

## Dr. Manish Kumar Gupta *M.Sc., M.Tech., Ph.D.*

Associate Professor

Department of Biotechnology, Faculty of Science

Veer Bahadur Singh Purvanchal University, Jaunpur -222003,  
UP, India

Mobile No: +91 9307267812

E-mail: [manish.kumar.gupta@gmail.com](mailto:manish.kumar.gupta@gmail.com)

Website: <http://www.vbspu.ac.in/home/>



### Education:

- **Ph.D. (Bioinformatics)** 2015  
Dr. APJ Abdul Kalam Technical University, Lucknow, India.
- **Master of Technology (Bioinformatics)** 2005  
Indian Institute of Information Technology-Allahabad, India ( )
- **Master of Science (Biotechnology)** 2003  
University of Hyderabad, Telangana, India, (Rated as University with 'Institution of Eminence')
- **Bachelor of Science (Chemistry, Zoology, Botany)** 1999  
DDU Gorakhpur University, Gorakhpur, Uttar Pradesh, India

### Research Experience:

Well-rounded Bioinformatics with a background in biotechnology. 14+ years of teaching and research experience in Bioinformatics with expertise in systems biology, pathway modelling, docking, QSAR, molecular dynamics simulation and Rnomics. Our primary focus is the pathways modeling, simulation, data analysis of non-communicable disease such as thyroid disorder, diabetes, cancer etc. To investigate those, we combine computational analysis with biological tools & databases with large scale data sets generated using state-of-the-art high-throughput sequencing and investigation protocols.

### Research interests:

Bioinformatics, Network Biology, Systems Biology, Computer Aided Drug Design

### Research Project

1. **Title:** Identification of pathways involving Bcl-2 family of proteins: A network biology approach  
**Funding Agency:** SERB, DST Govt of India under TARE Scheme  
**Total cost:** 18.3 Lakh      **Duration:** 2019-2022      **Status:** Ongoing
2. **Title:** DST INSPIRE INTERNSHIP:  
**Funding Agency:** DST, Govt of India  
**Total Cost:** 13 Lakh, **Duration:** 27-31 January 2019      **Status:** Completed

### Publications: ([http://scholar.google.co.in/citations?user=d4\\_y4AAAAAJ](http://scholar.google.co.in/citations?user=d4_y4AAAAAJ))

1. **Gupta MK, Misra K, (2016)** A holistic approach for integration of biological systems and usage in drug discovery. *Journal of Network Modeling Analysis in Health Informatics and Bioinformatics* 5(1): Article 4. (DOI: 10.1007/s13721-015-0111-4) (ISSN: 2192-6662; Online ISSN: 2192-6670)

2. Singh DB, **Gupta MK**, Kesharwani A, Kumar R, Sagar M, Dwivedi S, Misra K (2014) Molecular drug targets and therapies for Alzheimer's disease. *Translational Neuroscience* 5(3): 203-17 (Print ISSN:2081-3856 Online ISSN:2081-6936) (**IF 1.012**)
3. Sagar M, Pathak RK, Pandey RK, Singh DB, Pandey N, **Gupta MK** (2014) Binding affinity analysis and ADMET prediction of epigallocatechine gallate (EGCG) derivatives for AP-1 protein: a drug target for liver cancer. *Network Modeling Analysis in Health Informatics and Bioinformatics* 3:66 (ISSN: 2192-6662; Online ISSN: 2192-6670)
4. **Gupta MK**, Misra K (2014) Atom based 3D-QSAR, molecular docking and molecular dynamics simulation assessment of inhibitors for thyroid hormone receptor  $\alpha$  and  $\beta$ . *Journal of Molecular Modeling* 20:2286 (Print ISSN:1610-2940; Online ISSN:0948-5023) (**IF 1.867**)
5. **Gupta MK**, Singh DB, Shukla R, Misra K (2013) Comprehensive metabolic modeling of thyroid pathway.in relation to thyroid pathophysiology and therapeutics. *OMICS: A Journal of Integrative Biology*. 17(11):584-593 (Print ISSN: 1536-2310 Online ISSN: 1557-8100) (**IF 2.896**)
6. Singh DB, **Gupta MK**, Singh DV, Singh SK, Misra K (2013) Docking and In silico ADMET studies of noraristeromycin, curcumin and their derivatives with Plasmodium falciparum SAH hydrolase: A molecular drug target against malaria. *Interdisciplinary Sciences: Computational Life Sciences*. 5:1-12 (ISSN: 1913-2751; Online ISSN 1867-1462) (**IF 0.753**)
7. Singh DB, **Gupta MK**, Misra K (2013) Comparative Docking and ADMET Study of Some Curcumin Derivatives and Herbal Congeners Targeting beta-Amyloid. *Journal of Network Modeling Analysis in Health Informatics and Bioinformatics*. 2(1):13-27 (ISSN: 2192-6662; Online ISSN: 2192-6670)
8. **Gupta MK**, Misra K, (2013) Modeling and Simulation Analysis of Propylthiouracil (PTU), an Anti-thyroid drug on Thyroid Peroxidase (TPO), Thyroid Stimulating Hormone Receptor (TSHR) and Sodium Iodide Symporter (NIS) based on Systems Biology Approach. *Journal of Network Modeling Analysis in Health Informatics and Bioinformatics*. 2(1): 45-27 (ISSN: 2192-6662; Online ISSN: 2192-6670)
9. **Gupta MK**, Agarwal K, Prakash N, Singh DV, Misra K (2012) Prediction of miRNA in HIV-1 genome and its targets through artificial neural network: a bioinformatics approach. *Journal of Network Modeling Analysis in Health Informatics and Bioinformatics*. 1(4):141-151 (ISSN: 2192-6662; Online ISSN: 2192-6670)
10. **Gupta MK**, Singh DB, Misra K (2012) Metabolic Modeling and Simulation Analysis of Thyroid Disorder Pathways. *J Comput Sci Syst Biol*. 5(2):52-61 doi:10.4172/jcsb.1000090 (ISSN: 0974 - 7230)
11. Gupta SK, Singh S, **Gupta MK**, Pant KK, Seth PK (2010) Definition of Potential Targets in *Mycoplasma Pneumoniae* Through Subtractive Genome Analysis. *J Antivir & Antiretrovir* 2: 038-041 (ISSN: 1948-5964)

