# MD. Hasanur Rahman

Research Assistant

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ResearchGate R<sup>6</sup>

Google Scholar (3)

ORCID (D)

LinkedIn in

Personal Website HR



## **ACADEMIC CREDENTIALS**

Faculty of Life Sciences, Bangabandhu Sheikh Mujibur Rahman Science and Technology University, Gopalganj-8100, Bangladesh.

Bachelor of Science (Hons.), Biotechnology and Genetic Engineering Academic Year: Jan 2017 - Dec 2020 (Graduated Jan, 2022)

Result: 2.86/4.00 | 82th Percentile

Major Courses: Biotechnology, Microbiology, Oncology and Virology, Molecular Biology, Biochemistry, Immunology, Cell Signaling, Genetic Engineering, Human Physiology, Biostatistics, Bioinformatics, etc.

## NOTABLE PUBLICATIONS

Under Processing: 4, Published: 22

### <u>Under Processing (4 papers)</u>

- 1. MD. Hasanur Rahman, et al. (2022). An In-Silico Identification of Potential Flavonoids Against Kidney Fibrosis Targeting TGFßR-1. Molecular Diversity. [JCR IF: 2.943] [Status: Under Revision]
- 2. Salima Akter, et al. (2022). Dietary Carbohydrates: Pathogenesis and Potential Therapeutic Targets to Obesity-associated Metabolic Syndrome. Obesity Review [JCR IF: 8.483] [Status: Accepted]
- 3. Sagarika Shahriar, et al. (2022). Insights into the Role of RUNX1 Gene in Female-related Cancers. Molecular Biology Reports. [JCR IF: 2.316] [Status: Under Review]
- 4. In-Seon Lee, et al. (2022). The effect of Laminaria Japonica on metabolic syndrome: A systematic review of its efficacy and mechanism of action. Nutrients. [JCR IF: 6.706] [Status: Under Revision]

### Published (23 papers)

- 1. Md. Ataur Rahman, et al. (2022). Therapeutic Aspects and Molecular Targets of Autophagy to Control Pancreatic Cancer Management. Biomedicines, 10(6), DOI: 10.3390/biomedicines10061459 [JCR IF: 4.757]
- 2. Md. Sarwar Zahan, et al. (2022). Protective effects of fucoidan against kidney diseases: Pharmacological insights and future perspectives. International Journal of Biological Macromolecules, 209, pb. DOI: 10.1016/i.ijbiomac.2022.04.192 [JCR IF: 6.953]
- 3. Md. Ataur Rahman, et al. (2022). Autophagy Modulation in Aggresome Formation: Emerging Implications and Treatments of Alzheimer's Disease. Biomedicines, 10(5), DOI: 10.3390/biomedicines10051027 [JCR IF: 6.081]

