

# Shifath Bin Syed

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## ACADEMIC CREDENTIALS

Jan 2016 –	<b>Bachelor of Science (B.Sc.)</b>	<b>CGPA: 3.52/4.00</b>
July 2020	Department of Biotechnology and Genetic Engineering Faculty of Biological Sciences, Islamic University, Bangladesh.	<b>74.4%</b> score   Total credit hours: <b>160</b>
	<ul style="list-style-type: none"><li>• <b>Major courses:</b> Biotechnology, Microbiology, Basic Genetics, Molecular Biology, Biochemistry, Immunology, Cell Signaling, Genetic Engineering, Human Physiology, Biostatistics, Bioinformatics, etc.</li></ul>	

## NOTABLE PUBLICATIONS<sup>\*</sup>

- Dec 2020 Nain Z, Mansur FJ, **Syed SB**, Islam MA, Azakami H, Karim MM (2020) Inhibition of biofilm formation, quorum sensing and other virulence factors in *Pseudomonas aeruginosa* by polyphenols of *Gynura procumbens* leaves. *Journal of Biomolecular Structure and Dynamics*; DOI: [10.1080/07391102.2020.1870563](https://doi.org/10.1080/07391102.2020.1870563) [IF: 3.52; Q2]
- Aug 2020 Sheam MM, **Syed SB**, Nain Z, Tang SS, Ahmed KR, Biswas SK (2020) Community-acquired pneumonia: etiology, antibiotic resistance and prospects of phage therapy. *Journal of Chemotherapy*; DOI: [10.1080/1120009X.2020.1807231](https://doi.org/10.1080/1120009X.2020.1807231) [IF: 1.66; Q2]
- June 2020 **Syed SB**<sup>†</sup>, Sheam MM<sup>†</sup>, Barman SK, Hasan MR, Biswas SK (2020) COVID-19: the catastrophe of our time. *Journal of Advanced Biotechnology and Experimental Therapeutics*; DOI: [10.5455/jabet.2020.d150](https://doi.org/10.5455/jabet.2020.d150) [Scopus Indexed]
- Jan 2020 **Syed SB**, Nain Z, Khan MSA, Abdulla F, Tasmin R, Adhikari UK (2020) Exploring Lassa virus proteome to design a multiepitope vaccine through immunoinformatics and immune simulation analyses. *International Journal of Peptide Research & Therapeutics*; DOI: [10.1007/s10989-019-10003-8](https://doi.org/10.1007/s10989-019-10003-8). [IF: 1.50; Q2]
- Dec 2019 Nain Z, **Syed SB**, Karim MM, Islam MA, Adhikari UK (2019) Energy-optimized pharmacophore coupled virtual screening in the discovery of quorum sensing inhibitors of LasR protein of *Pseudomonas aeruginosa*. *Journal of Biomolecular Structure and Dynamics*; DOI: [10.1080/07391102.2019.1700168](https://doi.org/10.1080/07391102.2019.1700168). [IF: 3.52; Q2]

<sup>\*</sup> List of other publications can be found at the end

## RESEARCH EXPERIENCES

- Sep 2019-  
Present **Research Assistant**  
Department of Biotechnology and Genetic Engineering, Islamic University, Kushtia-7003, Bangladesh.
- **Project 1:** Myco-remediation of reactive red dye by fungal strain isolated from textile effluents.
  - **Project 2:** Transcriptomic analysis to reveal the pathophysiological impact of COVID-19 on comorbidities.
- Supervised by **Dr. Sudhangshu Kumar Biswas** [shu\_genetics@yahoo.com]
- Oct 2020-  
Present **Research Assistant**  
ABEx Bio-Research Center, Dhaka, Bangladesh
- **Ongoing Project:** A systemic study on anti-aging potentialities of ketogenic diets.
- Supervised by **Dr. Md Jamal Uddin** [research@abexbio.com]
- Jan 2020-  
Apr 2020 **Project Student**  
Department of Biotechnology and Genetic Engineering, Islamic University, Kushtia-7003, Bangladesh.
- **Bachelor's Project:** Antibiofilms of *Acinetobacter baumannii* isolated from local hospital specimens.
  - **Project 1:** Isolation and identification of biofilm-forming multidrug-resistant clinical pathogens.
  - **Project 2:** Identification of anti-quorum sensing compounds from *Gynura procumbens* leaf extract.
- Supervised by **Dr. Mohammad Minnatul Karim** [mkmicro.du@gmail.com]