12. Singh S, Gupta SK, Sabir G, **Gupta MK**, Seth PK (2009) A database for anti-diabetic plants with clinical / experimental trials. *Bioinformation*. 31;4(6):263-268 (Online ISSN 0973-2063; Print ISSN 0973-8894) (IF 0.50)

## Book / Book Chapter

### Edited Book

Mishra Giridhar, Dhawan Punit Kumar, **Gupta Manish Kumar**, Singh Devraj (2019) “Ultrasonics and Materials Science for Advanced Technology” The Proceedings of the International Conference on Ultrasonics and Materials Science for Advanced Technology (ICUMSAT-2019), November, 16-18,2019 , Narosa Publishing House Pvt. Ltd. (ISBN 978-81-8487-703-8)

### Book Chapter

1. Abhishek K. Bhardwaj, **Manish Kumar Gupta**, and R. Naraian (2019) “Chapter 12 - Myco-Nanotechnological Approach for Improved Degradation of Lignocellulosic Waste: Its Future Aspect” *Mycodegradation of Lignocelluloses*, Fungal Biology, Springer Nature Switzerland AG 2019 [https://doi.org/10.1007/978-3-030-23834-6\\_12](https://doi.org/10.1007/978-3-030-23834-6_12) (ISBN 978-3-030-23833-9) ISBN 978-3-030-23834-6 (eBook)
2. Roshan Lal Gautam, Shweta Singh, **Manish Kumar Gupta**, Ram Naraian (2019) Effect of Four Different Oil Seed Cakes on Yield and Lignocellulolytic Enzymes During Cultivation of Oyster Mushroom *Pleurotus florida*,. *Ultrasonics and Materials Science for Advanced Technology*, pp 195-200, Narosa (ISBN 9788184877038)
3. Abhishek K. Bhardwaj, K. N. Uttam, **Manish K. Gupta**, Ram Naraian, and Ram Gopal (2019) “Synthesis of Copper Nanostructure Using Sonochemical Assisted Co-Precipitation Method and Their Antibacterial Study”. *Ultrasonics and Materials Science for Advanced Technology*, pp 200-206, Narosa (ISBN 9788184877038)

## Conference Proceeding

1. Singh S , Gupta SK , **Gupta MK** , Seth PK, (2007) “Phylogenetic analysis of HIV-1 envelope glycoprotein (gp160) in Asian countries”. *Proceedings of International Conference on Applied Bioengineering (iCAB 07)*, Sathyabama University, Jeppiaar Nagar, Chennai, India. 5-7 December, 2007 (Page n0 200 -204)
2. Agnihotri S, Parihar SS, **Gupta MK**, Lalwani M (2012) “Metabolic Modeling of Autoimmune Skin Disorder Targeting Psoriasis Through Systems Biology Approach” poster presentation, 2<sup>nd</sup> **International Conference on Open Source for Computer – Aided Translational medicine from 22<sup>nd</sup> to 25<sup>th</sup> February 2012** Organized by Institute of Microbial Technology (CSIR), Chandigarh, India.

