

## **National Seminar of Immunology on “Frontiers in Immunology- Engaging Minds and Hearts”**

Department of Microbiology, School of Life Sciences, St Joseph's University in association with DpN lab, Department of Biochemistry, IISc., Bengaluru with support of Indian Immunology Society, New Delhi, organised National Seminar on "Frontiers in Microbiology - Engaging minds and hearts" On International Immunology Day 29 April 2023.

The keynote address was delivered by Dr Dipankar Nandi, Professor, Department of Biochemistry, IISc., Bengaluru. In his keynote address, Dr Nandi emphasised on the importance of making knowledge, especially on immunology accessible to one and all.

The second speaker was Dr Sudha Kumari, Assistant Professor, Department of Microbiology and Cell Biology, IISc., Bengaluru. She developed on the first talk by talking about immunosurveillance which can be understood as a cellular ‘hand-shake’.

The focus on T-cells remained as the third speaker, Ms Prerana M, a PhD student under Dr Kushagra Bansal, Molecular Biology and Genetics Unit, JNCASR, Bengaluru spoke about the development of T-cells in the thymus.

We were also shown the exciting field of immunology in plants by Dr Debabrata Laha, Assistant Professor, Department of Biochemistry, IISc., Bengaluru, who found inspiration to study plants from his hard-working father who works in agriculture. Dr Laha mentioned that the immune system of plants does not involve mobile defender cells and adaptive immunity, but relies completely on innate immunity.

After this enriching talk, our focus returned to animal immunity, this time to the question ‘Why are bats suitable hosts to pathogens like the SARS and the Nipah viruses?’ by Dr Kesav Sannula, Assistant Professor, Department of Biochemistry, IISc., Bengaluru. To understand the reason, Dr Sannula talked about how many of the viral diseases were caused by RNA viruses.

From viruses that stimulate immune responses, even those which cause fatal consequences, Prof. Uday Kumar Ranga, Molecular Biology and Genetics Unit, JNCASR, Bengaluru, pointed out a different virus, a retrovirus, that does not stimulate needed immune responses, which causes their proliferation, which have deadly repercussions. As a researcher on the two viruses, one cell model, Dr Ranga explains how HIV sleeps.

To end this illuminating seminar on a lighter note, Dr Sandeep Eswarappa, Associate Professor, Department of Biochemistry, IISc., Bengaluru, delivered a talk that was equally informative and witty. Based on his experience as a clinician and a researcher, Dr Eswarappa, using his humour, touched upon the importance of understanding evolution to combat diseases.

The seminar ended with a summary of the talks that were presented under the Umbrella of “Frontiers in Immunology – Engaging Minds and Hearts”. It was a real engagement of the minds and hearts of the participants with the resource persons, as they kept them engrossed although the seminar with their knowledge, oratory skills and humour.

The seminar received a great response from more than 15 Colleges and Universities. Around 200 participants attended the seminar. Well received by the audience. Great line of lecture series by professors from IISc. and JNCSAR. It was a real scientific treat for the audience.

The seminar was convened by Dr Syed Wajeed, Associate Professor, Department of Microbiology, St Joseph's University, Bengaluru, and Dr Dipankar Nandi, Professor, Department of Biochemistry, IISc., Bengaluru.

We thank the Pro-Chancellor, Vice-Chancellor, Pro-Vice-Chancellors, Registrar, Finance officer, management, staff, and students of the Department of Microbiology for the successful completion of the seminar.

For the Images of The National Seminar on "Frontiers in Microbiology - Engaging Minds and Hearts", kindly refer to the Photo Gallery: <https://www.sju.edu.in/gallery/16>