

CURRICULUM VITAE

Name: **Dr. Rajeev Singh**
Designation: **Scientist- C**
Department: **ICMR-Regional Medical Research Centre, Gorakhpur, Uttar Pradesh-273013.**
Date of Birth: **21/01/1979**

Qualifications:

- **Ph. D. (Immunology). 2008.** Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow (U.P.), India
- **M. Sc. (Biotechnology). 2003.** Devi Ahilya University, Indore (M.P.), India
- **B. Sc. (Botany & Chemistry). 1998.** Purvaanchal University, Jaunpur (U.P.), India

Research Area:

Japanese Encephalitis and Acute encephalitis syndrome, Child Health, Viral research and diagnostics, Translational research to develop point-of care test, Public Health.

Awards/ Honours

- Young Scientist Fellowship, SERB, DST, New Delhi, India. 2014-2016
- Kishimoto Foundation Fellowship, WPI-IFReC, Osaka University, Japan. 2010 - 2013.
- Senior Research Fellowship, CSIR, New Delhi, India. 2005- 2007.
- Junior Research Fellowship, CSIR, New Delhi, India. 2003- 2005.
- Scholarship, DBT, New Delhi, India, 2001-2003.

Positions (Experience)

Designation	University/ Institution	From (Month/Year)	To (Month/Year)
Scientist-C	ICMR-Regional Medical Research Centre, Gorakhpur, U.P., India.	1 st Sep 2020	Present
Scientist-B	ICMR-Regional Medical Research Centre, Gorakhpur, U.P., India.	2 nd Sep 2018	31 Aug 2020
Scientist-B	ICMR-Regional Medical Research Centre, Gorakhpur, U.P., India.	19 th Dec 2016	1 st Sep 2018
SERB-Young Scientist	King George's Medical University, Lucknow, U.P., India	19 th May 2014	17 th Dec 2016
Specially Appointed Researcher (Postdoctoral)	WPI-IFReC, Osaka University, Osaka, Japan	16 th Aug 2010	15 th Aug 2013
Scientist-B	CSIR-Indian Institute of Toxicology Research, Lucknow, India	29 th Jun 2007	9 th Aug 2010

List of Research Projects undertaken

Title of Project	Source of Funds	PI/Co-PI	Budget (Rs)	Duration
<i>Development of multiplex PCR for detection of Orientia tsutsugamushi, Rickettsia and Leptospira</i>	ICMR	PI	44.21 Lac	2021-23
<i>Study of Prevalence and determinants of anaemia in less than 5 years old children and effect of community based intervention on the improvement to the cure rate of nutritional iron deficiency anemia in children in Gorakhpur district, Uttar Pradesh, India</i>	ICMR	PI	28.53 Lac	2021-23

<i>Development of diagnostic kit for rapid and early detection of Orientia tsutsugamushi based on isothermal recombinase polymerase amplification and lateral flow</i>	ICMR	PI	53.88 Lac	2020-22
<i>“Setting up of Nationwide Network of Laboratories for Managing Epidemics and National Calamities” to the Regional Medical Research Center, Gorakhpur, State Level VRDL, through ICMR</i>	DHR	Co-PI	18 Crore	2021-26
<i>National Sero-surveillance for COVID-19</i>	ICMR	Site- CoPI	10 Lac	May 2020
<i>Population-based serosurveillance for SARS-CoV-2 infection transmission in India: Second survey, August 2020</i>	ICMR	Site- CoPI	10 Lac	Aug-2020
<i>Population-based serosurveillance for SARS-CoV-2 infection transmission in India: Third survey, December 2020</i>	ICMR	Site- CoPI	10 Lac	Dec-2020
<i>Impact of COVID-19 on Maternal and Child health services in India</i>	ICMR, UNISEF	Site- CoPI	5 Lac	2020-21
<i>Identification and characterization of Immunodominant T cell epitopes of OmpW and OmpF of salmonella typhimurium in patients with salmonella induced reactive arthritis/undifferentiated spondyloarthropathy.</i>	SERB, DST, New Delhi	PI	30.8 Lac	2014- 2016
<i>Identification of Biomarkers for infection- induced Reactive arthritis based of inflammation amplifier.</i>	DST, New Delhi	Co-PI	38.5 Lac	2014-17

Publications: Research Papers: **28**, Book Chapter: **01**.

