



Career objective

To find a position in an organization, where I can utilize my skill & directional strengths to produce time bound & innovative results with self-development through continuous learning.

Specialization

Data Science, Database Development, Clinical Data Management, Bioinformatics

Languages

Hindi, English, French (intermediate proficiency)

Research Experience

10-Mar-2026- Current	Teaching Fellow Faculty of Life Science (FLSB), South Asian University, Maidan Garhi
1-Dec-2022- 31-Dec-2025	Data Science (Consultant), Hybrid Infectious Disease Data Observatory (IDDO), Oxford University, Oxford, U.K Project Coordinator for all India activities like RCT trial and antimalarial mapping, Data-management of RCT Trial, Development of Active Intelligent dashboard for site selection of antimalarial resistance mapping in India Clinical database management.
1-June-2021- 30-Nov-2022	Biostatistician /Data scientist ICMR- National Institute of Malaria Research (NIMR), Dwarka Geospatial models for smart antimalarial drug resistance tool, Covid-19 Nanopore sequencing,
9-Feb-2021 -31-May-2021	Senior Research Fellow (SRF) Department of Gastroenterology, AIIMS Delhi Worked on Multi-institutional DBT project “Consortium on Celiac disease Biorepository” with primary role of database development for laboratory information management system (LIMS)
16-Nov 2015 15-Nov 2020	Research Fellow Bioinformatics Group, Defence Institute of Physiology & Allied Sciences (DIPAS), DRDO, Lucknow Road, Timarpur, New Delhi-110054, India. (Student Forum representative at DIPAS, DRDO from 2015-2020)
1-Mar-2018-1-Sep-2019	Industrial trainer (Bioinformatics/Biostatistics) and CO-PI. MRD Life science Pvt. Ltd. Lucknow, U.P Bioinformatics training to DBT-Biotechnology Industrial Training Programme (BITP)

Education

July 2017 –June 2022	(Doctorate of Philosophy) PhD, Life Science (Bioinformatics) DRDO-BU Center for Life Science, Bharathiar University, Coimbatore, Tamil Nadu
Aug 2010 –Jun 2015	B.Tech +M.Tech Dual Degree (Biotechnology) Amity University, Noida, India

Recent Publication

1. **Gupta A**, Harrison LE, Nain M, Phulgenda SS, Chhajer R, Kumar RS, Das A, Rahi M, Guerin PJ, Anvikar AR, Dhorda M, Flegg JA, **Bharti PK***. Model-guided geospatial surveillance system for antimalarial drug resistance. *PLOS Glob Public Health*. 2026 Jan 6;6(1):e0004717. doi: 10.1371/journal.pgph.0004717.
2. Nain M#, Dhorda M#, Flegg JA, **Gupta A**, Harrison LE, Singh-Phulgenda S, Otienoburu SD, Harriss E, **Bharti PK**, Behera B, Rahi M, Guerin PJ, Sharma A. Systematic Review and Geospatial Modeling of Molecular Markers of Resistance to Artemisinins and Sulfadoxine-Pyrimethamine in *Plasmodium falciparum* in India. *Am J Trop Med Hyg*. 2024 Apr 2;110(5):910-920. doi: 10.4269/ajtmh.23-0631.
3. Verma R#, Commons RJ#, **Apoorv Gupta**, Rahi M, Nitika, **Bharti PK**, Thriemer K, Rajasekhar M, Singh-Phulgenda S, Adhikari B, Alam MS, Ghimire P, Khan WA, Kumar R, Leslie T, Ley B, Llanos-Cuentas A, Pukrittayakamee S, Rijal KR, Rowland M, Saravu K, Simpson JA, Guerin PJ, Price RN, Sharma A. Safety and efficacy of primaquine in patients with *Plasmodium vivax* malaria from South Asia: a systematic review and individual patient data meta-analysis. *BMJ Glob Health*. 2023 Dec 20;8(12):e012675. doi: 10.1136/bmjgh-2023-012675.
4. **Apoorv Gupta**, Jai Chand Patel, Prince Kumar, Kamran Manzoor Waidha, Aakash Deep, Ashish Kumar, Deepshikha Pande Katore, Arun K. Sharma. Cardiovascular diseases display etiological and seasonal trend in human population: Evidence from seasonal cardiovascular comorbid diseases (SCCD) index. *Am J Hum Biol*. 2023 Jun;35(6):e23867. doi: 10.1002/ajhb.23867
5. Minu Nain, **Apoorv Gupta**, Sumit Malhotra, Amit Sharma. High-density lipoproteins may play a crucial role in COVID-19. *Virol J*. 2022 Aug 23;19(1):135. doi: 10.1186/s12985-022-01865-4.
6. **Apoorv Gupta**, S.Pathak, Rajeev Varshney, Yasmin Ahmad, Pankaj Khurana. HighAltitudeOmicsDB, an integrated resource for high-altitude associated genes and proteins, networks and semantic-similarities. *Sci Rep*. 2023 Jun 8;13(1):9307. doi: 10.1038/s41598-023-35792-3.