- 4. Abdullah Al Mamun Sohag, et al. (2022). Molecular pharmacology and therapeutic advances of the pentacyclic triterpene lupeol. *Phytomedicine*, 99, p.154012. DOI: 10.1016/j.phymed.2022.154012 [JCR IF: 5.340]
- 5. Salima Akter, et al. (2022). Recent Advances in Ovarian Cancer: Therapeutic Strategies, Potential Biomarkers, and Technological Improvements. *Cells*, 11(4), p.650. DOI: 10.3390/cells11040650 [JCR IF: 6.6]
- 6. Md. Ataur Rahman, et al. (2022). p53 Modulation of Autophagy Signaling in Cancer Therapies: Perspectives Mechanism and Therapeutic Targets. Frontiers in Cell and Developmental Biology, 10. DOI: 10.3389/fcell.2022.761080 [JCR IF: 6.684]
- 7. Md. Al Saber, et al. (2021). A Comprehensive Review of Recent Advancements in Cancer Immunotherapy and Generation of CAR T Cell by CRISPR-Cas9. *Processes*, 10(1), p.16. DOI: 10.3390/pr10010016 [JCR IF: 2.847]
- 8. Md. Ataur Rahman, et al. (2022). Potential Therapeutic Action of Autophagy in Gastric Cancer Managements: Novel Treatment Strategies and Pharmacological Interventions. *Frontiers in Pharmacology*, 12. DOI: 10.3389/fphar.2021.813703 [JCR IF: 5.810]
- 9. Md Aminul Islam, et al. (2022). Evaluation of In Vitro and In Silico Anti-inflammatory Potential of Some Selected Medicinal Plants of Bangladesh Against Cyclooxygenase-II Enzyme. *Journal of Ethnopharmacology*, 285, 114900. DOI: 10.1016/j.jep.2021.114900 [JCR IF: 4.360]
- 10. Minji Cho, et al. (2021). Efficacy of Complementary Medicine for Nonsteroidal Anti-inflammatory Drug-induced Small Intestinal Injuries: A narrative review. *Medicine*, 100, e28005. DOI: 10.1097/MD.00000000000028005 [JCR IF: 1.889]
- 11. Partha Biswas, et al. (2021). Candidate Antiviral Drugs for COVID-19 and Their Environmental Implications: A Comprehensive Analysis. *Environmental Science and Pollution Research*, 28, 59570-59593. DOI: <a href="mailto:10.1016/j.jep.2021.114900">10.1016/j.jep.2021.114900</a> [JCR IF: 4.223]
- Seog Young Kang, et al. (2021). Potential of Bioactive Food Components Against Gastric Cancer: Insights into Molecular Mechanism and Therapeutic Targets. *Cancers*, 13, 4502. DOI: <u>10.3390/cancers13184502</u> [JCR IF: 6.639]
- 13. Partha Biswas, et al. (2021). Analysis of SYK Gene as a Prognostic Biomarker and Suggested Potential Bioactive Phytochemicals as an Alternative Therapeutic Option for Colorectal Cancer: An In-Silico Pharmaco-Informatics Investigation. *Journal of Personalized Medicine*, 11, 888. DOI: 10.3390/jpm11090888 [JCR IF: 4.945]
- 14. Md. Ataur Rahman, et al. (2021). Phytochemicals as a Complement to Cancer Chemotherapy: Pharmacological Modulation of the Autophagy-Apoptosis Pathway. *Frontiers in Pharmacology*, 12. DOI: 10.3389/fphar.2021.639628 [JCR IF: 5.810]
- 15. Md. Ataur Rahman, et al. (2021). Potential Therapeutic Role of Phytochemicals to Mitigate Mitochondrial Dysfunctions in Alzheimer's Disease. *Antioxidants*, 10, 23. DOI: <a href="https://doi.org/10.3390/antiox10010023">10.3390/antiox10010023</a> [JCR IF: 6.313]
- 16. Md. Ataur Rahman, et al. (2021). Modulatory Effects of Autophagy on APP Processing as a Potential Treatment Target for Alzheimer's Disease. *Biomedicines*, 9, 5. DOI: 10.3390/biomedicines9010005 [JCR IF: 6.081]
- 17. Subyeta Binte Sarwar, et al. (2021). Assessing Drug Repurposing Option for Emerging Viral Diseases: Concerns, Solutions, and Challenges for Forthcoming Viral Battles. *Journal of Advanced Biotechnology and Experimental Therapeutics*, 4(1), p.74. DOI: 10.5455/jabet.2021.d109 [Scopus Indexed]
- Md. Ataur Rahman, et al. (2020). Molecular Insights into the Multifunctional Role of Natural Compounds: Autophagy Modulation and Cancer Prevention. *Biomedicines*, 8, 517. DOI: 10.3390/biomedicines8110517 [JCR IF: 6.081]

- 19. Md. Asad Ullah, et al. (2020). Pathogenesis, Diagnosis and Possible Therapeutic Options for COVID-19. *Journal of Clinical and Experimental Investigations*, 11(4), em00755. DOI: <a href="mailto:10.29333/jcei/8564">10.29333/jcei/8564</a> [DOAJ Indexed]
- 20. Bishajit Sarkar, et al. (2021). Analysis of Plant-derived Phytochemicals as Anti-cancer Agents Targeting Cyclin Dependent Kinase-2, Human Topoisomerase IIa and Vascular Endothelial Growth Factor Receptor-2. Journal of Receptors and Signal Transduction, 41, 217-233. DOI: 10.1080/10799893.2020.1805628 [JCR IF: 2.092]
- 21. Bishajit Sarkar, et al. (2020). Designing Novel Epitope-based Polyvalent Vaccines Against Herpes Simplex Virus-1 and 2 Exploiting the Immunoinformatics Approach. *Journal of Biomolecular Structure and Dynamics*, pp.1–21. DOI: 10.1080/07391102.2020.1803969 [JCR IF: 3.549]
- **22. MD. Hasanur Rahman**, et al. (2020). Current Knowledge on Mechanisms Involved in SARS-CoV-2 Infection and Kidney Diseases. *Journal of Advanced Biotechnology and Experimental Therapeutics*, 3(4), p.30. DOI: <u>10.5455/jabet.2020.d153</u> [Scopus Indexed]
- 23. Md. Asad Ullah, et al. (2020). Curcumin Analogs as the Inhibitors of TLR4 Pathway in Inflammation and their Drug Like Potentialities: A Computer-Based Study. *Journal of Receptors and Signal Transduction*, 40, 324-338. DOI: 10.1080/10799893.2020.1742741 [JCR IF: 2.092]

## **CONFERENCE PAPERS/POSTERS**

General Laboratory Safety and Development of SOP, Conference: <u>Hands-on Training in Laboratory Biosafety and Biosecurity 2020</u> at Jahangirnagar University, Bangladesh.