Bibliographical details of 10 publications

- Sapkal G, Srivastava RK, Dwivedi G, Sahay RR, Yadav PD, Deshpande GR, **Singh R et. al.** Immune responses against different variants of SARS-CoV-2 including omicron following six months of administration of heterologous prime-boost COVID-19 vaccine. *J Travel Med.* 2022 Mar 4;taac033. doi: 10.1093/jtm/taac033. Epub ahead of print. PMID: 3524469 **Impact factor 8.49.**
- Deval H, Nyayanit DA, Mishra SK, Yadav PD.....**Singh R et.al.** Genome Sequencing Reveals a Mixed Picture of SARS-CoV-2 Variant of Concern Circulation in Eastern Uttar Pradesh, India. *Front Med (Lausanne).* 2022 Jan 7;8:781287. doi: 10.3389/fmed.2021.781287. **Impact factor 4.46.**
- Kant R, Dwivedi G, Zaman K, Sahay RR, Sapkal G, Kaushal H, Nyayanit DA, Yadav PD, Deshpande G, **Singh R et.al.** Immunogenicity and safety of a heterologous prime-boost COVID-19 vaccine schedule: ChAdOx1 vaccine Covishield followed by BBV152 Covaxin. *J Travel Med.* 2021 Dec 29;28(8):taab166. doi: 10.1093/jtm/taab166. PMID: 34652440 **Impact factor 8.49.**
- Murhekar M, Bhatnagar T, Selvaraju S, Saravanakumar V, Jeromie WV, Sah N, Kumar SM, Rade K, Shah N, Sabarinathan R, Asthana S, Balachandar R, Bangar SD, Bansal AK, Bhat J, Rangaraju C, Chopra V, Das D,.....**Singh R et al.** SARS-CoV-2 antibody seroprevalence in India, August-September, 2020: findings from the second nationwide household Sero-survey. *Lancet Glob Health,* 2021, S2214-109X (20)30544-1. doi: 10.1016/S2214-109X (20)30544-1. **Impact factor 21.56.**
- Behera SP, Kumar N, **Singh R**, Deval H, Zaman K, Misra B *et.al.* Molecular Detection and Genetic Characterization of Orientia tsutsugamushi from Hospitalized Acute Encephalitis Syndrome Cases During Two Consecutive Outbreaks in Eastern Uttar Pradesh, India. *Vector Borne Zoonotic Dis.* 2021 Oct;21(10):747-752. doi: 10.1089/vbz.2021.0003. **Impact factor 2.1**
- Gupta V, Kumar S, Pratap A, **Singh R***, Kumari R, Kumar S, Aggarwal A, Misra R*. Association of ITGAM, TNFSF4, TNFAIP3 and STAT4 gene polymorphisms with risk of systemic lupus erythematosus in a North Indian population. *Lupus.* 2018 Oct;27(12):1973-1979. doi: 10.1177/0961203318786432. (* **Corresponding Author**) **Impact factor 2.9**
- Atsumi, T.*, **R. Singh***, L. Sabharwal*, H. Bando, J. Meng, M. Murakami et.al. Inflammation amplifier, a new paradigm in cancer biology. *Cancer Research,* 2014;74: 8-14. (***Equal contribution**) **Impact factor 12.7**
- Singh AK, Parashar A, Singh AK, **Singh R***. Pre-natal/juvenile chlorpyrifos exposure associated with immunotoxicity in adulthood in Swiss albino mice. *J Immunotoxicol.* 2013 Apr-Jun;10(2):141-9. (* **Corresponding Author**) **Impact factor 3.0**
- Singh R**, Aggarwal A, Misra R. Th1/Th17 Cytokine Profiles in Patients with Reactive Arthritis/Undifferentiated Spondyloarthropathy. *J Rheumatol.* 2007;34:2285-90. **Impact factor 4.6**
- Singh R**, Shasany AK, Aggarwal A, Sinha S, Sisodia BS, Khanuja SP, Misra R. Low molecular weight proteins of outer membrane of Salmonella typhimurium are immunogenic in Salmonella induced reactive arthritis revealed by proteomics. *Clin Exp Immunol.* 2007;148(3):486-93. **Impact factor 4.3**

List of Research Projects undertaken
Dr. Rajeev Singh, Scientist-C, ICMR-RMRC Gorakhpur