## Conference/Abstract/Poster:

1. Naraian R, Goshwami S, Yadav KL, **Gupta MK** (2010) “Color removal of Textiles dyes By Crude Enzyme Extract, From Spent Substrate of Oyster Mushroom *Pleurotus florida* PF05” at 51st annual conference association of microbiologists of India (AMI) **December 14-17, 2010**, “International Symposium on Recent Advances in Cross-Disciplinary Microbiology: Avenue & Challenges & International Workshop on rRNA Sequencing , Phylogeny & Next Generation

Genome Sequencing” Birla Institute of Technology, Mesra, Ranchi, India, Central University of Jharkhand, Ranchi, India, Birsa Agricultural University, Ranchi India.

2. Singh S, Gupta SK, **Gupta MK**, Seth PK.(2007) “Insilico: Protein Structure Prediction of Mannose binding lectin protein in *Convolvulus arvensis* Through Homology modeling” in **International conference on Bioinformatics 2007(INCOB2007)** presented by Asia Pacific Bioinformatics Network. New Delhi, India.

### **Editor member and Reviewer of Journal:**

1. Associate Editor: Journal of Environmental Sustainability (Springer Nature publisher)  
ISSN 2523-8922, J.No. 42398  
(<https://www.springer.com/environment/sustainable+development/journal/42398?detailsPage=editorialBoard>)
2. Assoc. Editor: International Journal of Wellness ([http://www.ijw.co.in/editorial\\_board.php](http://www.ijw.co.in/editorial_board.php))
3. Reviewer Network Modeling Analysis in Health Informatics and Bioinformatics (Springer)
4. Reviewer Journal of Computational Life Science (Springer)
5. Reviewer Journal of Biomedical informatics (Elsevier)
6. Reviewer Scientific Report (Nature)

### **Workshops / Symposium/Seminar/Conferences participated:**

1. 16<sup>th</sup> Annual Conference of Uttar Pradesh Diabetes Association Accredited by UPMCI 8 Credit hours, UPDAICON 2017 during 14-15 October 2017, Faizabad UP.
2. “**National Seminar on e-Learning and MOOCs in Higher Education**” organised by the Guru Angad Dev Teaching Learning Centre of MHRD under PMMMNMTT and Centre for e-Learning, SGTB Khalsa College, University of Delhi on **29<sup>th</sup> March 2017**.
3. National Workshop on “**Basic ICT Skills, e-Learning and MOOCs for Educators**” Guru Angad Dev, Teaching Learning Centre, Under Pandit Madan Mohan Malaviya National Mission On Teachers And Teaching, MHRD, Govt. Of India, Sri Guru Tegh Bahadur Khalsa College, University Of Delhi, on **25-26 February 2017**.
4. Seminar on “Abhiyaan AIDS Se Bachaw” Organized by University Institute of Paramedical Sciences, CSJM University Kanpur and Swasth Kanpur Pariyojana on **29<sup>th</sup> November 2011**.
5. Workshop On “Computational Methods in Physical, Geological Modelling and Drug Designing” **29<sup>th</sup> September to 1<sup>st</sup> October 2011** Organized by National Centre of **Experimental Mineralogy and Petrology**, University of Allahabad & The National Academy of Sciences India, (**Allahabad Chapter**), Allahabad.
6. A national conference on “Scope and Application of Microbes in Agriculture & Environment” **held on 19-21 February 2007 at Institute of Biosciences and Biotechnology**, CSJM University, Kanpur, India.
7. Workshop on "Medicinal Plants and Environment "Organized by Environmental Protection Society, Gorakhpur, U.P India, held in March 1997.

### **FDP/Short Term Training/ Refresher Courses**

1. One week Training programme on **Academic Leadership** during **23-29 April 2019** at VBS Purvanchal University, Jaunpur Under the scheme of PMMMNMTT, MHRD, Govt. of India, by Centre of Academic Leadership and Education Management, AMU Aligarh.
2. One week short term In-house training programme on “**Pedagogy for 21<sup>st</sup> Century Learners**” organised by National Institute of Technical Teachers’ Training and Research, Kolkata, during **04 December 2017 to 08 December 2017**.
3. AICTE sponsored One-week QIP - Faculty Development Program on “**Biomedical Data**

- Analytics (BioMedics - 2017)**” organised by **Indian Institute of Technology, Kharagpur, Bengal, India** during 11 September to **17 September 2017**.
4. One Week Short Term Training Program on **“Wireless Network”** organised by NITTTR Chandigarh, through Information communication technology at remote centre Department of Computer Application, University Institute of Engineering and Technology, CSJM University, Kanpur during **22 May to 26 May 2017**.
  5. **Two-week Faculty Development program** sponsored by Dept. of Science & Technology, Govt of India, New Delhi on **“Entrepreneurship Development”** organized by Centre for Industrial and Management Consultants, Kanpur at Institute of Hotel and Tourism Management, CSJM University Kanpur during **28<sup>th</sup> March 2015 to 10<sup>th</sup> April 2015**.
  6. UGC Sponsored four-week **16<sup>th</sup> Refresher course in Biotechnology** organised during **28 July to 22 August 2014** (26 Days) at academic college staff, **Jawaharlal Nehru University, New Delhi**.
  7. One-week short term courses titled Faculty Development Program on **“Intellectual Property Rights”** organized by **IIT-Delhi**, during **6-10 July 2009** under the sponsorship of Quality Improvement Programme, AICTE, Govt of India.
  8. National Level One-week short term courses on **“IPRs for Pharmaceutical Sector and Patent System in India”** at **National Institute of Technical Teachers' Training and Research, Chandigarh 26-30 July 2010**.
  9. Eight Week (2 month) Certificate course in **“Office Automation”** from Swami Vivekanand Institute of Information Technology, Gorakhpur during 6th May to 6th July, 2002.