Conference Paper

Designing Novel Epitope Based Vaccine Against Human Respiratory Syncytial Virus, Presented in "4th Latin American Student Council Symposium (LA-SCS) 2020"

Poster

Computional Exploration of Curcumin Analogs to Identify Natural Anti-inflammatory Drugs, Presented in <u>"European Student Council Symposium 2020"</u>

Poster

In-Silico Approach to the Analysis of Plant-derived Phytochemicals as Anticancer Agents, Presented in <u>"International Poster Presentation Competition 2020"</u>

Poster

## **RESEARCH EXPERIENCES**

Research Assistant at ABEx Bio-Research Center,

Kyung Hee University, Seoul, 02447, Republic of Korea.

East Azampur, Dhaka-1230, Bangladesh.

Aug 2019 - Present

Focus: Reviewing Emerging Research Findings, Molecular Pharmacology Strategies and Drug Designing Using In-Silico Techniques.

Research Assistant (Virtual) at Department of Pathology, College of Korean Medicine,

Feb 2022 - May 2022

Focus: Molecular Signaling Pathways Design, Reviewing Cancer Immunotherapies.

**Bioinformatician and Designer** at <u>Swift Integrity Computational Lab</u>, Savar, Dhaka, Bangladesh.

Nov 2019 - Dec 2021

Focus: Anticancer Phytochemicals Analysis, Designing and Developing Molecular Biology Pathways.

Research Fellow under a Ministry of Education Research Project Titled: Effects of Insulin on Breast Cancer Growth and Proliferation Among Diabetic Patients in Bangladesh, Bangladesh University of Health Science (BUHS), Dhaka, Bangladesh.

Mar 2021 - Jun 2021

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OPCANITING	LEVUEDCHID	EXPERIENCES
CRUAINIZING	LLADLASIIIF	LAFLAILINGLA

Executive Member of <u>1st BSMIAB-COB International Conference on COVID-19 Pandemic</u> (Virtual)	Nov 2020
Managing Team Leader of International Biotech Symposium 2021 (Virtual)	Feb 2021
Executive Member of <u>2nd BSMIAB-COB International Conference On COVID-19 Pandemic</u> (Virtual)	Nov 2021

## **TECHNICAL SKILLS**

Molecular Docking, Dynamic Simulation, Scientific Figure Illustrations, Biological Data Visualization, Computer-aided Drug & Vaccine Design, Cancer Informatics, Protein Modeling, Alignment & Analysis, DNA Sequencing Algorithms, Tools for Genomic Data Science, etc.

Dry-Lab Expertise

Microbial Cell Culture, PCR, Animal Handling, UV Techniques, Centrifuge, Western Blot Analysis, etc.

Wet-Lab Expertise

Linux, Python, Biopython, Pymol, Schrödinger Suite, Javascript, PHP, Django, Endnote, Mendeley, Adobe illustrator, Adobe Indesign, Adobe Photoshop, etc.

**Tools & Softwares** 

## PERSONAL SKILL DEVELOPMENT

Programming for Everybody (Getting Started with Python) (19 hrs) Instructed by: Charles Russell, University of Michigan	Credential	Jul 2020
Python Data Structures (19 hrs) Instructed by: Charles Russell, University of Michigan	Credential	Jul 2020
Genomic Data Science with Galaxy (16 hrs) Instructed by: James Taylor, PhD, Johns Hopkins University	Credential	May 2020
Introduction to Genomic Technologies (6 hrs) Instructed by: James Taylor, PhD & Jeff Leek, PhD, Johns Hopkins University	Credential	Apr 2020

## **AWARDS**

1.	4 <sup>th</sup> Position out of Top 15 Researchers List 2021, Bangabandhu Sheikh Mujibur Rahman Science and Technology University, Published by Scopus.	Jan 2022
2.	Best Performing Research Assistant Award of 2020, ABEx Bio-Research Center, East Azampur, Dhaka-1230, Bangladesh.	Dec 2021
3.	6 <sup>th</sup> Position out of 14 <sup>th</sup> Team in Bangladesh, International Hult Prize on campus 2019.	Jul 2019

## PROFESSIONAL VOLUNTEERING EXPERIENCES

Chief Creative & Branding Officer, Sep 2020 - Present

Communiy of Biotechnology (COB)

Editorial Assistant, Jun 2020 - Present

Journal of Advanced Biotechnology and Experimental Therapeutics

Founding Licensee & Organizer, Nov 2020 - Feb 2022

TEDx BSMRSTU, TEDx BSMRSTU-Women

Chief of Visual Arts, Aug 2020 - Mar 2021

**TEDx Juniv & TEDx SUST** 

Steering Committee Core Member, May 2020 - Dec 2021

**ISCB RSG-Bangladesh** 

Campus Ambassador, Oct 2019 - Dec 2019

Biotech Club, Jahangirnagar University

## LANGUAGE PROFICIENCY

International English Language Testing System (IELTS), Academic. Result Published on 18th Apr, 2022

Overall	Listening	Reading	Writing	Speaking
5.5	5.5	5.0	5.0	5.5

## **REFERENCES**

#### Md Jamal Uddin, PhD

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Engineering, Bangabandhu Sheikh Mujibur Rahman Science and Technology University, Gopalganj-8100,

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