Dr.SHAZIA HAIDER
E-mail:shaziahaider786@gmail.com
Phone: +91-9811930241
DOB:19-05-1982

Education Summary

- Presently working as a **Senior Research Officer** (SRO) in the Department of Neurology, AIIMS, New Delhi from 1st June 2018.
- Worked as an **Assistant Professor** in the Department of Biotechnology, Sharda University, Greater Noida from 14th August, 2017.
- **SERB National Post-Doctoral fellow** (N-PDF) awarded by Department of science and technology (DST) from 14th March 2016 to 14th August 2017 in the project entitled, "A systems biology approach in combinatorial regulation of microRNA machinery components in cancer" under the supervision of Dr. RK. Brojen, School of Computational and Intergartive Sciences, JNU, New Delhi.
- Ph.D. in Biotechnology from Jamia Millia Islamia, New Delhi, Under the supervision of Mohammad Husain, Department of Biotechnology, Jamia Millia Islamia and co-supervision of Prof.R.N.K.Bamezai, School of Life Science, Jawaharlal Nehru University, New Delhi in 2015.
- M.Sc. Bioinformatics (78%), Sikkim Manipal University, India in 2006.
- B.Sc. Zoology (Hons.) (56%), Ramjas College, University of Delhi, India in 2004.

Technical Skills

- **Bioinformatics,** specialization in the field of **Systems Biology:** Cytoscape, Network analyzer, Biological network, Singal propagation, Complex regulatory network and cell designer.
- **Genome informatics:** miRNA target prediction (miRanda, TargetScan, RNAhybrid and PICTAR), Novel miRNA prediction, Novel gene prediction.
- **Programming Language:** Perl, R (biostatics and molecular simulation libraries).

Summary of Skills

- 6+ years of research experience in Bioinformatics, functional genomics and Molecular Biology
- Excellent work experience with Protein and Genome Informatics (Systems Biology).
- Ph.D. major in Bioinformatics and Experimental study of human protein and microRNA in the area of Cancer and its associated diseases.

Areas of Interest

- Bioinformatics
- System Biology
- Biological Network
- microRNA prediction and target prediction

Research Achievements

- Total Number of Publications: 08
- Impact factor: 21.183

Publications

1. **Nafis, S.,** Kalaiarasan, P., Brojen Singh, R.K., Husain, M. and Bamezai, R.N.K (2014)"Apoptosis regulatory protein-protein interaction demonstrates hierarchical scale-free fractal network". ***Briefings in bioinformatic*** (Impact factor: 9.6), Vol: 16.4., page: 675-699 **(**Online ISSN 1477-4054) PMID: 25256288 .
2. Ali, S., **Nafis, S.,** Kalaiarasan, P., Rai, E., Sharma, S., and Bamezai, R.N. (2015) "Understanding genetic heterogeneity in type 2 diabetes by delineating physiological phenotypes – SIRT1 and its gene network in impaired insulin secretion". ***The Review of Diabetic studies.*** (Impact factor: 3.2), Vol: 13., page: 17-34 PMID: 27563694 **(**ISSN 1613-6071).
3. Vipin Gupta, **Shazia Haider**, Utkarsh Sood, Jack A. Gilbert, Meenakshi Ramjee, Ken Forbes, Yogendra Singh, Bruno S. Lopes & Rup Lal (2016)" Comparative genomic analysis of novel Acinetobacter symbionts: A combined systems biology

and genomics approach". ***Scientific reports.*** (Impact factor: 5.2), Vol: 6, page: 29043 PMID: 27378055 **(**ISSN 2045-2322).

