

DR. SUBASH CHANDRA S.

SUMMARY

A distinguished researcher with more than 10 years of research and teaching experience with specializing in Microbiology, Public Health, Medical Diagnostics, and Molecular Biology, Currently serving as a Research Scientist-II at the Multidisciplinary Research Unit (MRU) of Maulana Azad Medical College and Associated Hospital in New Delhi, India. Additionally, holding the position of Institute of Eminence Fellow at the Delhi School of Public Health, Institute of Eminence, University of Delhi.

Research Interests :

Molecular Diagnostics: Developing and validating PCR-based assays for the detection of sexually transmitted infections such as *Chlamydia trachomatis*, *Neisseria gonorrhoeae*, and *Trichomonas vaginalis*.

Public Health Studies: Investigating the effectiveness of syndromic case management in controlling sexually transmitted infections and antibiotic resistance among women in India.

COVID-19 Research: Studying the presence of SARS-CoV-2 in atmospheric air and surfaces of COVID-dedicated hospitals, as well as evaluating the potential of curcumin as a therapeutic agent against COVID-19

Cancer Research: Exploring therapeutic approaches, including the use of monoclonal antibodies and phytopharmaceuticals, for cancer treatment.

Publications and Citations:

Corresponding, 1st Author and co-authored 61 publications, 02 Books with ≥ 900 Citations, H-15 & I-10 is 21.

EXPERIENCE

Institute of Eminence Fellow, 06/2022 - Current

Delhi School of Public Health - Delhi, India, India

- Data analysis, community organizing, leadership, grant writing, public speaking, and media relations, to address public health challenges.
- Worked independently and in collaboration with colleagues to submit proposals and bids for funding and scholarships to enrich student experience and education.
- Facilitated high-level meetings and workshops, effectively gathering consensus among diverse stakeholder groups.
- Conducted individual, collaborative and Multicentric research projects to produce and publish articles in peer-reviewed journals.
- Supervised and mentored postgraduate students, guiding thesis research and supporting academic and professional development.

Research Scientist-II, 02/2020 - Current

Maulana Azad Medical College and Associated Hospital - New Delhi, India, India

- Led day-to-day R&D activities and related project planning and resource allocation.
- Led cross-functional teams in the development of innovative research methodologies, enhancing project outcomes.
- Authored and co-authored research papers for publication in peer-reviewed journals, contributing to scientific knowledge.
- Presented findings at international conferences, engaging with the scientific



CONTACT

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SKILLS

- Excellent written and verbal skills
- Great presentation skills
- Interdisciplinary collaboration
- Critical analysis
- Teaching material development
- Lecturing proficiency
- Scientific experimentation setups
- Professional Development
- **Academic leadership**
- **Conflict resolution in academia**
- **Student performance evaluation**
- **Journal publication procedures**
- Professional accreditation processes
- Departmental planning
- Research proficiency
- **Decision-Making acumen**
- Student development
- Learning management systems operation
- Online class discussion
- **Research dissemination**
- Advanced data analysis
- **Individual mentoring**
- Remote teaching techniques
- **Tutorial planning**
- **Peer review experience**
- **Internship supervision**
- **Proposal development**
- **Academic writing mastery**
- **Multicultural sensitivity**
- **Grant writing acumen**
- **Grant application experience**
- **Scholarly databases search**
- **Networking expertise**

community to share insights and foster collaborations.

- Secured funding for research projects through the successful application for grants and awards from scientific bodies.
- Provided mentors-hip to junior researchers, guiding them in research methodologies and best practices.
- Developed and maintained research project timelines, ensuring milestones were met within budget constraints.
- Recruited qualified staff and mentored team on best practices to build cohesive, well-performing group, Collaborated with team members to achieve target results.

Technical Advisor Cum Consultant, 02/2019- 06/2009

Indian Council of Medical Research (ICMR), New Delhi, India

- Overall Project Progress of National Capacity building programs on mental health.
- Responsible for Implementation and monitoring of all stake holder across the country and Internationally collaborations.
- Collaborated with team members to achieve target results.

Global Health Emerging Scholar (PDF)Fellows, 09/2018 - 02/2019

Florida International University, Miami USA &Public Health Research Institute of India (PHRII) - Mysore, Karnataka, India

- Role of viral infection and its association with adverse birth outcomes in pregnant women.
- Collaborated with team members to achieve target results.
- Identified issues, analyzed information and provided solutions to problems.
- Trained and mentored employees to maximize team performance.
- Collaborated with team members to achieve target results.

National Postdoctoral Fellow, 07/2016 - 07/2018

Department of Obs & Gynae, Vardhmaan Mahaveer Medical College and Safdarjung Hospital - New Delhi, India, India

- Design and development of RT-LAMP and LFA-based POC devices for the diagnosis of SARS-CoV-2, and its clinical evaluations.
- Responsible for overall project progress and developments, and achieved service time and quality targets.
- Engaged in ongoing professional development, attending workshops and conferences to stay abreast of pedagogical advancements.
- Worked independently and in collaboration with colleagues to submit proposals and bids for funding and scholarships to enrich student experience and education.

Postdoctoral Fellow, 08/2015 - 07/2016

Department of Biomedical Science, University of Delhi - Delhi, India, India

- Multiplex qPCR-based diagnostic kit for simultaneous detection of *N. Gonorrhoeae*, *C. Trachomatis* and *T. Vaginalis*.
- Developed excellent working knowledge of industry trends and improvements in processes.
- Prepared range of written communications, documents and reports.
- Met schedule using excellent planning and coordination skills..
- Identified issues, analysed information and provided solutions to problems.

