



Golden Jubilee

Conference of

Indian Immunology Society

5th-8th Oct 2023, JL Auditorium AIIMS, New Delhi

Frontiers In Immunology: A Gateway To Healthcare



Day 01: Inaugural Function, Thursday 5th October 2023

Venue: JL Auditorium, AIIMS, New Delhi

09:00 AM- 06:00 PM

Registration

15:30 - 16:30

INDUSTRY- ACADEMIA SESSION

Moderators: Prof NK Ganguly, Prof NK Mehra

Speakers: Dr Rajesh Jain (Panacea Biotech Ltd), Dr Neerja Hajela (Yakult),

Dr. Dinesh Kundu (Allogenic Cell-Based Therapy)

BREAK

16:40 - 19:20

INAUGURATION

16:40

Welcome all dignitaries
Invocation and lamp lighting

16:45

Dr. Uma Kanga

Welcome by Organizing Secretary and Convener

16:50

Prof. GP Talwar

Address, Founder President IIS

17:00

Prof. Narinder K Mehra

Address, Founder Member IIS

17:05

Dr. Taruna Madan

Presidential Address
Souvenir Release by Dignitaries

17:15

Dr Rajesh Gokhale

Address by Guest of Honor, Secretary DBT, Govt of India

17:20

Prof. M Srinivas

Address by Guest of Honor & Patron- Director, AIIMS, New Delhi

17:25

Prof. Vinod K. Paul

Address by Chief Guest, Member of Niti Ayog, Govt of India

17:40

Felicitation of Former IIS Presidents

18:10

Prof. Sujata Mohanty

Vote of Thanks

18:15

Prof. Narinder K Mehra: Immunology Over the Years in India

Cultural Program

18:35

- **Bharatnatyam Dance** Recital by Sudhana Sankar (30 min)
- **Flute and Tabla: Jugalbandi** by Mr. Anil Lakhera, Mr. Satish Pathak on Flute & Mr. Mohit Raj on Tabla (15 min)

19:30 onwards

WELCOME DINNER

Venue: AIIMS Swimming Pool Lawns

Day 02: Friday 6th October, 2023

Venue: JL Auditorium, AIIMS, New Delhi

08:00 onwards: Registration

SESSION 01: 09:00 – 10:00		Chairpersons: NK Ganguly, Akhil Banerjee
Clive Gray (25+5) mins Title: The HIV epidemic in South Africa: understanding the immunology of poor birth outcomes and immune ontogeny in HIV exposed infants		
Vishwa Deep Dixit (25+5) Title: Immunometabolic checkpoints of aging and longevity		
SESSION 02: 10:00 - 10:30		Chairpersons: DN Rao, Sita Naik
Kamal Khanna (25+5) Title: The remarkable functions of lung-resident nerve and airway-associated interstitial macrophages (NAMs)		
BREAK (15mins)		
Hall – A (JL Auditorium)	Hall – B (Conference Hall)	Hall – C (SET Facility)
SESSION 03: INFECTIOUS DISEASES-I, (10:45 - 13:10)	SESSION 04: COMPLEMENT & AUTOIMMUNITY, (10:45 - 13:10)	SESSION 05: MICROBIOTA, (10:45 - 13:10)
Chairpersons: Jayanta Bhattacharya, Anant M Srivastava	Chairpersons: LM Srivastava, Nibhriti Das	Chairpersons: Anil Kumar, Zafar A Shah
Akhil Banerjea (25+5) Exploitation of host cellular machinery by viruses of public health importance	Arvind Sahu (25+5) Virus-Complement Tango: A Molecular Perspective	Vineet Ahuja (25+5) Alteration of epithelial single cell transcriptomics with Faecal Microbial Transplantation in Ulcerative Colitis
Devinder Sehgal (15+5) Immunity to <i>Streptococcus pneumoniae</i> : Molecular insights from protective monoclonal antibodies	Geeta Rai (15+5) Amelioration of autoimmunity in systemic lupus erythematosus by dexamethasone primed mesenchymal stem cells conditioned media	Vikrant M Bhor (15+5) Dysregulated Gut Microbiota–Immune Crosstalk: Implications for Severity of HCMV Infection in Infants
RP Mishra (15+5) Prefusion-stabilized trimeric spike protein: The next generation protein-subunit vaccine candidate against SARS-CoV-2	Hadida Yasmin (15+5) Expression of complement Factor H during pregnancy and its protective role against the development of preeclampsia	Rashmi Kumar (12+3) Aging mediated gut microbiota dysbiosis influences the function of dendritic cells
Monika Sharma (12+3) Mycobacterium tuberculosis protein PPE15 (Rv1039c) interferes with NADPH Oxidase assembly to inhibit Reactive Oxygen Species production as its survival strategy in host macrophages	Biswadev Bishayi (12+3) Combined antibody therapy regulates the severity of septic arthritis via modulating synovial Th17/Treg homeostasis	KP Kochhar (12+3) Indian traditional Diet as a Natural Immunity booster
Rajeev K. Tyagi (12+3) Oleuropein activates autophagy to circumvent anti-plasmodial defense	Neeraj Kumar (12+3) Identification of HLA-DR3/DQ2 restricted immunogenic peptides of GAD65 protein in Type 1 diabetes	Pragyan Acharya (12+3) Immunomodulation in Acute-on-Chronic Liver Failure: A lipid story!