4. Shazia Nafis, Kalaiarasan Ponnusamy, Mohammad Husain, R. K. Brojen Singh and Rameshwar N. K. Bamezai (2016)." Identification of key regulators and their controlling mechanism in a combinatorial apoptosis network: a systems biology approach". ***Molecular Biosystems***. (Impact factor: 3.183), Vol: 12, page: 3357-3369 PMID: 27754508 **(**ISSN 1742-206X).
5. Roshan Kumar, Helianthous Verma, Shazia Haider, Abhay Bajaj, Utkarsh Sood, Kalaiarasan Ponnusamy, Shekhar Nagar, Mallikarjun N. Shakarad, Ram Krishan Negi, Yogendra Singh, J.P.Khurana, Jack A. Gilbert and Rup Lal (2017). "Comparative Genomic Analysis Reveals Habitat-Specific Genes and Regulatory Hubs within the Genus Novosphingobium" ***mSystems***, Vol: 2(3), page: e00020-17, PMID: 28567447**(**ISSN 2379-5077).
6. Mustafa Alhaji Isa & Rita Singh Majumdhar & **Shazia Haider** (2018). "In silico docking and molecular dynamics simulation of 3-dehydroquinate synthase (DHQS) from Mycobacterium tuberculosis" Journal of Molecular Modeling (2018) 24:132 (Impact factor:1.425).
7. Mustafa Alhaji Isa & Rita Singh Majumdhar & **Shazia Haider** (2018). "Molecular modelling and dynamic simulation of UDP-N-acetylglucosamine1-carboxyvinyltransferase (MurA) from Mycobacterium tuberculosis using in silico approach" Informatics in Medicine Unlocked, Volume 12, 2018, Pages 56-66.
8. Mustafa Alhaji Isa & Rita Singh Majumdhar & **Shazia Haider** (2018). "In silico identification of potential inhibitors against shikimate dehydrogenase through virtual screening and toxicity studies for the treatment of tuberculosis" International Microbiology, (ISSN 11396709) Impact factor: 0.796.

Papers presented in Conferences/Seminars/Workshops

- Presented a Paper in "International Interdisciplinary Science Conference (I-ISC,2011) on Bioinformatics November 15-17, 2011 at Jamia Millia Islamia , New Delhi.

- Presented a Paper on the topic "GENE REGULATORY NETWORK IN SPORADIC BREAST CANCER – A PRELIMINARY STUDY", Shazia Nafis, Ponnusamy Kalaiarasan, Mohammad Husain, Rameshwar N K Bamezai, in International Conference on Genes, Genetics &Genomics: Today & Tomorrow- Human Concerns and 37th Annual Conference of Indian Society of Human Genetics on 3rd to 5th March, 2012 at Punjab University, Chandigarh.
- Presented a Paper on the topic 'Analysis of Apoptosis regulatory pathway in sporadic breast cancer through Gene Regulatory Network', Shazia Nafis, Ponnusamy Kalaiarasan, Mohammad Husain, Rameshwar N K Bamezai, in European Society of Human Genetics Conference, 8-11 June 2013, Paris, France, **Travel award** from **ICMR**, New Delhi.
- Presented a Paper on the topic "Influence of Transcription factors and microRNA on apoptosis protein-protein interaction Network" Shazia Nafis, Ponnusamy Kalaiarasan, Dr.R.K.Brojen, Rameshwar N K Bamezai, in Indo US Conference and Workshop on Synthetic and System Biology at Jawaharlal Nehru University, November 9-12, 2014.
- Presented an oral presentation and appreciated with an best oral presentation award at INSCR International Conference (IIC-2017) on role of Microbe-Plant-Animal Interactions in Human Health, held on September 26, at University of Delhi, India.

Conferences/Seminars/Workshops Attended

- Attended an International Conference on Mitochondria Research & Medicine ICMRM, November 12-13, 2010 at Shri Mata Vaishno Devi University, Katra, Jammu.
- Participated in the 13th annual statistical Genetics Course 7-11 July 2014 on the Campus of the University of California, Los Angeles (USA), **Travel award** from **DST**, New Delhi.
- Participated in Indo-US Bilateral Conferences-cum-Workshop Big Data Analysis and Translation in Disease Biology at JNU from January 18-22, 2015.
- Participated in "Renovating Bacterial Taxonomy with Bioinformatics" Jointly Organized by National Bureau of Agriculturally Important Microorganisms

(NBAIM), Mau, Uttar Pradesh & Department of Zoology, University of Delhi, Delhi, 14-15thMay, 2015.

