Scientist Profile

1. Name of the Scientist: AJAY VIR SINGH

2. **Designation:** Scientist-E

3. Division: Microbiology and Molecular Biology

4. Official Email address: ajayvir.s@icmr.gov.in
5. Qualifications: M.Sc., Ph.D., PDF (ICMR)

6. Research interests: Mycobacterial infections (Tuberculosis,

Leprosy, Bovine tuberculosis and Paratuberculosis), Molecular epidemiology, Genomics, Biomarker discovery and Diagnostic development.

7. Research experience (in Years): 17 Years

8. H-index: 289. Total number of Publications: 111

 $(Web\text{-}link.\ \underline{https://scholar.google.com/citations?hl=en\&user=6wENFuoAAAAJ})$

10. Patents (Filed/ Awarded): Nil

11. List of research grants received (Reverse chronological order):

S. No	Research Project	Funding agency	Period
1	Identification of genetic determinants and risk factors for drug resistance to bedaquiline and delamanid in native isolates of Mycobacterium tuberculsosis in India. (As Principal Investigator)	Department of Biotechnology (DBT), New Delhi.	2021-2024
2	Proteomic profiling and miRNA analysis of exosomes for the identification of potential biomarkers for tuberculosis in HIV patients. (As Principal Investigator)	Indian Council of Medical Research (ICMR), New Delhi.	2018-2021
3	Identification of genetic mutations and risk factors associated with the conferring of extensive drugs resistance (XDR) in Indian isolates of Mycobacterium tuberculosis. (As Principal Investigator)	Department of Science & Technology (DST), New Delhi	2017-2020
4	Molecular strain characterization and its correlation with drug resistance in tuberculous and non-tuberculous mycobacteria in HIV positive and HIV negative patients in Agra region. (As Principal Investigator)	Intra-Mural	2016-2019
5	ICAR- Outreach program on Zoonotic Diseases- Phase II (As Co-Principal Investigator)	Indian Council of Agriculture Research (ICAR), New Delhi.	2018-2020
6	Molecular epidemiology and anti- tuberculosis drug resistance in HIV positive and negative children with tuberculosis. (As Co- Principal Investigator)	Indian Council of Medical Research (ICMR), New Delhi	2017-2018
7	Crohn's disease in India: A multicenter study from a country where intestinal tuberculosis as well as Johne's Disease is endemic. (As Co- Principal Investigator)	Indian Council of Medical Research (ICMR), New Delhi.	2015-2018
8	An integrated data-driven model to accelerate leprosy eradication from high-burden states and Union territories in India (As Co-Investigator)	Indian Council of Medical Research (ICMR), New Delhi	2023-2026

9	Strengthening of Mycobacterial Repository for translational studies –Phase II. (Translational Phase) (As Co-Investigator)	Indian Council of Medical Research (ICMR), New Delhi	2015-18
10	Validation of indigenously developed technologies for diagnosis of: (a) pulmonary tuberculosis (b) drug resistant tuberculosis under Phase 1: Validation of indigenous test for diagnosis of pulmonary tuberculosis from sputum samples, Phase 2: Validation of indigenous test for diagnosis of drug resistant tuberculosis from sputum samples. (As Co- Investigator)	Department of Biotechnology (DBT), New Delhi	2014-18

12. Awards/ Recognitions/Honors:

S. No	Award Details	Awarded by	Year
1	Young Scientist Award	Indian Society of Genetics, Biotechnology, Research and Development	2021
2	ISCB Young Scientist Award	Indian Society of Chemists and Biologists for outstanding contributions in biological sciences	2020
3	Certificate of Appreciation	Director, ICMR-NJIL&OMD, Agra in recognition of valued contribution for COVID-19 diagnosis at the Institute	2020
4	Young Researcher Award'	Millennium India Education Foundation	2016
5	Helping Hand Award	International Association for Paratuberculosis	2011
6	Post-Doctoral Fellowship	Indian Council of Medical Research, New Delhi	2010
7	Best Oral Presentation Award	Organizing committee, 6th annual conference of association of medical microbiologist-up chapter in MICROCON-2010	2010
8	Annual ISSGPU Award for the 'Best Research Article'	Indian Society For Sheep And Goat Production And Utilization (ISSGPU) for publication in the Indian Journal of Small Ruminants during the year of 2010.	2010
9	Best Poster Presentation Award'	Organizing committee, National Seminar on Rural India Development Alternatives: Sectoral Convergence for Livelihood Security	2009
10	Best Poster presentation Award	Organizing committee, National seminar on Emerging diseases of Small ruminant and there containment under WTO Regime	2007
11	Helping Hand Award	International Association for Paratuberculosis	2007

13. Academic activities (Last five years)

- Member of scientific societies/ bodies / committees

- 1. Life Member, Indian Association of Leprologists (ID: S/1033/UP/20/ LM)
- 2. Life Member, Society for Biosafety, India (No. LM0282/2017)
- 3. Patron Member, Society for Environmental Resources and Biotechnology Development (No. PT-119320)
- 4. Member, Leprosy focus group (Leprosy Diagnostics), Indian Association of Leprologists Academy (2021-2023)
- 5. Member, Microbiology Society, UK (No. C027134)
- 6. Member, Global Partnership for Zero Leprosy (2023-onwards)
- 7. Member, International Society of Infectious Diseases, USA. (2015-onwards)

- 8. External Expert, Institutional Biosafety Committee (IBSC) at GLA University, Mathura.
- 9. External Expert, Doctoral Committee, King George's Medical University (KGMU), Lucknow
- Member, Local Research Advisory Committee (LRAC), Multi-Disciplinary Research Unit (MRU), Veer Chandra Singh Garhwali Government Institute of Medical Science and Research, Pauri Garhwal, Uttarakhand.
- 11. Member, Local Research Advisory Committee (LRAC), Multi-Disciplinary Research Unit (MRU), Government Medical College, Haldwani, Uttarakhand.
- 12. Member, 'Board of Studies' Dr. Dr. Bhim Rao Ambedkar University, Agra Uttar Pradesh
- 13. Member, 'Board of Studies' Dr. Sanskriti University, Mathura, Uttar Pradesh
- External examiner to conduct practical examination of M.Sc (Biotechnology) at Institutes affiliated to Dr. Bhim Rao Ambedkar University, Agra.
- 15. Reviewer and External examiner for Ph.D Thesis, Mangalayatan University, Beswan, Aligarh Uttar Pradesh.
- 16. Expert Reviewer, Investigator Initiated Research Proposals (IIRP) for small extramural grants, Indian Council of Medical Research (ICMR), New Delhi.
- 17. Reviewer, Short Term Studentship (STS) program, Indian Council of Medical Research (ICMR), New Delhi.
- 18. Paper setter, Dr. Bhim Rao Ambedkar University, Agra, Uttar Pradesh.
- 19. Paper setter, GLA University, Mathura, Uttar Pradesh.
- 20. Paper setter, Raja Mahendra Pratap Singh State University, Aligarh, Uttar Pradesh.
- No. of Conference/ Webinar/ Workshop/ Training attended: 20
- No. of invited lectures delivered: 04
- **No of students supervised:** 18 (Ph.D: 01, MD: 04, M.Tech / M.Sc.: 13)