Hridayesh Prakash (12+3) Designing new Anti-Tubercular Regimens for Controlling latent / MDR tuberculosis	Sunil K. Raghav (12+3) Metabolic control of Immune-tolerance and Inflammation balance in Dendritic cells by NCoR1 and SMRT	Rizwanul Haque (12+3) Telomerase mediated Apoptosis induction in Liver Cancer
Deepak Tripathi (12+3) Metabolites mediated innate resistance to human Mycobacterium tuberculosis infection	Amar Singh (12+3) Decoding Immunobiology of Nonchimeric Tx Tolerance: Insights from Preclinical Islet Tx Studies in Nonhuman Primate Models	Monisha Dhiman (12+3) Inflammasome Activation and its Regulation during Helicobacter pylori Pathogenesis
LUNCH (13:00 – 14:00)		
SESSION 06: POSTER SESSION (14:00 – 15:00)		
SESSION 07: INFECTIOUS DISEASES-II, (15:00 - 16:30)	SESSION 08: YOUNG SCIENTIST- ORAL ABSTRACTS SESSION-I, (15:00 - 16:30)	SESSION 09: YOUNG SCIENTIST- ORAL ABSTRACTS SESSION-II, (15:00 - 16:30)
Chairpersons: Pawan Sharma, Santosh Kar	Chairpersons: Uday Kishore, Ravi K Gutti	Chairpersons: K Balakrishnan, Rupesh Srivastava
Sarat Dalai (25+5) Plasmodium berghei radiation-attenuated sporozoite-immunized mice require challenge to maintain protective immunity	Aswathy S Nair (8+2) Homocysteine and associated biochemical modifications induces neutrophil extracellular traps and platelet activation in ischemic stroke	Harsha Chandrashekhar Palav (8+2) Integrated Screening and Anti-Viral Immune Profile of HCMV Infection in High Risk Pregnant Women and its Association with Adverse Pregnancy Outcome
Shubhankar Kumar Singh (12+3) Evaluation of the immunological response to recombinant ACP reductase from Leishmania donovani	Bharat Singh (8+2) IL-10 augments exonal switch to HERV-E derived E1B variant of cd5 gene in aged T cells in a CEBP- β dependent manner	Pronabesh Ghosh (8+2) Targeting Myeloid Derived Suppressor Cells (MDSCs) in an IL-6 dependent manner to control disease severity during experimental cerebral malaria
Suprabhat Mukherjee (12+3) Exploring the mechanism of immunopathogenesis of bancroftian filariasis: a scope of immunotherapy	Sourav Dutta (8+2) Nuclear HMGB1: Bridging Mitochondrial Dysfunction and Sterile Inflammation Pathways	Puja Pramod Pawar (8+2) Increased microRNA-155 contributes to compromised innate immune response among HIV infected progressors
Pradip Sen (12+3) TIM-3: a key mediator of type-2 dendritic cell polarization during Leishmania donovani infection	Leena Sapra (8+2) (Functionally compromised regulatory B cells (Bregs) augment inflammatory bone loss under estrogen deficient osteoporotic conditions)	Ritirupa Roy (8+2) Different microRNA profiles in the circulation are associated with different clinical presentations of Leishmania donovani infection
Itu Singh (12+3) Exploring immunological phenomena to understand tissue damage in Type 1 Reaction of leprosy	Susmita Srivastava (8+2) CYT387 restores the Th17/Treg balance and inhibits mature osteoclast formation via regulating SOX-5 signaling in an adjuvant-induced arthritic rat model of rheumatoid arthritis.	Shivani Yadav (8+2) Azithromycin enhances expression of transcriptional factors upstream (PU.1, C/EBP β) and downstream (pERK1/2) to CSF-1R causing M2-skewing of macrophages: A new facet in immuno-modulating properties of azithromycin
Seema Chhabra (12+3) Low-density neutrophils in Hidradenitis Suppurativa	Kailash Ganesh (8+2) Metabolic Reprogramming in Type 2 Diabetes Leads to Inadequate Response of Neutrophils During Sepsis	Sushree Rekha Mallik (8+2) Unravelling the role of Arginine/ornithine transporter, ArgT, in the zoonotic bacterial pathogen, Brucella, to infect macrophages & mice.