- Participated in "Next Generation Sequencing (NSG) workshop, at the CSIR- Central Drug Research Institute,Lucknow, January 14-16, 2017.
- Participated in "Networks and Pathways course, 22-26 May 2017 at the European Bioinformatics Institute (EMBL-EBI) - Wellcome Genome Campus, Hinxton, Cambridge, CB10 1SD, United Kingdom, **Travel Award** from **SERB, DST**.
- Organized a workshop on Hands on to Computational Biology for (Meta) Genomic Analysis at IIC-2017 held on September 26, at University of Delhi, India.

Post-doctorate Experience

- Worked as a **Research Associate** from 2nd June to 15th September 2015 in the project entitled, "Understanding Genome Organization and gene expression in response to different Hexachlorocyclohexne Isomers in HCH degrading bacteria and the dumpsite" under the supervision of Prof. Rup Lal, Principle Investigator, Department of Zoology, University of Delhi, New Delhi.
- Awarded a **Research Associate** position by Indian Council of Medical Research (ICMR) from 14th October 2015 to 14th March 2016 in the project entitled, "A systems biology approach in combinatorial regulation of microRNA machinery components in cancer" under the supervision of Dr. RK. Brojen, School of Computational and Intergartive Sciences.
- Awarded as a **SERB National Post-Doctoral fellow** (N-PDF) by Department of science and technology (DST) from 14th March 2016 to 14th August 2017 in the project entitled, "A systems biology approach in combinatorial regulation of microRNA machinery components in cancer" under the supervision of Dr. RK. Brojen, School of Computational and Intergartive Sciences, JNU, New Delhi.
- Awarded a **Research Associate** position by Indian Council of Medical Research (ICMR) in 2018 in the project entitled, "miRNA-mediated regulatory network in human cancer and other diseases – A Systems biology approach".

Work Experience

- Worked as a **Senior Research Fellow** from 4th November 2010 to 3rd May 2014 in the Project entitled "Regulation of Gene Network" at Indian Council of Medical Research (ICMR), New Delhi.
- Worked as a **Research Associate** from 2nd June to 15th September 2015 in the project entitled, "Understanding Genome Organization and gene expression in response to different Hexachlorocyclohexne Isomers in HCH degrading bacteria and the dumpsite" under the supervision of Prof. Rup Lal, Principle Investigator, Department of Zoology, University of Delhi, New Delhi.
- Worked as a **Guest Faculty** for MSc: Bioinformatics at Department of Computer Science, Faculty of Natural Sciences, Jamia Millia Islamia, New Delhi-25, from January-2016 for one semester.
- **Worked as a SERB National Post-Doctoral fellow** (N-PDF) awarded by the Department of science and technology (DST) from 14th March 2016 to 14th August 2017 in the project entitled, "A systems biology approach in combinatorial regulation of microRNA machinery components in cancer" under the supervision of Dr. RK. Brojen, School of Computational and Intergartive Sciences, JNU, New Delhi.
- Working as an **Assistant Professor** in Sharda University, Greater Noida, Uttar Pradesh from 14th August 2017.

Awards

- Won the third prize in Cytoscape v3.2 Launch Challenge competition under the category: **Most aesthetically pleasing network visualization in Cytoscape** from Department of Medicine, University of California, and San Diego, USA, 2015.
- Won the best **Oral Presentation** award in Young Scientist Colloquim **INSCR International Conference (IIC-2017)** on Role of Microbe-Plant-Animal Interactions in Human Health held fro September 26 to 28, 2017 at University of Delhi, India.

Referees