University from 28.02.2013 to 27.05.2013 to 14.09.2013.
Language Proficiency	<ul style="list-style-type: none"> ▪ Bengali: Mother tongue. ▪ English: Fluent in speaking, writing, reading and listening. ▪ Japanese: Completed Basic Japanese language course (Level I and II) at Yamaguchi University of Japan. Have moderate fluency in daily conversation with Japanese people, can read and write hiragana, katakana and more than 100 kanji character.
Membership	<ul style="list-style-type: none"> ▪ Member, World Veterinary Poultry Association, Bangladesh Branch (WVPA-BB) (Membership no. BGD0193/2025) ▪ Life member, Bangladesh Coastal Vet Society (The CVSBD) (Membership no. CVSLM0020) ▪ Ex-Member, Tularemia International Society (TULISOC) ▪ Life member, Bangladesh Association for Biotechnology & Genetic Engineering (BABGE) (Membership no. 182)

	<ul style="list-style-type: none"> ▪ Life member, Bangladesh Society for Safe Food (BSF) (Membership no. LM00122) ▪ Life member, Bangladesh Society for Veterinary Education and Research (BSVER) (Membership no. 120 PSTU11) ▪ Life member, Japanese Universities Alumni Association in Bangladesh (JUAAB) (Membership no. JUAAB-LM-0562) ▪ Member, Bangladesh Veterinary Council (BVC) (Membership no. 2215) ▪ Life Member, Krishibid Institute of Bangladesh (Membership no. 02-03-15135)
Major award	<ul style="list-style-type: none"> ▪ Received ‘Japanese Government (MEXT)’ Scholarship for pursuing PhD in Yamaguchi University, Japan in 2013. ▪ Awarded ‘Japanese Government (JASSO)’ follow-up research fellowship program in Yamaguchi University, Japan in 2023.
Training, Workshop& other experiences	<ul style="list-style-type: none"> ▪ Attended a 2 day long workshop on “Advanced Bioinformatics & Computational Biology” held on 16-17 September, 2022 at Chittagong Veterinary and Animal Sciences University (CVASU), Chittagong, Bangladesh. ▪ Attended a 3 long training course on “Teachers Training Program on Disease Control and Pedagogic Skills” held on 09,10,11 May 2022 organized by Bangladesh Veterinary Pedagogy Forum and Patuakhali Science and Technology University. ▪ Attended a 3 day long training-workshop on “Development of Outcome Based Curriculum, Faculty of ANSVM,PSTU” on 06,07,09 September 2021at faculty of ANSVM,PSTU organized by IQAC of PSTU. ▪ Attended a day long working experience on “Question drafting workshop with Tuft University” on 16th June 2019 organized by Food and Agricultural University at The Hotel Ascott Palace, Baridhara, Dhaka, Bangladesh. ▪ Attended 3 semester of Basic Japanese language course offered by Yamaguchi City, Yamaguchi Prefecture of Japan in 2014. ▪ Attended a five day long training courses on “Administrative and Financial Management for PSTU Teachers” at Patuakhali Science and Technology University, Dumki, Patuakhali from 21-23 and 29-30 October 2010. ▪ Attended a two weeks long training course on “Administration, Office Management & communication” at Graduate Training Institute, BAU, Mymensingh from 27th January to 08th February 2007. ▪ Attended a day long workshop on “Immediate Technical Assistance to Strengthen Emergency Preparedness for Highly Pathogenic Avian Influenza (HPAI) - OSRO/RAS/605/USA, which is organized by FAO & USAID at 18th January, 2007. ▪ Attended a week long training course on “Scientific Report Writing” at Graduate Training Institute, BAU, Mymensingh from 12 to 17th August 2006. ▪ Attended a two week long training course on “Basics of MS office” at Graduate Training Institute, BAU, Mymensingh from 06 to 18th August 2005. ▪ Attended a English Language Courses in “Bhuiyan English Language Club” School of Computers & Language Club, House 39/A, Road 8, Dhanmondi R/A, Dhaka, Bangladesh from 10th March 2004 to 09th July 2005.