Other Top Publication

1. Pankaj Khurana*, Rajeev Varshney, **Apoorv Gupta et al**. A network-biology led computational drug repurposing strategy to prioritize therapeutic options for COVID-19. ***Heliyon* 8 (2022)**. <https://doi.org/10.1016/j.heliyon.2022.e09387>.
2. **Apoorv Gupta**, Pankaj Khurana*, Sukanya Srivastava, S. Suryakumar et al. MyomirDB: *A unified database and server platform for muscle atrophy myomiRs, coregulatory networks and regulons*. ***Sci Rep* 10, 8593 (2020)**. <https://doi.org/10.1038/s41598-020-65319-z>
3. Pankaj Khurana, **Apoorv Gupta**, Ragumani Sugadev, Yogendra Kumar Sharma, Bhuvnesh Kumar. *HAHmiR.DB: a server platform for high-altitude human miRNA-gene coregulatory networks and associated regulatory circuits*, **Database, Volume 2020, 2020, baaa101**, <https://doi.org/10.1093/database/baaa101>
4. Pankaj Khurana*, **Apoorv Gupta**, Ragumani Sugadev. et al. *nSARS-Cov-2, pulmonary edema and thrombosis: possible molecular insights using miRNA-gene circuits in regulatory networks*. ***ExRNA* 2, 16 (2020)**. <https://doi.org/10.1186/s41544-020-00057-y>
5. **Apoorv Gupta**, Sugadev Ragumani, Yogendra Kumar Sharma, Yasmin Ahmad, Pankaj Khurana*: *Analysis of Hypoxiamir-Gene Regulatory Network Identifies Critical Mirnas Influencing Cell-Cycle Regulation Under Hypoxic Conditions*. **02/2019; 08, DOI:10.2174/2211536608666190219094204**
6. **Apoorv Gupta**, R Sugadev, Y K. Sharma, Y Ahmad, P Khurana*: *Role of miRNAs in hypoxia-related disorders*. ***Journal of Biosciences* 08/2018; 43(4), DOI:10.1007/s12038-018-9789-7**

7. Kamran Manzoor Waidha, **Apoorv gupta**, Rupsneet Kaur, Pooja Mahapatra, Divyam Singh, Neetu Jabalia*: *Phylogenetic analysis and In-silico characterization of nucleotide binding site proteins from Ascochyta rabiei*. **International Journal of Control Theory and Applications** 09/2016; **9(23):183 - 189**.
8. **Apoorv Gupta**, Sujata Sangam, Adeeba Shakeel, Rohan Bhattacharya, Arun Kumar Sharma, Deepa Suhag, Sandip Chakrabarti, Sandeep Kumar Garg, Sourav Chattopadhyay, Biswarup Basu, Vinod Kumar, Satyendra Kumar Rajput, Malay Kishore Dutta and Monalisa Mukherjee: **Sustainable synthesis of single crystalline sulphur-doped graphene quantum dots for bioimaging and beyond**. **Green Chem.**, 2018, 20, 4245–4259

Patents Grant

1. Amlan Chakraborty, **Apoorv Gupta**, Sitanshu Sekhar Lahiri: *Bioelectricity, waste remediation and increased nitrogenase activity in plants by cloning and expression of nifH, nifD gene in geobacter metallireducens*. **Grant Patent No. : 439693, Year: 22/11/2022**
2. **Apoorv Gupta**, Adeeba shakeel, Rohan Bhattacharya, Monalisa Mukherjee, Sujata sangam, Deepa suhag, Sandip chakraborty: *Novel synthetic method for the preparation of highly fluorescent and biocompatible Sulphur doped Graphene quantum dots from agro industrial bio-waste for bio imaging and diagnostics*. **Grant Patent No. : 397183, Date- 19/05/2022**

Awards & Grants

24 th -26 th Feb-2023	BioAsia 2023, Hyderabad, Telangana. Top 80 startup with free showcase in Conclave
Nov 2015-Nov 2020	Grant: Defence R&D Organization (DRDO) Fellowship 2015-2020
Feb 2015	GATE 2016 (Biotechnology)- Graduate Aptitude Test for Engineering
Oct 2013	Award: All India team rank 4 in BEST INDIA entrepreneur 2013 competition by (ABLE, DBT & BIRAC)
May 2012	Grant: Indian Academy Of Sciences(IASc) summer research fellowship 2012

Technology Developed

1. **Boxscope, AI microscope** - Developed through DBT-Foldscope grant BT/IN/Indo-US/Foldscope/39/2015 on 18/9/2018 and submitted on 3rd –March-2020. **The product was demonstrated in BioAsia 2023.**

Technology Presented

1. **Pipeline for Molecular biomarker identification in seasonal cardiovascular comorbid diseases (SCCD)** presented **JITMM 2023, Bangkok, Thailand 13-15 Dec/2023. Won 3rd Prize in Presentation and receive a DST- travel grant.**
2. **Developed Psychometric stress assessment of COVID patients** in emergency care helps in better equipping ICU for mood disturbance and fear patients, presented **ICTMM 2024, Kuching, Sarawak, Malaysia. 19-23 Sept/2024. Won Young Scientist Travel Award.**

Govt. Projects

1. **Co-PI- of DBT-foldscope project-** BT/IN/Indo- US/Foldscope/39/2015 vide title “**To design a novel and portable system using Foldscopes, R Pi IR camera and custom Image processing software for quantitative live cell detection for diagnostics and lab use purposes**”, initiated on 1st June-2018 and complete report on 20th- March -2020.
2. **Co-PI of ICMR Adhoc project number (ISRM/12(62)/2020) vide title** “**Identification of biomarker candidate for early diagnosis of myocardial reperfusion injury and reoccurrence centralizing GSK3 β using meta-analysis**”