## PROFESSIONAL EXPERIENCE

- Mar 2020-  
Present **Content Developer**, Shabash Fakibaj<sup>TM</sup>
- Responsibilities include higher study related online content creation and presentation,
  - Directing and supervising fifteen campus ambassadors,
  - Encouraging students for higher education, and organizing seminars countrywide
- Presided by **Wasiq Ameen** [wasiq.ameen2011@gmail.com]

[Website](#)

## STANDARDIZED LANGUAGE TEST

International English Language Testing System (IELTS)

TRF No.: 20BD004776SYES050A

Overall	Listening	Reading	Writing	Speaking
8.0	8.5	8.5	7.0	7.0

## PERSONAL DEVELOPMENT

June 2020	<b>Ecology: Ecosystem Dynamics and Conservation (14 hours)</b> Instructed by: American Museum of Natural History (Coursera)	<a href="#">Credential</a>
May 2020	<b>Bacterial Genomes: Disease Outbreaks and Antimicrobial Resistance (9 hours)</b> Instructed by: Wellcome Genome Campus (FutureLearn)	<a href="#">Credential</a>
May 2020	<b>Introduction to Python (12 hours)</b> Instructed by: Hugo Bowne-Anderson (DataCamp)	<a href="#">Credential</a>
Apr 2020	<b>Bacterial Genomes: From DNA to Protein Function Using Bioinformatics (10 hours)</b> Instructed by: Wellcome Genome Campus (FutureLearn)	<a href="#">Credential</a>

## TECHNICAL SKILLS

Wet-Lab Skills	Cell Culture, Gram Staining, MIC, Spectrophotometry, Biochemical Assays, Antibiotic Susceptibility Test, Column Chromatography, Student's T-Test, Standard Deviation, ANOVA, etc.
Dry-Lab Skills	Computer-aided Drug & Vaccine Design, Virtual Screening, Protein Modelling, Molecular Docking, Phylogeny, Disulfide Engineering, <i>In Silico</i> Cloning, Immune Simulation, Population Coverage, Microarray Data Analysis, etc.
Tools & Softwares	Discovery Studio, PyMol, PyRx, AutoDock Vina, Cytoscape, SnapGene, Chromas Pro, MS Office, BioRender, Google Sheets, Google Docs, Mendeley, Python 3, Windows OS, etc.

## ADDITIONAL INFORMATION

Presentations	<ul style="list-style-type: none"><li>• Poster Presentation (Abstract No: <b>P9</b> &amp; <b>P18</b>), International E-Conference on Biotechnology, Bioinformatics &amp; Biomedicine, AIMST University, Malaysia. [24-26 August 2020]<ul style="list-style-type: none"><li>- <b>P9</b>: Antibigrams of multidrug-resistant <i>Acinetobacter baumannii</i> isolated from specimens at Kushtia Medical College Hospital, Kushtia, Bangladesh.</li><li>- <b>P18</b>: Myco-remediation of reactive red dye by highly potential fungal strain isolated from textile effluents.</li></ul></li><li>• Poster Presentation (Abstract No: <b>PDM02</b>), 34th BSM Annual Conference (International E-conference) organized by Bangladesh Society of Microbiologists. [19-20 December 2020]<ul style="list-style-type: none"><li>- <b>PDM02</b>: Prevalence of multidrug-resistant <i>Acinetobacter baumannii</i> in a tertiary care hospital environment.</li></ul></li><li>• 3 Minute Thesis Presentation, <i>Designing of Multi-epitope vaccine against Lassa virus through immunoinformatics approaches</i>, National Biotechnology Fair – 2019, Bangabandhu Novo Theatre, Dhaka, Bangladesh.</li></ul>
Awards & Achievements	<ul style="list-style-type: none"><li>• <b>Participant</b>, Global Community Bio Summit 4.0, MIT Media Lab, Massachusetts Institute of Technology, Cambridge, USA [9<sup>th</sup>-11<sup>th</sup> October 2020]</li><li>• <b>Bronze Award</b> in Poster Presentation at IECBBB2020 (Abstract No: P9)</li><li>• <b>Semi-Finalist</b> in 3 MT Presentation, National Biotechnology Fair – 2019.</li><li>• <b>University Merit Scholarship</b> in Third and Fourth Academic Year.</li><li>• <b>National Education Board Scholarship</b>, Junior School Certificate (JSC) Examination.</li><li>• <b>National Education Board Scholarship</b>, Primary School Certificate (PSC) Examination.</li></ul>
Organizations	<ul style="list-style-type: none"><li>• <b>Vice-President</b>, International Association of Students in Agricultural and Related Sciences (IAAS), Islamic University, July 2020 - Present</li><li>• <b>Executive Member</b>, International Society for Computational Biology – Regional Student Group (ISCB-RSG) Bangladesh, June 2020 – Present.</li><li>• <b>Member</b>, Asian Federation of Biotechnology (AFOB), Mar 2020 – Present.</li><li>• <b>Global Outreach Student Member</b>, American Society for Microbiology (ASM), Mar 2020 – Present.</li><li>• <b>Founding Member</b>, Islamic University Model United Nations Association (IUMUNA), May 2019 – Present.</li><li>• <b>Co-founder &amp; Managing Director</b>, Alorito'30, Islamic University, Jan 2017 – Present.</li></ul>