#### **Seminar/Conferences organized/Science Camp/worked as member:**

1. Worked as **Program Coordinator, INSPIRE Science Camp-2020** at Veer Bahadur Singh Purvanchal University Jaunpur, UP during 27-31 January 2020 sponsored by DST, Govt. of India.
2. Worked as **Convener** of Souvenir & Abstract Book Committee in **“FAC – 2017” International Conference on Fight against cancer**, held at Chhatrapati Shahu Ji Maharaj University, Kanpur, UP on **5-7 October 2017**.
3. Worked as member of the organizing committee of the Symposium **“Trends in Biosciences: Recent Developments and Future Prospects” (TRENDSBIO -2017)** held on **19<sup>th</sup> August 2017** at Institute of Biosciences and Biotechnology, CSJM University, Kanpur.
4. Organised a seminar as **Convener** entitled **“Many Dimensions of Indian Atomic Energy Programme”** and Exhibition on **“BARC Technologies”** in association with **Bhabha Atomic Research Centre, Mumbai** on **25<sup>th</sup> February 2015**, at University Institute of Engineering and Technology, Chhatrapati Shahu Ji Maharaj University, Kanpur, UP.
5. Worked as **Convener** of Souvenir & Abstract Book Committee in **“Wellness Con – 2014” National Conference on Wellness**, held at Chhatrapati Shahu Ji Maharaj University, Kanpur, UP on 14<sup>th</sup> & 15<sup>th</sup> November 2014.
6. Organised a Seminar entitled **“Sustainable Science and Technology for Society”** as **Convener** on National Education Day, **11<sup>th</sup> November 2014**, at University Institute of Engineering and Technology, Chhatrapati Shahu Ji Maharaj University, Kanpur, UP.
7. Worked as Executive committee member **2<sup>nd</sup> National conference** of Society for promotion of Libraries on **“Libraries Towards Digital Paradigm” 19-20 April 2014** organised by Department of Library and Information Science, Chhatrapati Shahu Ji Maharaj University Kanpur

8. Worked as active of member “**Youth Conclave (Success Mantra) and Job fair**” organised by University Placement Cell on 17-18 Mar 2012, at Chhatrapati Shahu Ji Maharaj University Kanpur.
9. Organised Seminar on “**Recent Trends in Biosciences and Biotechnology**” on National Education Day, 11<sup>th</sup> November 2011, University Institute of Engineering and Technology, CSJM University, Kanpur as an **Organizing Secretary**.
10. Worked as **Executive member** in the National Workshop on “**Current Trends in Computing and Bioinformatics**” Held on 23 and 24th Feb 2007 jointly organised by Department of Bioinformatics and Computer Science and Engineering at University Institute of Engineering and Technology, CSJM University Kanpur.
11. Organised Seminar on “**Education System in India: Introspection**” to celebrate National Education Day, 11<sup>th</sup> November, 2009 at University Institute of Engineering and Technology, CSJM University Kanpur.

### **NET/Fellowship/Scholarship:**

1. Qualified joint **CSIR-UGC** Junior Research fellowship (**JRF**) in Life Sciences and eligibility for lectureship – National Eligibility Test (**NET**) held on June 2003.
2. Qualified Graduate Aptitude Test in Engineering (**GATE**) in Life Sciences, MHRD with 97.42 percentile in 2003.
3. **Fellowship** by Department of Biotechnology, Govt. of India (2001-2003) to support M.Sc.- Biotechnology programme and master thesis project at University of Hyderabad.
4. **Scholarship** by Ministry of Human Resource and Development (2003-2005), Govt. of India to support M.Tech –Bioinformatics and thesis work.