	Aniket Kamble (8+2) A step towards development of HPV-16 therapeutic vaccine using immunoinformatics approach	Ann Miriam Jose (8+2) Deciphering myricetin as a novel IL-21 inhibitor and its underlying mechanism in impeding Tfh cell differentiation in rheumatoid arthritis
	Sanjib Das (8+2) Unravelling immunological insights using an intra-gastric surgical model in C57BL/6 mice for assessing vaccine efficacy against <i>Helicobacter pylori</i>	Shaifali Sharma (8+2) Development of elite plasma neutralizing activity in HIV-1 infected infant following superinfection
	Suparna Chakraborty (8+2) Evaluating the efficacy of an intranasal Vaccine Candidate, rCTB-T2544, against Paratyphoid Infection using iron overloaded murine model	Snehanshu Chowdhury (8+2) Elevating cytosolic Acetyl CoA pool enhances the therapeutic potential of anti-tumor CD8+ T cells

BREAK (16:45 – 17:00)

SESSION 10: (17:00 – 17:30)

Chairpersons: H. Krishna Prasad, Rajni Rani

Stefan HE Kaufmann, (25+5) (Virtual)

Title: Vaccination Against Tuberculosis: Lessons from the Past, Thoughts for the Future

SESSION 11: (17:30 – 18:00)

Chairpersons: AN Malaviya, Vijay Rathinam

Ritu Chakravarti (25+5)

Title: Molecular Mechanisms of Anti Arthritic effects of Anti Rheumatoid Arthritis Vaccine

IIS GENERAL BODY MEETING (18:00 – 19:00)

