

## PERSONAL DETAILS & CONTACT

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**Location:** Nagpur, Maharashtra

## EDUCATIONAL QUALIFICATION

NAME OF THE DEGREE	SUBJECT	PERIOD
Doctor of Philosophy	<b>Doctor of Philosophy</b>	<b>Jul 2020 to April 2025</b>
Master of Science	Biochemistry	<b>Jun 2014 to Jul 2017</b>
Bachelor's in Science	Microbiology, Biochemistry, Chemistry	<b>May 2012 to Mar 2014</b>
Higher Secondary Education (HSC)	Biology, Physics, Chemistry, Maths	<b>2011 pass out</b>
Secondary School Education (SSC)	Maharashtra State Board	<b>2009 pass out</b>

## PROFESSIONAL EXPERIENCE

INSTITUTE	POST + FUNDING SOURCE	NAME OF THE ASSIGNMENT	PERIOD
CIIMS	<b>Research associate- II in a DBT funded project</b>	A Comparative One-Health Approach Tackling AMR Infections in UK and Indian Livestock	<b>Jan 2025 to present</b>
CIIMS	<b>Project Associate level 2 in a DBT funded</b>	Genomic Surveillance for SARS-CoV-2 In India (INSACOG)	<b>Jan 2023 to Jun 2024</b>
CIIMS	<b>Project Co-coordinator in an Indo-UK project</b>	a. Establishment of a Regional Network of Clinical Laboratories in India for CDI.	<b>April 2017 to June 2024</b>

		b. Multiplex PCR for Determining Aetiology of Infectious Diarrhea in Central India c. C.difficile in urbanized and tribal Communities in Central India: Molecular Study	
LAD college	<b>Lectureship (Contractual basis)</b>	Biochemistry lecturer	<b>Aug 2016 to Mar 2017</b>

## RESEARCH & TECHNICAL EXPERTISE

### Research & Scientific Skills

- Microbial analysis
- PCR standardization (including RT-PCR for COVID-19)
- Whole cell lysate extraction
- PAGE electrophoresis
- Peptide designing (NCBI BLAST)
- Designing immunoassays
- Preparation of POCT (Point-of-Care Testing) devices
- Patent and copyright drafting
- Manuscript and thesis compilation
- Scientific writing and publishing
- Bioinformatics tools usage
- Sewage and water sample handling for nucleic acid extraction
- Handling human biological samples

### Technical & Laboratory Skills

- NABL accreditation procedures
- SOP (Standard Operating Procedure) planning and design
- DNA extraction kit development
- Multiplex PCR techniques
- Anaerobe culturing and MIC analysis
- Biofire-based multiplex PCR handling
- Stool sample collection and analysis
- Nucleic acid quantification

## Project & Team Management

- Drafting research projects for funding
- Handling IBSC (Institutional Biosafety Committee) responsibilities
- Project coordination and team management
- Metadata collection and proforma filling
- Accounting and utilization certificate (UC) preparation
- Report writing and presentation skills

## Teaching & Communication

- Lecturing in Biochemistry
- Conducting practical sessions and setting examination papers
- Strong interdisciplinary collaboration
- MOOC viva voce coordination
- Communication and presentation skills

## PUBLICATIONS

SR. NO	TITLE	AUTHOR LIST	JOURNAL	YEAR	IMPACT FACTOR	TYPE
1	A Biomarker Based Peptide Immunoassay for <i>Clostridioides difficile</i>	Biswas, R., Dhok, A., Nayak, A., Monaghan, T. M., & Kashyap, R. S.	International Journal of Peptide Research and Therapeutics	2025	02	Original article
2	The Molecular Epidemiology of <i>Clostridioides difficile</i> Infection in Central India: A Prospective Observational Cohort Study	Biswas, R.; Pinkham, N.; Walk, S.T.; Wang, Q.; Ambalkar, S.; Satav, A.R.; Wilcox, M.H.; Reghunath, R.; Chawla, K.; Shenoy, P.A.; et al.	<i>Microbiol. Res</i>	2023	1.5	Original article
3	Challenges and future solutions for detection of <i>Clostridioides difficile</i> in adults.	Biswas R, Dudania H, Lakherab P, Palc AK, Kurbahd P, Bhatiad D, Dhoke A, Kashyapa RS.	Annals of Gastroenterology	2023	2.1	Review

4	Clostridioides difficile epidemiology in India.	Monaghan TM, Biswas R, Satav A, Ambalkar S, Kashyap RS.	<i>Anaerobe</i>	2022	2.5	Review
5	Development of Affordable Methods and Protocols for Diagnosis of Clostridium difficile Infection.	Rima Biswas, Lokendra Singh, Archana Dhok, Rajpal Singh Kashyap	Annals of R.S.C.B	2021	0.60	Protocol
6	Multiomics Profiling Reveals Signatures of Dysmetabolism in Urban Populations in Central India. Microorganisms.	Monaghan TM, Biswas RN, Nashine RR, Joshi SS, Mullish BH, Seekatz AM, Blanco JM, McDonald JAK, et al	Microorganisms	2021	4.1	Original article
7	Performance of Adenosine Deaminase assay in diagnosis of pulmonary & extrapulmonary tuberculosis.	Anuja Kawle , Arti Mishra, Vinita Hutke , Seema Shekhawat, Amit Nayak, Rima Biswas, Nitin Chandak, et al	medRxiv	2021	-	Original article
8	Metagenomics reveals impact of geography and acute diarrheal disease on the Central Indian human gut microbiome.	Monaghan TM, Sloan TJ, Stockdale SR, Blanchard AM, Emes RD, Wilcox M, Biswas R, Nashine R, et al	Gut Microbes	2020	12.3	Original article

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<b>SR. NO</b>	<b>TITLE</b>	<b>APPLICANTS</b>	<b>AUTHORS</b>	<b>JOURNAL</b>	<b>YEAR</b>
<b>1</b>	A method for preparing a nitrocellulose membrane-based device.	Dr. Rajpal Singh Kashyap & Ms. Rima Biswas	Dr. Rajpal Singh Kashyap, Ms. Rima Biswas, Dr. Amit Nayak, Dr. Archana Dhok	Official Journal of the patent Office	<b>2024</b>

#### **CONFERENCES AND WORKSHOPS ATTENDED**

<b>SR. NO</b>	<b>TITLE</b>	<b>VENUE</b>	<b>ORAL/POSTER</b>	<b>AWARDS</b>	<b>YEAR</b>
<b>1</b>	Society of Neurochemistry India (SNCI)	Nagpur	Oral	-	2022
<b>2</b>	Society of Biological Chemist (India) (SBC)	Goa	Poster	-	2023

#### **ANY OTHER AWARDS RECEIVED**

<b>SR. NO</b>	<b>TITLE</b>	<b>AWARDS</b>	<b>YEAR</b>
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#### **LIFE MEMBERSHIPS**

- Society of Neurochemistry India (SNCI)