### **Invited speakers/Chairperson in Workshop/Seminars/Conferences:**

S.No.	Name of the programme Workshop/Seminar/Conference	Title of Talk	Date	Place
1.	Integrated Workshop on "Publication Ethics and Patenting" and International Conference on "Environmental Sustainability: Innovations, Translational Dimensions and Way Forward"	Intellectual Property Right Policy: Roadmap for the future of Innovation in India	10 February 2020	Babasaheb Bhimrao Ambedkar University (A Central University) NAAC 'A' Accredited Vidya Vihar, Raebareli Road Lucknow-226025
2.	International Conference on Ultrasonics and Materials Science for Advanced Technology (ICUMSAT-2019)	“Integrative biology approach for investigation of key regulatory molecules involved in metabolic pathways”	18 November 2019	Prof. Rajendra Singh (Rajju Bhaiya) Institute of Physical Sciences for Study and Research, Veer Bahadur Singh Purvanchal University, Jaunpur, UP-222003
3.	International Conference on “Bioinformatics and Systems Biology” WBSB2018	Chaired a Scientific session	26 <sup>th</sup> -28 <sup>th</sup> October 2018	Indian Institute of Information Technology, Allahabad, UP, India
4.	International Conference on Fight Against Cancer, FAC-Con 2017	Chairperson of the scientific session,	5-7 October 2017	University Institute of Health Sciences, Chhatrapati Shahu Ji Maharaj University, Kanpur

5.	International Conference on “Nanoscience and Nanotechnology ICNN -2017”	“Holistic approach from pathways modeling to molecular docking, QSAR and molecular dynamics simulation studies of biological molecules”	23 September 2017	Babasaheb Bhimrao Ambedkar University, Lucknow, UP, India
6.	National workshop on “Protein Structure Prediction and Function Analysis”	Structure Prediction Pharmacophore modeling and Molecular Dynamics Simulation Analysis of Biological Molecules: Thyroid Receptor a case Study	March 02 – 04, 2017	Department of Bioscience and Biotechnology at Banasthali University, under the aegis of Department of Biotechnology, Government of India
7.	National Symposium cum Workshop on “Bioinformatics for Medical Research”	A holistic Approach for Integration of Biological Systems Pathways	January 20 - 21, 2017	Biomedical Informatics Centre, PGIMER, Chandigarh
8.	National workshop on “Advances in Bioinformatics and Computer Aided Drug Designing”	Integration of Biological Systems Network for Drug Discovery	February, 21 <sup>st</sup> , 2017	Institute of Advanced Science & Technology, NIMS University Rajasthan, Jaipur
9.	Workshop on "Emerging Trends in Bioinformatics: Big Data Analysis and Drug Discovery"	Systems Biology in perspective of Big Data	December 21-23, 2016	Biotech Park Lucknow ,U.P India
10.	National Workshop on “In-Silico Strategies for Disease Pathway Analysis & Biomarker Discovery”	Systems Biology: A holistic Approach for Integration of Biological Systems	March 29 – 31, 2016	Biotech Park Lucknow ,U.P India
11.	National Training Programme on "Bioinformatics and System Biology Approaches for Agriculture and Veterinary Applications"	Pathway modeling and simulation analysis through systems biology approach" Thyroid Pathways modeling a case study	September 13-15, 2014	Bioinformatics Sub DIC, Department of Molecular Biology & Genetic Engineering, College of Basic Sciences & Humanities, G. B. Pant University of Agriculture & Technology, Pantnagar-263145, Uttarakhand
12.	National Conference on “Biomedical Science and Technology”	Role of systems biology and biochemical modelling for drug discovery	November 21-22 , 2013	CSIR-National Physical Laboratory, New Delhi
13.	National Workshop on “Basic Concepts of Bioinformatics and Bioinformatics Softwares”	Rational designing of non-coding miRNA and siRNA	Feb 9, 2013	National Bioinformatics Infrastructure Facility Centre of DBT ,D.G.(P.G.) College, Kanpur, Affiliated to CSJM University Kanpur
14.	National Seminar on “Science for shaping the future of India”	Bioinformatics Opportunity and Challenges	October 1-2, 2012	Dr. Harisingh Gour University (Central University), Sagar , M.P., India organised by Indian Science Congress Association Sagar chapter, Sagar
15.	National Workshop “Drug Discovery, Design Methods & Applications”		September 11-13, 2012	Biotech Park, Lucknow, U.P. India (promoted by Deptt. Of Biotechnology, Govt. Of India, and Deptt. Of Science and Technology, Govt. Of U.P.
16.	National Workshop on “Chemoinformatics and Computational Drug Design”	Structural Analysis of Non coding RNA for gene silencing	February 27 – 29, 2012	Biotech Park Lucknow ,U.P India
17.	National Workshop on “Recent Advances in	Role of Systems Biology for Drug Discovery	October 12 – 14, 2011	Biotech Park, Lucknow, U.P. India (promoted by Deptt. Of