## LIST OF PUBLISHED ARTICLES

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- Dec 2020 Khan MSA, Nain Z, **Syed SB**, Abdulla F, Moni MA, Karim MM (2020) Computational formulation and immune dynamics of a multi-peptide vaccine candidate against Crimean-Congo hemorrhagic fever virus. *Molecular & Cellular Probes*, DOI: [10.1016/j.mcp.2020.101693](https://doi.org/10.1016/j.mcp.2020.101693) [IF: 1.951; Q3]
- Dec 2020 Abdulla F, Nain Z, Hossain MM, **Syed SB**, Adhikari UK (2020) A comprehensive screening of the whole proteome of hantavirus and designing a multi-epitope subunit vaccine for cross-protection against hantavirus: structural vaccinology and immunoinformatics study. *Microbial Pathogenesis*, DOI: [10.1016/j.micpath.2020.104705](https://doi.org/10.1016/j.micpath.2020.104705) [IF: 2.941; Q2]
- Nov 2019 Nain Z, Abdulla F, Rahman MM, Karim MM, Khan MSA, **Syed SB**, Mahmud S, Haque Z, Adhikari UK (2019) Proteome-wide screening for designing a multiepitope vaccine against emerging pathogen *Elizabethkingia anophelis* using immunoinformatic approaches. *Journal of Biomolecular Structure and Dynamics*, DOI: [10.1080/07391102.2019.1692072](https://doi.org/10.1080/07391102.2019.1692072). [IF: 3.52; Q2]

## MANUSCRIPT IN SUBMISSION

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- Dec 2020 Ezaj MMA, Haque MS, **Syed SB**, Khan MSA, Ahmed KR, Khatun MT, Nayeem SMA, Rizvi GR, Forkan MA, Khaleda L: Combined bioinformatics approach to annotate the structural and functional association of the hypothetical proteins of *Stenotrophomonas maltophilia* K279a and predict potential T and B cell targets for vaccination. *Plos One* [Revision; IF: 2.740; Q1]
- Dec 2020 Nain Z, Barman SK, Sheam MM, **Syed SB**, Samad A, Karim MM, Moni MA, Biswas SK: Transcriptomic studies revealed pathophysiological impact of COVID-19 to predominant health conditions. *Briefings in Bioinformatics* [Under-review; IF: 8.991; Q1]
- Dec 2020 Sultana A, Sarker NC, Kakon AJ, **Syed SB**, Elahi T, Biswas SK, Tang SS, Rahman A, Paul DK: Major nutritional constituents and genetic diversity analysis of different strains of oyster mushrooms. *Heliyon* [Revision; CS: 1.20; Q1]

## REFERENCES

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### Mohammad Minnatul Karim, PhD

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Department of Biotechnology and Genetic Engineering  
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