

Dr. Seema Sood, MD, FAMS

Professor, Department of Microbiology E. mail: seemalsood@gmail.com

Dr. Seema Sood has made significant contributions to the advancement of diagnostic technologies for sexually transmitted infections (STIs), with innovations such as DNA Biosensors, Aptamers, LAMP and various other cutting-edge methods. Presently, her focus is on creating a Point-of-Care Test (POCT) for Bacterial Vaginosis, a polymicrobial infection and *Chlamydia trachomatis*. Additionally, she is actively involved in exploring alternative treatment approaches for gonorrhoea and conducting STI testing among high-risk populations, specifically men who have sex with men (MSMs).

In the past, Dr. Sood established a National Network for the surveillance of AMR for *Neisseria gonorrhoeae* with centres across India with financial assistance from ICMR. Her laboratory has been participating in the EQAS programme of WHO GASP since 2005 with excellent results. Furthermore, Dr. Sood's laboratory has played an active role in contributing to molecular epidemiology studies of *Neisseria gonorrhoeae*.

She has also been involved in formulation of Guidelines for Screening and Testing for STIs in Asia-Pacific Region. Furthermore, she is technical expert for NACO and has contributed to the publication of four NACO documents. She has previously also served as a resource person for WHO workshops.

Currently she is Elected member IUSTI World Executive Committee, Vice-Chair South Asia Subregion of IUSTI Asia Pacific.

In addition to the STD laboratory, Dr. Sood has been working in the general Bacteriology Division where her research interest includes enteric fever, ICU infections particularly, VAP.

Honors/ Awards:

1. Fellow- National Academy of Medical Sciences (FAMS)- 2024
2. Dr. R.V. Rajam Endowment Oration, ASTICON-2023
3. AIIMS Excellence Research Award, 2021
4. Included in Erudite Women's Outstanding Contribution to the Indian Medical education: A recognition on International Women's Day, 2021
5. ICMR Lala Ram Chand Kandhari Award for research in the field of Dermatology and Sexually Transmitted Diseases-2016
6. Dr. P.S. Ranganathan Memorial Prize-Gold Medal-2013
7. R.A. Bhujwala Award-2012
8. Best Paper Award-International Union of STI (IUSTI) World Congress-2011 in Basic Science Category
9. Others: Dr. V. Govindan Nair Memorial Award- ASTICON 2017
Rabindranath Dutta Memorial Award- ASTICON 2022,
Dr. Sardarilal Memorial Award- ASTICON 2025

Patents: Four

Publications: 200 research papers, 5 chapters in books and 1 Text book

H-index: 42

Few Recent Research Papers

1. Vaitheeswaran KK, **Sood S**, Soneja M, Ray A, Pandey S, Kapil A, Wig N. *In vitro* evaluation of sulbactam combination therapies for *Acinetobacter baumannii*. Indian J Med Microbiol. 2026;60:101051
2. Malhotra S, Verma R, **Sood S**. Advancing STI diagnostics - Potential of aptasensors as POCTs. Indian J Med Microbiol. 2025;56:100900.
3. Verma R, Gupta S, **Sood S**. Resurgence of sexually transmitted infections: Surveillance insights from a North Indian tertiary care hospital. Indian J Sex Transm Dis AIDS. 2025;46(1):100.
4. **Sood S**, Gupta S, Verma R, Singh R, Agrawal SK, Mahajan N, Sharma VK. Analysis of *Neisseria gonorrhoeae* susceptibility trends (MIC creep) from North India: A 15-years' experience! Indian J Dermatol Venereol Leprol. 2025;91(4):432-439.
5. Bhattacharya A, Gupta S, Verma R, Das BK, Kapil A, Singh R, Sreenivas V and **Sood S**. Detection of *Neisseria gonorrhoeae* in Genital and Extragenital Sites in Men Who Have Sex With Men in India. Sex Transm Dis 2023; 50(2): 128

Research guidance (Chief- Guide)

PhD students: 4

MD students : 8

DM (Infectious Diseases) : 5

STD Lab services information:

Specimen from the STD clinics and Gynaecology Department are received for testing for the reproductive tract infections (RTIs) or the bacterial STIs. The direct smears for Bacterial Vaginosis or vaginitis are screened. Microscopy and cultures for *N. gonorrhoeae* and the antibiotic resistance monitoring is undertaken. Besides, the semen specimens & EPS are cultured in suspected bacterial infections. PCR for *N. gonorrhoeae* and *C. trachomatis* for genital & extragenital samples is available. Culture & PCR for *T. vaginalis* is also available. In addition, dark ground microscopy & PCR for *Treponema pallidum* from ulcer lesions/ blood is available.