Curriculum Vitae

Full Name: Designation: Department: Campus:	Dr. RAHUL I Assistant Pro Microbiology Srinagar Cal						
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Email	rksingh.hnb@gmail.com; rksingh.hnb@hnbgu.ac.in						
Education Qualification:		Ph.D. (Applied Microbiology) Banaras Hindu University- 2012					
Teaching Experience:		10 Years		Research Experience:	13 Years		

Research Interest and Fields of Specialization

- 1. Cyanobacterial Biotechnology
- 2. Infectious diseases
- 3. Bioactivity of Natural products
- 4. Plant growth promoting microorganisms

Honours & Awards

- 1. Best Innovation Award by HNBGU in 2021
- 2. Young Scientist Award by Samaj Vikas Sansthan, Merrut in October 2013
- 3. *ICMR-SRF* in January, 2011.
- 4. *UGC-JRF* in October, 2009

Member of Academic Institutions

Membership of Scientific Organizations

- 1. Life Member & Secretary, Srinagar Garhwal Unit, Association of Microbiologists of India,
- 2. Life Meember, Innovation Education and Scientific Research Foundation, New

Research Supervision

Ph.D. Awarded: 01, Submitted: 02, Registered: 01; PG Dissertation: 18

Research Projects/ MoU undertaken

Sr. No.	Title of the project	Sponsoring Agency	Amount in (Rs.) lakh	Status
1	Screening of thermophillic cyanobacteria containing nonribosomal peptide synthetase gene clusters for their antimicrobial activity.	UGC	06	Completed
2	Cyanobacterial biodiversity along the physico- chemical gradients in hot water springs of Arunanchal Pradesh and their bioactive potential	DBT	08	Completed

Administrative Experience

- 1. Assistant Director, UGC- Malaviya Mission Teacher Training Centre, HNBGU
- 2. Assistant Director, Faculty Development Centre, HNB Garhwal University
- 3. Member Secretary, Institutional Ethics Committee, HNBGU
- 4. Expert Member, Board of Studies, Microbiology, SDSU, Tehri
- 5. Member, Board of Studies, Botany & Microbiology, HNBGU

Invited lecturs during last five years (2018-2023)

- Invited Lecture (NEP 2020 and Skill Development in India) in NEP Orientation & Sensitization Program organized by UG-MMTTC, Iswar Saran PG College, Prayagraj on Dec 13, 2023.
- 2. Invited Lecture (Microbiological quality and Examination of Milk) in Skill Vigyan Program organized by Department of Biotechnology, HNBGU on Jan 01, 2022.
- 3. Invited Lecture (Microbiological quality and Examination of Water for pharmaceutical use) in Skill Vigyan Program organized by Department of Biotechnology, HNBGU on Dec 31, 2021.
- 4. Invited lecture (**Sustainable Development and Microbes**) in Refresher Course entitled: Pedagogical techniques and Research methodology) organized by FDC, HNBGU on March 23, 2021.
- 5. Invited lecture (**Scientific paper writing**) in in Induction Training of Faculty on May 31, 2019 at FDC, HNBGU.
- Invited lecture (Foldscope: Revolution in field of Microscopy) in DST Inspire Science Internship Camp at HNBGU on Jan 22, 2019
- Invited lecture (UGC Regulations, 2018) in Orientation Program on September 20, 2018 at FDC, HNBGU.
- 8. Invited lecture (**Use and Applications of Foldscope**) in workshop on 'Communication skills and Scientific Temparament' on July 31, 2018 at FDC, HNBGU.
- Invited lecture (How to write a research article) in Induction Training of Faculty on June 11, 2018 at FDC, HNBGU.
- 10. Invited lecture (**Microbes: powerful players to serve humanity**) in NSS Camp at HNB Garhwal University on February 11, 2018.
- 11. Invited lecture (**Targeted Therapies for Cancer**) in World Cancer Day Celebration at Department of Biochemistry, HNB Garhwal University on February 04, 2018.

Conference/Symposium/Workshop Organized during last five years (2018-2023)

- 1. Webinar on "How to read scientific literature and introducton to project MANV on June 02, 2020.
- 2. National Webinar on "Mass spectrometry in natural products research" on June 24, 2020.
- 3. International Webinar on "Microbial diversity: from health to environment" on June 27, 2020.
- 4. One Day University level Conference on occasion of World Tuberculosis Day on March 24, 2018.

Publications during last five years (2018-2023)

Journals

- 1. Tyagi S, Suyal S, Tewari A, Awasthi S, **Singh RK**, A, Sharma N Uniyal A. Thermophilic cyanobacteria: an untapped reservoir of pharmacological leads. Eur Chem Bul (2063-5346) 2023; 12 Special issue (5): 2802 2809. doi: 10.53555/ecb/2023.12.si5a.01612023.07/12/2023
- Uniyal S, and Singh RK. Impact of different carrier material on the viability of Nostoc sp. HNBGU 006. Eur Chem Bul (2063-5346) 2023; 12 (10): 6860-6867. doi: 10.48047/ecb/2023.12.10.4922023.22/07/2023
- 3. Tyagi S, Baswal N, **Singh RK**, A, Sharma N Uniyal A. RNA Viruses: A Review on Rapid Adaptation Potential and Globally Emerged Pandemics. Acta Sci Microbiol (2581-3226) 2023; 6 (8): 57-72. doi: 10.31080/ASMI.2023.06.1285
- 4. Bhandari M, **Singh RK**. Screening of Cyanobacterial Strains Isolated from Garhwal Himalaya for Polyhydroxybutyrate Production. J. Env. Bio-Sci. (0973-6913), 2023; 37 (1): 83-87. Doi: 10.59467/JEBS.2023.37.83
- 5. Bhandari M, **Singh RK**, Laishevtcev A, Mohapatra TM, Nigam M, Mori E, Vasconcelos de Lacerda BCG, Coutinho HM, Mishra AP. (2022). Revisiting Scrub typhus: A neglected tropical disease. Comparative Immunology, Microbiology and Infectious Diseases (0147-9571) 90-91. doi: 10.1016/j.cimid.2022.101888
- 6. Nigam M, Panwar AS, Singh RK. (2022) Orchestrating the Fecal microbiota transplantation: Current technological advancements and potential biomedical application. Frontiers in Medical Technology (2673-3129) 4; 961569. doi: 10.3389/fmedt.2022.961569
- 7. Uniyal S, Bhandari M, Singh P, **Singh RK**, Tiwari SP. (2022) Cytokinin biosynthesis in cyanobacteria: Insights for crop improvement. Frontiers in Genetics (1664-8021; IF= 4.77). 13; doi.org/10.3389/fgene.2022.933226
- 8. Karthic A, Kesarwani V, Singh RK, Yadav PK, Chaturvedi N, Chauhan P, Yadav