Dinner (by Invitation only) 20:00 Onwards

Day 3: Saturday 7th October 2023

08:30 onwards: Registration

SESSION 12: 09:00 - 09:30		Chairpersons: Alpana Sharma, Savita Yadav			
Dietrich Kabelitz (25+5) Title: Prospectives of gamma delta T cell for Cancer Immunotherapy					
SESSION 13: 09:30 – 10:00		Chairpersons: Devinder Sehgal, Satish Gupta			
Bryan Briney (25+5) Title: Improving computational models of human antibodies					
POLYFEENOLIX- IIS-BEST Teacher Awards Session (15min) Announcement by Prof. Santosh Kar					
SESSION 14: 10:15 - 10:45		Chairpersons: IIS Vice Presidents- Dipankar Nandi, Dipyaman Ganguly, Geeta Rai, Savita Kulkarni			
IIS- MID-CAREER Scientist Oration (30min)					
BREAK (10:45 - 11:00)					
Hall – A (JL Auditorium)		Hall – B (Conference Hall)		Hall – C (SET Facility)	
SESSION 15: VACCINOLOGY (11:00 - 13:00)		SESSION 16: CANCER IMMUNOTHERAPY (11:00 - 13:00)		SESSION 17: IMMUNOTHERAPY & IMMUNOINFORMATICS (11:00 - 13:00)	
Chairpersons: Balram Bhargava, Clive Gray		Chairpersons: Subrata Sinha, Alok C Bharti		Chairpersons: Punit Kaur, Sadhna Sharma	
Chairpersons Remarks (10min)		Chairperson Remarks (10 min) Human recombinant antibodies to an oncofetal antigen, the placental isozyme of Alkaline Phosphatase for tumor targeting			
Raiees Andrabi (25+5) Toward pan-betacoronavirus vaccines		Vibha Jawa (25+5) Early development considerations for Cell and Gene therapy Products to support clinical trials		Javed Agrewala (25+5) Acr1 nanovaccine displaying morphine and Pam3Cys elicits high affinity and enduring memory B cells protect from addiction	
Dipankar Nandi (15+5) Studies on T cell activation and the road to possible translational applications		Rahul Purwar (15+5) Make in India CAR-T cell therapy for cancer- journey from lab to clinic		Dipyaman Ganguly (15+5) ATP13A2 polyamine transporter regulates human plasmacytoid dendritic cell function	
Annapurna Vyakarnam (15+5) BCG vaccination - benefits on innate and adaptive immunity		Savita Kulkarni (15+5) Development of camel derived single domain antibody against human thyroglobulin, a thyroid cancer marker, opens a new avenue towards the immunotherapy of cancers		Sripad Patil (15+5) Extrapulmonary Tb: Diagnosis, And Management	
Naresh Sachdeva (12+3) Calcifediol boosts the efficacy of ChAdOx1 nCoV-19 vaccine via upregulation of key genes associated with memory T cell responses		Urmila Kulkarni Kale (15+5) Characterization of tumor immune microenvironment: A prerequisite to understand cancer prognosis		Kiran Kumar M N (12+3) Microdelivery of Vaccine-Adjuvant for Safe and Effective Epicutaneous Immunotherapy	
Adi Idris (12+3) An effective intranasal RNAi antiviral therapy against COVID-19 and other respiratory viruses		Manzoor Ahmad Mir (12+3) Deciphering the Molecular Mechanism of Stypoldione against Breast cancer through Network Pharmacology and experimental validation		Nima D Namsa (12+3) Immunoinformatics mapping of epitopes in the 56-kDa type-specific protein of Orientia tsutsugamushi	

		and development of chimeric antigens for rapid diagnosis of scrub typhus
Soma Rohatgi (12+3) Development of monoclonal antibodies against Spike protein of SARS-CoV-2 virus, followed by their Molecular and Functional Characterization	Ambak Kumar Rai (12+3) Hypoxia reduced CD5 expression on T cells, resulting in CD5neg/low infiltrating cells in solid tumor	Syed M. Faisal (12+3) Looking Beyond the Antigens: Adjuvants are Key to Success of Vaccines
Dablu Lal Gupta (12+3) Serum levels of cross-reactive antibodies against the spike protein variants of SARS-CoV-2 in the vaccinated and non-vaccinated people who have recovered from natural infection	Pramod Kumar Gautam (12+3) Whole proteomic profiling based approach to identify biomarkers for prognostic and diagnostic applications in prostate cancer patients	Dimpu Gogoi (12+3) Characteristics of circulatory gamma delta T cells in patients with symptomatic chronic hepatitis B Infection
LUNCH (13:10 – 14:00)		
SESSION 18: Poster Session (14:00 – 15:00)		
Hall – A (JL Auditorium)	Hall – B (Conference Hall)	Hall – C (SET Facility)
SESSION 19: IMMUNITY AND HEALTH (15:00 – 16:45)	SESSION 20: YOUNG SCIENTIST- ORAL ABSTRACTS SESSION-III (15:00 – 16:45)	SESSION 21: YOUNG SCIENTIST- ORAL ABSTRACTS SESSION-IV (15:00 – 16:45)
Chairpersons: Shashi Baruah, Madhuri Thakkar	Chairpersons: Roonmoni Deka, Ashok Sharma	Chairpersons: Sarat Dalai, Aparanji Poosrala
Anita K. Verma (15+5) To evaluate the osteogenic and immune response of miR 214a encapsulated Lipid nanoparticles to modulate crosstalk between osteoblast and osteoclast in 3D co-cultures	Anit Kaur (8+2) Utility of Multiplex Ligation dependent Probe Amplification for detecting copy number variations in Primary immunodeficiency Disease.	Anjali Gaur (8+2) Development of One Pot CRISPR/Cas12a based assay for detection of HIV-1 Indian subtype-C infections
Veron Ramsuran (15+5) HLA class II gene expression and regulation	Amit Lahiri (8+2) ORMDL3 regulates NLRP3 inflammasome activation by maintaining ER-mitochondria contacts in human macrophages and dictates ulcerative colitis patient outcome	Pawandeep Kaur (8+2) Impact of checkpoint Inhibitors on suppressed of immunity in tuberculosis
Nishelle Dsouza (12+3) Genuine IgE sensitization to Blomia tropicalis diagnosed using micro arrayed recombinant allergens	Proteesh Rana (8+2) Association of serum indoleamine 2,3-dioxygenase activity with co-morbid depression in patients with tuberculosis	Divya Kinha (8+2) Identification of Russell Viper Venom (RVV) neutralizing single domain antibodies (sdAb) and enhancing their potency using genetically-linked bispecific sdAb
Jyoti Kode (12+3) Phytoformulations act through regulating immunoectoenzyme CD26 in immune microenvironment and improve clinical outcome post Allogeneic Stem Cell Transplantation: Leads from pre-clinical and computation approaches	Asha Bhardwaj (8+2) Probiotics play a pivotal role in ameliorating inflammatory bone loss in osteoporosis via modulating immunoporotic ROR γ t+ pTregs cells	Surbhi Dahiya (8+2) Anti-DenV single domain antibody inhibits the dengue virus infectivity.
SB Anand (12+3)	Vidhi Vaidya (8+2) Association of plasma interferon-alpha with hypertension in pregnant women during the first stage of labour	Sachin Kushwaha (8+2)