	Structure-based Rational Drug Designing”			Biotechnology, Govt. Of India, and Deptt. Of Science and Technology, Govt. Of U.P.
18.	National Workshop on “Bioinformatics: Tools in Sequencing & Drug Targeting”	Omics to Drug Discovery through Systems Biology	October 3-5, 2011	National Bioinformatics Infrastructure Facility Centre of DBT ,D.G.(P.G.) College, Kanpur, Affiliated to CSJM University Kanpur
19.	National Workshop on “Bioinformatics: In-Silico aspects of Drug Designing	Systems Biology for Drug Discovery	June 23-25, 2011	Biotech Park , Lucknow , U.P. India
20.	National Workshop on “Structural Biology and Bioinformatics in Drug Design”	Structural Analysis of Secondary Structure Prediction of RNA involved in Gene Silencing	October 6 – 8, 2010	Biotech Park Lucknow ,U.P India
21.	National Workshop on “Bioinformatics and Molecular Modeling in Drug Design”	In silico Secondary Structure Prediction and Analysis of miRNA in Virus for RNA interference	June 23 – 25, 2010	Biotech Park Lucknow ,U.P India
22.	National Workshop on “Drug Design Approaches: Molecular Modeling, Computational Chemistry and RNAi applications”	Rnomics: Rational Designig of non coding RNA	February 23-25, 2010	Biotech Park Lucknow ,U.P India
23.	National Workshop on “Role of Chemoinformatics, Pharmacoinformatics & Bioinformatics in Rational Drug Designing”	Role of Bioinformatics for Rational Designing of siRNA	October 8-10, 2009	Biotech Park, Lucknow ,U.P India
24.	National Workshop on “Bioinformatics: Application and Current Approaches”	Role of Systems Biology in Drug Discovery	June 10-12, 2009	Biotech Park, Lucknow ,U.P India
25.	National Workshop on “ Bioinformatics and its Application in RNAi”	Study of miRNA gene network through systems biology	February 17-19,2009	Biotech Park, Lucknow ,U.P India
26.	Training program on “Introduction to bioinformatics with hands on internet browsing and data searching”	Structural database and molecular visualization of Protein through biological tools.	January 9-10, 2009	N.D University of Agriculture & Technology, Kumarganj, Faizabad, U.P., India
27.	National Workshop on “Bioinformatics in Molecular Modeling, Data Analysis and System Biology ”	Systems Biology: From “omics” to Drug Discovery	August 8-9, 2008	Biotech Park, Lucknow ,U.P India
28.	National Workshop on “Computational Tools and Databases for Genomics & Proteomics ”	Phylogenetic Analysis : Method and Application in Bioinformatics	May 27-29,2008	Biotech Park, Lucknow ,U.P India
29.	National Workshop on “ Principle and Applications of Bioinformatics in Biotechnology”		December 10-11, 2007	Biotech Park, Lucknow ,U.P India
30.	National Workshop on “Bioinformatics Applications in Genomics and Proteomics ”	System Biology- A Bioinformatics Approach for biological system Network	September 13 -15, 2007	Biotech Park, Lucknow ,U.P India
31.	National Workshop on “Structural Bioinformatics ”	RNA Structure Prediction and Visualization	June 8-9, 2007	Biotech Park, Lucknow ,U.P India



32.	National Workshop on “Bioinformatics Tools & their Application in Biological Research ”		February 15-17,2007	Biotech Park, Lucknow ,U.P India
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### Teaching Experience: 14+ Years

1. 23<sup>rd</sup> December 2019 to till date: Associate Professor, Department of Biotechnology, Veer Bahadur Singh Purvanchal University, Jaunpur, UP
2. 30<sup>th</sup> May 2018 to 22<sup>nd</sup> December 2019: Assistant Professor, Department of Biotechnology, Veer Bahadur Singh Purvanchal University, Jaunpur, UP
3. 6<sup>th</sup> August 2005 to 29<sup>th</sup> May 2018: Assistant Professor, Department of Bioinformatics, UIET, CSJM University, Kanpur

#### Courses Taught:

1. M.Sc. - Biotechnology
2. Pre-Ph.D. course work
3. M.Sc.–Bioinformatics & Advanced P.G. Diploma in Bioinformatics
4. M.Sc.-Biotechnology, M.Sc. - Life Sciences, M.Sc. - Microbiology & M.Sc.- Nutrition Science
5. B.Tech.- Computer Science and Engineering , Mechanical Engineering, Chemical Engineering
6. BCA