Doctoral Researcher, 10/2010 - 08/2015

Delhi University - NEW DELHI, India

- Mentored students to support achievement of target grades.
- Liaised with ethics committees to secure approval for research protocols, adhering to ethical guidelines.
- Developed innovative methodologies to address research challenges, improving efficiency and accuracy.
- Evaluated the impact of research findings on policy and practice, advocating for

- **Class organisation**
- **Exam proctoring**
- **Faculty communication**
- **Seminar management**
- **Plagiarism detection software proficiency**
- **Project leadership**
- **Data visualisation techniques**
- **Curriculum Development**
- **In-class lectures**
- **Budgeting and finance**
- **Negotiation prowess**
- **Vision development**
- **Academic publishing platforms familiarity**
- **Human behaviour education**
- **Lecture planning**
- **Lecture preparation**
- **Classroom management**
- **Research data analysis**
- **Friendly and approachable**
- **People Management**
- **Class management**
- **Data collection and interpretation**
- **Assessment marking, grading, feedback**
- **Research and analysis**
- **Quality education**
- **Research methodology expertise**
- **Syllabus development**
- **Subject Matter Expertise**
- **Student progress reporting**
- **Literature analysis**
- **Assignment monitoring**
- **Proofreading and editing**
- **Time management in research**
- **Literature review proficiency**
- **Institutional collaboration**
- **Critical thinking facilitation**
- **Time management mastery**
- **Subject-Specific knowledge**

Projects completed or ongoing

- Detection of SARS-COVID-19 antigen from different biological samples, such as urine, serum, saliva, nasopharyngeal or oropharyngeal swab, and stool, by a rapid antigen kit coated with single or multiple SARS-COVID-19 antigens
- Evaluation of the performance of detection of IgG and IgM antibodies against spike protein of SARS-CoV-2 by a rapid kit approved by ICMR
- Development of rapid test (LFIA) for detection of inflammatory biomarkers [procalcitonin (PCT), C-reactive protein (CRP), serum ferritin, and interleukin-6 (IL-6)] in serum of COVID-19 patients

evidence-based decision-making.

- Conducted comprehensive literature reviews to identify research gaps in the field of study. Analysed complex data sets using statistical software to draw meaningful conclusions.

NOTABLE ACHIEVEMENTS

- Part of Ph.D was nominated for President Visitor Awards, 2015
- Established SARS-CoV-2 diagnostic lab and trained manpower for its diagnosis, 2020 during pandemic
- Established a Centralized facility MRU, MAMC & Secured funding of **07 Cr.** research projects

EDUCATION

Ph.D., Biomedical Science, 08/2015

University of Delhi - New Delhi, IN-DL, India

Titled "Designing and Clinical Evaluation of NAAT-Based Diagnostic Assays for Detection of *Trichomonas vaginalis*"

Outcomes: Publications, Patents, Nominated President Visitor Awards in 2015

Publications PMID: 36465932, PMID: 36274971, PMID: 27318568, PMID: 28469158 PMID: 27146362, PMID: 30051801, PMID: 25802857, PMID: 20822551

M.Sc., Applied Microbiology, 07/2007

Institute of Science, Banaras Hindu University - Varanasi, India

Research dissertations completed from the Department of Microbiology, AIIMS, New Delhi 110029 under the supervision of Prof. Director Arti Kapil, I worked on AMR due to lack of accurate diagnosis

B.Sc., Program (Chemistry, Botany, Zoology), 07/2004

V.B.S. Purvanchal University - Jounpur, Uttar Pradesh, India

LANGUAGES

English:

C2

Hindi:

C2

Proficient

Proficient

CERTIFICATIONS

- Certification for Responsible Conduct of Biomedical Research
- Certification for Biomedical Human Subject Research Course
- CITI Certificates in Good Clinical Practice (GCP) for Clinical Trials with Investigational Drugs and Medical Devices (U.S. FDA Focus)
- Certification for IRB Member -Human Subjects Research
- Certification for Protecting Human Research (National Institutes of Health (NIH): Intramural Research Program (IRP)
- Clinical Research Training Course: IPPCR National Institutes of Health (NIH): Intramural Research Program (IRP)
- Master Project Manager Assessments
- Program Managements Professionals (PgMP Assessment)
- Project Managements Professional Assessments
- Certified Scrum Master Assessment

- Role of viral infection and its association in adverse birth outcomes
- Design and development of RT-LAMP and LFA-based POC devices for the diagnosis of SARS-CoV-2, and its clinical evaluations
- In-house assembled protective devices in laboratory safety against SARS-CoV-2, in the clinical biochemistry laboratory of a COVID-dedicated hospita
- Biochemical profile of COVID-19 patients
- Detection of SARS-COVID-19 antigen from different biological samples like urine, serum, saliva, nasopharyngeal or oropharyngeal swab, and stool etc by rapid antigen kit coated with single or multiple SARS-COVID-19 antigens
- To develop an algorithm to map and know the status of the burden of blood-borne diseases
- Development and validation of lateral flow immunoassay-based point-of-care (POC) diagnostic kit for salivary IGF-1 to predict skeletal maturity
- Development of point-of-care test kits for the diagnosis of patients with suspected oral squamous cell carcinoma
- Development of point-of-care test kits for detection of inflammatory status of pulp in patients with deep caries
- In-house development and validation of nanoparticle-based Point of Care Test (POCT) device for early detection of acute myocardial infections