- BS, Kushwaha SK. (2022) Computational Analysis Reveals Monomethylated Triazolopyrimidine as a Novel Inhibitor of SARS-CoV-2 RNA-Dependent RNA Polymerase (RdRp). **Molecules** (1420-3049; IF= 4.927) 27 (3): 801. https://doi.org/10.3390/molecules27030801
- Olatunde A, Nigam M, Singh RK, Panwar AS, Lasisi A, Alhumaydhi FA, Kumar VJ, Mishra AP, Sharifi-Rad J. (2021) Cancer and diabetes: the interlinking metabolic pathways and repurposing actions of antidiabetic drugs. Cancer Cell International (1475-2867; IF = 5.72) 21 (1): 499.
- 10. Tyagi S, **Singh RK**, Tiwari SP. (2021) Anti-enterococcal and anti-oxidative potential of *Leptolyngbya* sp. HNBGU 003. **Saudi Journal of Biological Sciences** (1319-562X; IF = 4.2). 28: 4022-4028. https://doi.org/10.1016/j.sjbs.2021.04.003
- 11. Budakoti M, Panwar AS, Molpa D, **Singh RK**, Büsselberg D, Mishra AP, Coutinho HDM, Nigam M. (2021) Micro-RNA: The darkhorse of cancer **Cellular Signalling** (0898-6568; IF = 3.9) 83, 109995.
- 12. Singh RK, Yadav BS, Mohapatra TM. (2020) Molecular drug targets and system biology approaches for drug repurposing against SARS-CoV-2. Bulletin of the National Research Center. (2522-8307) 44:193. https://doi.org/10.1186/s42269-020-00444-3
- Tyagi S, Singh RK. (2020) Chemical profile of the antibacterial component from Leptolyngbya sp. HNBGU 002 isolated from a hot spring of Garhwal Himalaya. Int. J. Pharmceut. Sci. Res. (0975-8232) 11 (10): 5225-5238.

Book Chapters

- Microorganisms as Drivers of Host-Parasite Interactions. Negi R, Bhandari M, Singh RK, Mohapatra TM. In: Parasitic Infections: Immune Responses and Therapeutics, First Edition. Eds. Mishra AP, Nigam M. John Wiley & Sons, Inc. USA (2024). ISBN: 9781119878025
- 2. Oesophagostomum Infection. Negi R, **Singh RK**, Raj VS, Mohaptara TM. In: Textbook of Parasitic Zoonoses. Eds. Parija SC, Chaudhary A. Springer Nature, Singapore (2022). eISBN: 978-981-16-7204-0
- 3. Mammomonogamiasis. Bhandari M, **Singh RK**, Raj VS, Mohaptara TM. In: Textbook of Parasitic Zoonoses. Eds. Parija SC, Chaudhary A. Springer Nature, Singapore (2022). eISBN: 978-981-16-7204-0
- 4. Dipylidiasis. Pandey RP, Raj VS, **Singh RK**, Mohaptara TM. In: Textbook of Parasitic Zoonoses. Eds. Parija SC, Chaudhary A. Springer Nature, Singapore (2022). eISBN: 978-981-16-7204-0
- Dicrocoeliasias. Raj VS, Pandey RP, Singh RK, Mohaptara TM. In: Textbook of Parasitic Zoonoses. Eds. Parija SC, Chaudhary A. Springer Nature, Singapore (2022). eISBN: 978-981-16-7204-0
- Ecology of Diazotrophic Microbiome. Singh P, Singh RK, Tiwari SP, Kumar D. In: The Plant Microbiome in Sustainable Agriculture. Eds. Srivastava AK, Kashyap PL, Srivastava M. John Willey & Sons, USA, pp: 81-99 (2020). ISBN: 978-1-119-50516-7
- Microalgae: potential agent for carbon dioxide mitigation. Singh P, Singh RK, Kumar D. In: Microbes for Climate Resilient Agriculture. Eds. Kashyap PL, Srivastava AK, Kumar S, Tiwari SP. John Willey & Sons, USA, (2018). ISBN: 9781119275923
- 8. From Leuwenhoek to Craig Venter. Sharma R, Srivastav R, **Singh RK**, Tiwari SP. In: Recent Advances in Microbiology Vol 3. Eds. Tiwari SP, Sharma R, Gautam NC. Nova Science Publishers, Inc. New York, USA, (2018). **ISBN:** 9781536140583
- 9. Cyanobacteria: a new terminus for anti-infectious agents. Tyagi S, Singh P, **Singh RK**. In: The role of photosynthetic organisms in agriculture and industry. Eds: Tripathi KN, Kumar N, Abraham G. Nova Science Publishers, Inc. New York, USA, (2018). **ISBN:** 978-1536140323