Phage screening identified antigenic allergens potentially responsible for human filarial Tropical Pulmonary Eosinophilia (TPE)		Molecular evolution and repertoire diversity of antibodies elicited during immune response to a model glycoconjugate vaccine
Vaishali Agarwal (12+3) The temporal contribution of interferon- γ in driving T-cell exhaustion and response to immune checkpoint blockade	Supriya Sinha (8+2) Modulation of hematopoiesis during chronic filarial infection and its implication in trained immunity	Anwesha Kar (8+2) Targeting CD38-RyR2-AKT Axis Enhances Therapeutic efficacy of Anti-PD1 Immunotherapy in Tumors
	Yashvi Sharma (8+2) Enhancing the immunomodulatory properties of human Mesenchymal stem cells derived small Extracellular Vesicles via hypoxia priming	Shruti Mahapatra (8+2) MSCs-EVs loaded immunopotent bioactive hybrid scaffold: A innovative platform for wound care & healing
	Priyankar Dey (8+2) Catechin-microbiota interaction influence intestinal immunometabolic homeostasis: Mechanistic insights from pre-clinical studies	Kasturi Ganguly (8+2) Therapeutically Active RIG-I Agonist Transforms “Cold” Prostate Tumor into “Hot” Immunogenic Subtype
	Nidhi Gupta (8+2) Human endogenous retrovirus-R envelope as an anti-viral integrative element against SARS-CoV-2: A probable therapeutic option,	Jyotirmoyee Roy (8+2) IFN γ and TNF α induced PANoptosis in keratinocytes: Implications in inflammatory skin disorders
	Avik Chattopadhyay (8+2) High Throughput Screening Identifies Novel Pharmacological Inhibitors of Interferon-gamma-induced Nitric Oxide Production, Alleviating Ulcerative Colitis and Bacterial Sepsis in Mice	

BREAK (16:45 – 17:00)

SESSION 22: (17:00 – 17:30)

Chairpersons: Narinder K Mehra, Dietrich Kabelitz

Vijay Rathinam (25+5) mins

Title: Innate Immune Cell Death: Causes and Consequences

**SESSION 23: Technology Update-I
ThermoFisher Scientific, Beckman Coulter (17:30 – 18:00)**

SESSION 24: (18:00 - 18:30)

Chairpersons: Kalpana Luthra, Nimesh Gupta

Anna Durbin (25+5) (Virtual)

Title: Can we get a dengue vaccine over the finish line?