A. Completed Projects:

Title of Project	Source of Funds	PI/Co-PI	Budget (Rs)	Duration
<i>National Sero-surveillance for COVID-19</i>	ICMR	Site- CoPI	10 Lakh	May 2020
<i>Population-based serosurveillance for SARS-CoV-2 infection transmission in India: Second survey, August 2020</i>	ICMR	Site- CoPI	10 Lakh	Aug-2020
<i>Population-based serosurveillance for SARS-CoV-2 infection transmission in India: Third survey, December 2020</i>	ICMR	Site- CoPI	20 Lakh	Dec-2020
<i>Population-based serosurvey to estimate prevalence of SARS-CoV-2 antibodies in India: Fourth survey, June - July 2021</i>	ICMR	Site-CoPI	20 Lakh	June-2021
<i>Impact of COVID-19 on Maternal and Child health services in India</i>	ICMR, UNISEF	Site- CoPI	5 Lakh	2020-21
<i>Identification and characterization of Immunodominant T cell epitopes of OmpW and OmpF of salmonella typhimurium in patients with salmonella induced reactive arthritis/undifferentiated spondyloarthropathy.</i>	SERB, DST, New Delhi	PI	30.8 Lakh	2014-2016
<i>Identification of Biomarkers for infection- induced Reactive arthritis based of inflammation amplifier.</i>	DST, New Delhi	Co-PI	38.5 Lakh	2014-17

B. On-going Projects:

Title of Project	Source of Funds	PI/Co-PI	Budget (Rs)	Duration
<i>Development of diagnostic kit for rapid and early detection of Orientia tsutsugamushi based on isothermal recombinase polymerase amplification and lateral flow</i>	ICMR	PI	53.88 Lakh	2020-22
<i>“Setting up of Nationwide Network of Laboratories for Managing Epidemics and National Calamities” to the Regional Medical Research Center, Gorakhpur, State Level VRDL, through ICMR</i>	DHR	Co-PI	18 Crore	2021-26
<i>Development of multiplex PCR for detection of Orientia tsutsugamushi, Rickettsia and Leptospira</i>	ICMR	PI	44.21 Lakh	2021-23
<i>Study of Prevalence and determinants of anaemia in less than 5 years old children and effect of community-based intervention on the improvement to the cure rate of nutritional iron deficiency anemia in children in Gorakhpur district, Uttar Pradesh, India</i>	ICMR	PI	28.53 Lakh	2021-23
<i>Development of Isothermal amplification and CRISPR/Cas based rapid detection test of Orientia tsutsugamushi</i>	ICMR	PI	8.5 Lakh	2021-23
<i>Development of CRISPR/Cas based isothermal detection platform for rapid and accurate diagnosis of Dengue Virus and Chikungunya Virus.</i>	DHR	Mentor	51.6 Lakh	2021-24
<i>Hospital based surveillance of respiratory pathogens in children below 5 years in Gorakhpur</i>	ICMR	Co-PI	54.7 Lakh	2021-24
<i>Evaluation of immunogenicity and protective efficacy after vaccine interchangeability in a selected population of Eastern UP</i>	ICMR	Co-PI	84 Lakh	2021-22
<i>JE-AES Apex Laboratory</i>	ICMR	PI	12 Lakh	Since 2021
<i>Dengue Chikungunya Sentinel Laboratory</i>	ICMR	PI	4 lakh	Since 2021

C. Proposed Project as Approved by SAC:

Title of Project	Source of Funds	PI/Co-PI	Budget (Rs)	Duration
<i>Identification of unknown etiologies in acute encephalitis syndrome of eastern Uttar Pradesh using next generation sequencing.</i>	ICMR	PI	2 crore	2022-25
<i>Assessment of susceptibility of antibiotics in Orientia tsutsugamushi isolated from acute encephalitis syndrome patients with scrub typhus</i>	ICMR	PI	1.5 crore	2022-25
<i>Establishing pre-diabetes and at risk for hypertension cohorts through non-communicable disease risk factor surveillance at HDSS, Gorakhpur</i>	ICMR	CoPI	5.66 crore	2022-25
<i>Clinico-epidemiological study of Scrub typhus: A multicentric Pan India Study.</i>	ICMR	Co-PI	6.54 crore	2022-25