



# FIMSA Immunology Course-2020

*A Virtual School- From Basic to Advanced Immunology*

## 8<sup>th</sup>-10<sup>th</sup> October 2020

Organised by  
**Indian Immunology Society**

Course Conveners: Sunil K Arora, President IIS  
Amit Awasthi, Secretary, IIS

FIMSA: Laura MacKay, President FIMSA

### Program

#### Day 1

<b>8 Oct (Thursday)</b>		
<b>(Lecture time 30 minutes Discussion 10 minutes)</b>		
<b>Basics of Immune System</b>		
10:00 – 10:20	Welcome Remarks Opening of the course	Sunil K Arora Laura Mackay Amit Awasthi
<b>Session-1: Moderator- Laura Mackay</b>		
10:30 –11:10	Living and dying in the thymus: an organ essential for immunity	Dipankar Nandi (IISc, Bangalore, India)
11:10 -11:20	Refreshment Break	
11:20 - 12:00	Thymus atrophy—continued talk	Dipankar Nandi (IISc, Bangalore, India)
12:00 – 12:10	Discussion on Session-1 lectures	
<b>Session-2: Moderator - Sunil K Arora</b>		
12:10 - 12:50	Innate Components of Immune-system	Himanshu Kumar (IISER, Bhopal, India)

12:50-13:30	Complement system	Arvind Sahu (NCCS, Pune, India)
13:30 -13:40	Discussion on Session-2 lectures	
13:40-14:40	Lunch Break	
<b>Basics of Immune System</b>		
<b>Session-3: Moderator- Amit Awasthi</b>		
14:40 – 15:20	Regulatory mechanisms of innate immune responses	Osamu Takeuchi (Japan)
15:20 – 16:00	MHC linked control of Immune Response	Manni L Guptasarma (PGIMER, India)
16:00 – 16:10	Discussion on Session-3 lectures	
16:10 – 16:20	Refreshment Break	
<b>Session-4: Moderator- Dil Afroze</b>		
16:20 – 17:00	Pattern recognition Receptors (PRRs)	Prafulakumar Tailor (NII, India)
17:00 – 17:40	Inflammation and the role of Neutrophils in Innate response	Monidipa Ghosh NIT, Durgapur, India
17:40 – 17:50	Discussion on Session-4 lectures	
<b>Session Break for late Keynote Lectures</b>		
<b>Keynote Session-I</b>		
<b>Session Moderator: Pawan Sharma</b>		
<b>(Lecture time:45 minutes + 15 minutes discussion)</b>		
18:00 – 19:00	Approaches to Human Immunology	Shiv Pillai (Harvard, USA)
19:00 – 20:00	B-cell responses and establishment of humoral immunity	Joshy Jacob Emory, USA

## Day 2

<b>9<sup>th</sup> Oct (Friday)</b>	<b>Basics of Immune-Response</b>	
<b>Session-5: Moderator- Sarat Dalai</b>		
10:00 – 10:40	T-Cell Activation and Differentiation	Joanna Groom (Australia)
10:40 – 11:30	Inter-organ diversity of Tissue resident Lymphocytes	Laura MacKay (Australia)
11:30 – 11:40	Discussion on Session-5 lectures	
11:40 – 12:00	Refreshment Break	
<b>Session-6: Moderator- Zingang Tian</b>		
12:00 – 12:40	T-cell subsets and cytokine storm	Amit Awasthi THSTI, India)
12:40 – 13:20	The function and mechanism of macrophages against infection	Hongyan WANG (China)
13:20-13:40	Discussion on Session-6 Lectures	
13:40 – 14:40	Lunch Break	
<b>9<sup>th</sup> Oct (Friday)</b>	<b>Immunology of Infections</b>	
<b>Session-7: Moderator- Kalpana Luthra</b>		
14:40 – 15:20	Immune-regulatory network in Protozoan infections	Rajiv Kumar (BHU, Varanasi, India)
15:20 – 16:00	Vaccine Development against Enteric Pathogens: Current Challenges	Priti Desai (Gandhinagar, India)
16:00 – 16:20	Discussion on Session-7 lectures	
<b>Refreshment Break for late afternoon start</b>		
<b>Keynote Session-II: on Covid-19</b>		
<b>Session Moderator: B Ravindran</b>		
<b>(Lecture time 45 minutes + Discussion 15 Minutes)</b>		
17:00 – 18:00	Host immunity and COVID-19	N K Mehra (AIIMS, India)
18:00 – 19:00	The Immunology of COVID-19	Shiv Pillai (Harvard, USA)
19:00 – 20:00	Modified Vaccinia Ankara (MVA) based vaccines for COVID-19	Rama Rao Amara Emory, USA

## Day 3

<b>10 Oct (Saturday)</b>	<b>Vaccines, Autoimmunity &amp; Cancer</b>	
<b>Keynote Session-III: Moderator- Nirmal K Ganguly</b>		
10:00 – 11:00	<b>Keynote Lecture</b> Recent Vaccine efforts against viral infections	Gagandeep Kang (CMC Vellore, India)
11:00 – 11:10	Discussion Q & A	
11:10 – 11:20	Refreshment Break	
<b>Session-8: Moderator- Anand N Malviya</b>		
11:20 – 12:00	Auto-immunity- mechanisms and spectrum	Dipyaman Ganguli (ICB, India)
12:00 – 12:40	Immune targets for therapy in autoimmune diseases	Amita Aggarwal (SGPGI, India)
12:40 – 13:20	The novel regulating roles of TREMs in inflammation of autoimmune and UUO nephritis	Nien-Jung Chen (Yang-Ming Univ. Taiwan)
13:20 – 13:30	Discussion Q & A	
13:30 – 14:30	Lunch Break	
<b>Session-9: Moderator- Shubada Chiplunkar</b>		
14:30 – 15:10	Mechanisms of Immunopathogenesis in Cancer	Girdhari Lal (NCCS, India)
15:10 – 15:50	Cancer Vaccine: Past, present and future	Gaurisankar Sa (Bose Institute, India)
15:50 – 16:00	Discussion Q & A	
16:00 – 18:00	<b>Session break for late Evening Keynote Session</b>	
<b>Keynote Session- IV</b>		
<b>Session Moderator: Narinder K Mehra</b>		
<b>(Lecture time: 45 minutes + Discussion 15 minutes)</b>		
18:00 – 19:00	Immunological Memory to Viral Infections	Rafi Ahmed (Emory, USA)

19:00 – 20:00	Checkpoint molecules and induction of anti-tumour immunity	Vijay Kuchroo Harvard, USA
<b>20:00</b>	<b>Closing &amp; valedictory</b>	Narinder K Mehra Sunil K Arora Amit Awasthi