### Administrative Experiences:

1. Nodal Officer – Intellectual Property Right Cell, Veer Bahadur Singh Purvanchal University, Jaunpur, UP
2. Member Secretary – Institutional Ethics Committee, Veer Bahadur Singh Purvanchal University, Jaunpur, UP
3. Member: Academic Council, Veer Bahadur Singh Purvanchal University, Jaunpur
4. Worked as Incharge – Department of Bioinformatics, UIET, Chhatrapati Shahu Ji Maharaj University Kanpur, UP
5. Worked as Program Officer of National Service Scheme (NSS) Unit - 4<sup>th</sup> of CSJM University, Kanpur, UP
6. Member Secretary of Institutional Ethics Committee, Chhatrapati Shahu Ji Maharaj University, Kanpur, UP
7. Worked as Centre Observer in JEE- B.Ed.-2017 conducted by Lucknow University, Lucknow
8. Worked as Member of Proctorial Board, CSJM University, Kanpur.
9. In charge - Placement Cell, University Institute of Engineering and Technology, CSJM University, Kanpur during July 2014 – June 2016
10. Worked as Counselling Centre Representative of Joint Entrance Examination - B.Ed.-2012 conducted by DRMLA University, Faizabad, U.P
11. Worked as Centre Observer in JEE- B.Ed.-2012 conducted by DRMLA University, Faizabad
12. Worked as Member of University Placement Cell, CSJM University, Kanpur February- 2012
13. Member of Board of Studies, Department of Bioinformatics, C.S.J.M. University, Kanpur.
14. Worked as Assistant Centre Superintendent in University Entrance Examination conducted by CSJM University, Kanpur in 2011
15. Worked as Centre Observer in JEE- B.Ed.-2011 conducted by MJPR University Bareilly, U.P
16. Worked as Counselling Centre Representative in JEE-B.Ed.-, 2007, 2008, 2010, 2014 conducted by CSJMU University Kanpur, Bheem Rao Ambedkar University, Agra and Lucknow University, Bundelkhand University, U.P., Respectively
17. Worked as Centre Representative in Entrance Examination of JEE-B.Ed.-2010 conducted by Lucknow University, U.P

18. Worked as Internal Centre observer in Combined Pre Medical Test 2010 conducted by CSJM University Kanpur, U.P
19. Worked as CSJM University Representative for exploration of University courses in “Hindustan Education Fair”, 16-17 May 2009 in Kanpur.
20. Worked as centre in charge for Conducting MBA/BBA Entrance Examination 2008
21. Worked as Member of Advisory Committee of “TECHMART 2008” a technical event organised by UIET, CSJM University Kanpur
22. Worked as Member of Placement committee, cultural committee and anti-ragging committee at UIET, CSJM University, Kanpur, India (2008-09, 09-10).
23. Establishment of Bioinformatics Laboratory in 2006 at Department of Bioinformatics, University Institute of Engineering and Technology, CSJM University Kanpur

### Membership of Professional Bodies:

- ✚ Life Member: Indian Science Congress Association (membership No. L16550)
- ✚ Life Member: Society for Environmental Sustainability (Membership No. 006)
- ✚ Life Member: Association of Microbiologist of India (Membership No. 4778-2018)

### Supervisor/Mentoring experience:

1. Post-Doctoral Fellow : 01 (Ongoing)
2. Supervised 60 students of M.Sc.-Bioinformatics at Department of Bioinformatics, CSJM University, Kanpur for their Project work.

#### 2020 (Ongoing)

Mr. Manoj Kumar (Ongoing) M.Sc.- Biotechnology

#### 2017 (Awarded)

1. Pathway Modelling network analysis of Diabetes Type 2 (Ms. Pratibha Diwedi)
2. Pathway Modelling analysis of Lung cancer (Ms. Anjali Katiyar)
3. Pathway Modelling analysis of Asthma (Ms. Simmi Zakkaurab)

#### 2015 (Awarded)

4. Metabolic pathways modelling of cationic antimicrobial peptides (Aishwarya Tiwari)

#### 2013 (Awarded)

5. Protein Modelling, docking and molecular dynamics simulation of HLA-DR $\beta$ 3 (**Sanjay Kumar**)
6. Docking study of simulators for stem cell proliferation (**Shubhra Dubey**)

#### 2012 (Awarded)

7. Metabolic Modeling and Topological Analysis of Hypothalamus Pituitary Thyroid axis (**Rohit Shukla**)
8. Biochemical and Homology Modeling of HLADRB3 through Systems Biology Approach (**Shivangi Singh Parihar**)
9. Docking studies of Inhibitors for Thyroid Hormone Receptors (**Shikha Agnihotri**)
10. Computational Analysis of hormones Related to Thyroid Function (**Namrata Nigam**)
11. A novel proposed algorithm for prediction of immunostimulatory RNA (**Durgesh Upadhyay**)

12. Database Development for Human Hormones (**Swati Srivastva**)
13. In Silico vaccine Designing for Autoimmune thyroid disorder (**Krati Srivastava**)
14. Biological Network analysis of Homo Sapiens miRNA through Systems Biology approach (**Swati Srivastva**)
15. Computational modelling and simulation analysis for thyroid cancer progression pathways (**Chandramani**)

#### **2011(Awarded)**

16. Biochemical modeling and Simulation Analysis for Thyroid Disorder (**Anupam Chakraborty**)
17. InSilico Vaccine designing for autoimmune Hyperthyroidism (**Anupama Singh**)
18. Phylogenetic Analysis of Thyroid Stimulating Hormone receptor and Autoantibody (**Apoorv Tiwari**)
19. High throughput Docking study for Thyroid Disorder (**Preetilekha Bharti**)
20. Homology Modeling and Docking analysis for New Delhi Metallo Beta Lactomase 1 protein (**Shakti Kumar**)