**Networking Time - GALA DINNER
India Habitat Centre - Margosa Lawns (20:00 onwards)**

Day 04: Sunday 8th Oct 2023

SESSION 25: (09:00 – 09:30) **Chairpersons:** Shyam Chauhan, Satyan Das

Sourav Ghosh (25+5)
Title: Effector Responses to Cell Death: Principles of Resolving and Resolving Injuries

Prof. Indira Nath Memorial Session (09:30 – 10:20)

H Krishna Prasad, AIIMS (10mins)
 Suman Laal, NYU (10mins)
 Aruna Mittal, ICMR (NIOP) (10mins)

SESSION 26: (10:20 – 10:50) **Chairpersons:**
Taruna Madan (IIS President), K Balakrishnan (IIS Secretary)

IIS-Senior Scientist Oration

BREAK (10:50 - 11:15)

SESSION 27: GPT – Young Scientist Award Session, (11:15 – 12:25)

Chairpersons: Archana Singh, Kaustuv Nayak

GPT 01	Ashu Singh (8+2)	Hyperkalemie reverberation induces autophagic death of Tissue resident memory T cells (TRMS) in patients with Renal cell carcinoma: a novel mechanistic approach for therapeutics.
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GPT 02	Doli Das (8+2)	Defective GPCRs signaling mediated through Rap1a/B-Raf/ERK results inefficient Neutrophil extracellular Trap formation in term low birth weight newborns: A study to discover of new therapeutic molecular targets of immune-compromised term low birth weight newborns
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GPT 03	Khushbu Priya (8+2)	IFN- γ -primed mesenchymal stem cells conditioned media immunomodulates immune responses in systemic lupus erythematosus patients in vitro and ameliorates clinical pathology in lupus disease mouse model
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GPT 04	Priyanka Dhahiya (8+2)	LIPX Enzyme of <i>Mycobacterium tuberculosis</i> : Shaping Infection Outcome through Enzymatic Activity and Immunomodulation
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GPT 05	Purbita Bandopadhyay (8+2)	Type I Interferon driven Gut Dysbiosis contributes to Insulin Resistance and promotes the Development of Metabolic Syndrome
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GPT 06	Upasana Madan (8+2)	Novel Tr1 cell modulators and their therapeutic potential in experimental colitis
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GPT 07	Yadya M Chawla (8+2)	Identification and design of minimum epitope pool to investigate dengue specific T cell responses during natural infections and vaccines
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Session 28: Technology Update-II (12:25 – 12:55)
Citadel Precision Medicine Limited, Becton Dickinson, abcam

(12:55 – 13:05) Prof. Clive Gray: 18th International Congress of Immunology, Cape Town, South Africa

LUNCH (13:05 - 14:00)

SESSION 29: OSTEOIMMUNOLOGY (14:00 – 15:10)	SESSION 30: INBORN ERRORS OF IMMUNITY (14:00 – 15:10)	SESSION 31: OCCULAR IMMUNOLOGY (14:00 – 15:10)
Chairpersons: Ravinder Goswami, Rohini Handa	Chairpersons: Manisha Madkaikar, Madhu Mohanty	Chairpersons: Uma Kanga, Sujata Mohanty

M. Wani (25+5) Immunomodulatory role of IL-3 in Rheumatoid Arthritis	Mukesh Desai (25+5) Monogenic susceptibility to EBV	K Dharmalingam (25+5) Antifungal Immune Response in Human Mycotic Keratitis
Naibedya Chattopadhyaya (15+5) Fine-Tuning Rheumatoid Arthritis Therapy: Selective Targeting of Joint Inflammation	Amita Agarwal (15+5) Autoinflammatory diseases & IEI	Soumyava Basu (15+5) Decoding the intraocular immune response – one cell at a time
Sanjay Bhadada (15+5) Landscape of Bone health and osteoporosis in diabetes	Biman Saikia (15+5) Fungal infections in IEI	T Velpandian (15+5) TLR-4 activation induced uveitis altering blood ocular barriers

(15:30 – 15:45)

Golden Jubilee Oration

Chairpersons: Nirmal K Ganguly, Narinder K Mehra
Prof Vijay Kuchroo

CLOSING CEREMONY (15:45 - 16:30)

PRIZE DISTRIBUTION

Closing remarks by Prof. GP Talwar: Immunology – The way forward (10 min)