#### **2010 (Awarded)**

21. Virtual screening and docking analysis for thyroid stimulating hormones receptor (**Anand Katiyar**)
22. Virtual screening and docking analysis with Autoantibody for thyroid disorder (**Neetesh**)
23. Biochemical Modeling and Thyroid Simulation Analysis for Thyroid Disorder (**Neha Rajora**)
24. Ligand based drug designing for Thyroid disease (**Hina Khan**)

#### **2009 (Awarded)**

25. Computational Analysis of Toll Like Receptor in Human and Their Interaction With isRNA (**Aditi Gupta**)
26. Database development of diseases due to protein misfolding in *Homo sapiens* (**Deepak Singh**)
27. Insilico modelling of metabolic pathway of Autoimmune skin disease targeting Psoriasis through System biology Approach (**Manisha Lalwani**)
28. miRNA –mRNA interaction network of KSHV and *Homo sapiens* for identification of miRNA target bases on Systems Biology Approach (**Meenakshi Verma**)
29. Computational analysis of SNP in 10 Kb region of Human Chromosomes 1 (**Pragya Chaturvedi**)
30. Computational designing of siRNA for Chikungunya virus (**Sukhdeep Kaur**)
31. Computational modeling of the interaction of metabolites in *Homo sapiens* for non-communicable disease targeting breast cancer (**Swati Shukla**)
32. Phylogenetic analysis of mammal's miRNA and protein involved in translation repression (**Upendra Singh**)
33. Construction of metabolic pathway of autoimmune thyroid disease through metabolic modelling (**Varsha Srivastva**)
34. Ligand based drug designing for thyroid stimulating hormone receptor of *Homo sapiens* (**Yashwant Vishwakarma**)

#### **2008 (Awarded)**

35. On-siRNA: A Tool For Designing Effective siRNA (**Abhishek Shukla**)

36. Comparative Genome Analysis of *E.coli* k12 and *E.coli* O157:H7 Using Biological Tools (**Abdul Lateef**)
37. Functional Genomic Approach to Predict The Gene Of *C. elegans* (**Anurag Kumar Jaiswal**)
38. Identification of miRNA Gene Interaction Network In Viruses Through System Biology Approach (**Ashutosh Pathak**)
39. Phylogenetic Analysis of Proteins Involved in Gene Silencing (**Gyandeep Yadav**)
40. Identification and Prediction Of miRNA In Viruses Using Artificial Neural Networks (**Kavita Agarwal**)
41. Database on retrovirus information resource (**Sakshi Issar**)
42. Database of Infectious Proteins of Micro-Organism for Human (**Sanjay Kumar Singh**)
43. Database of Immunological Factor and Structure Resource (**Devendar Singh Bhadauria**)
44. Structure Prediction and Phylogenetic Analysis of E2 Glycoprotein of Hepatitis C Virus of Indian Isolate for the development of an effective vaccine (**Kritika**)

#### **2007 (Awarded)**

45. In- Silico design of siRNA for Chikungunya virus (**Rasika Thaker**)
46. Computational Analysis of HIV -1 Reverse Transcriptase Inhibitors and Homology Modeling of HIV –p1 sequence (**Saurabh Shukla**)
47. Phylogenetic Analysis of Polyprotein of Japanese encephalitis virus in Asian country (**Chandan Kumar**)
48. Phylogenetic Analysis of Den-2 protein of Dengue virus (**Rajeev Rav**)
49. Comparative Analysis of Human & Mouse Chromosome-7 Using Biological Tools (**Priyanka Sachan**)
50. Computational Analysis of Topoisomerase-II Inhibitors (**Sanjeev Kumar**)
51. Computational Identification and Prediction of micro-RNA in Hepatitis D Virus (**Abhishek Gupta**)
52. Rational design of siRNA for Duck Hepatitis B Virus (**Chetna Udainia**)
53. Microarray Data Analysis of Lung Cancer using Principal Component Analysis (**Mohammad Fareed**)
54. Database Development of Coding and Non-Coding RNA of Viruses (**Priyanka Bajpai**)

#### **2006 (Awarded)**

55. Computational Analysis of Diauxic shift in Yeast from cDNA Microarray Data (**Ankur Srivastva**)
56. Computational Analysis of “alpha –synuclein” protein through protein drug interaction of Parkinson’s disease (**Akansha Srivastva**)
57. Database on protein misfolding disease caused in human body (**Sunil Kumar Gupta**)
58. Phylogenetic analysis of glycoprotein of HIV-1 in Asian countries (**Sarita Singh**)
59. A Biological Database Development for Fishes Using Active Server Page (**Uday Bhan Sharma**)
60. A database Development of Bt Toxins Using Active Server Page (**Deshdheepak Tripathi**)

**Dr. Manish Kumar Gupta**