The IUIS Webinar Series was established at the beginning of 2020 as an online education programme with the aim to provide individuals from all around the world the opportunity to gain comprehensive knowledge on the latest COVID-19 research developments without the need of travelling in these uncertain times. This first series was a tremendous success: internationally-acclaimed speakers shared their insights and latest research results on COVID-19-related topics in 20 webinars that welcomed more than 8,800 scientists from 86 countries.

For its second series, IUIS, in partnership with Immunopaedia and Frontiers, will broaden the scope to cover a variety of hot topics in immunological research such as Autoimmunity, Infectious Diseases and Allergology.

**HIV prevention-antibodies and vaccine development (part 1)**

Lynn Morris began her talk comparing the HIV and SARS-Cov-2 epidemics, at the peak of the HIV epidemic approximately annual mortality was 1.8 million deaths reported due to HIV/AIDS. – Read More
HIV prevention - antibodies and vaccine development (part 2)

Prof Lynn Morris discussed results from the antibody-mediated prevention trial that tested the ability of VRC01 broadly neutralising antibody that binds the HIV envelope protein CD4 binding site, has a wide coverage of HIV subtype B and C strains in vitro studies. Participants in the AMP trials received 10 administrations of VRC01…Read More

Immunopathology of COVID-19 lessons from pregnancy and ageing

Prof Cossarizza webinar focused on “Immunopathology of COVID-19 lessons from pregnancy and ageing.” Professor Cossarizza began his talk by highlighting the major role inflammation (and hyper inflammation) play in COVID-19…Read More

Clinical representation of hyperinflammation

Fabrizio De Benedetti gave examples of clinical presentations
and laboratory features of hyper-inflammation with a focus on hemophagocytic lymphohistiocytosis (HLH) and macrophage activation syndrome (MAS). — Read More

**In-depth characterisation of immune cells in Ebola virus**

Anita McElroy describes the cellular immune landscape that occurs following Ebola virus infection and will correlate these findings with key features of Ebola virus disease. — Read More

**Getting to the “bottom” of arthritis**

In a recent IUIS-Immunopaedia-Frontiers in Immunology webinar, Claudia Mauri discussed how microbial products induce B-reg and their relevance for arthritis pathology. Murine models of arthritis have... — Read More
Immunology taught by Plasmodium falciparum

Using a systematic search for antibodies that bind broadly to infected erythrocytes, they discovered a new class of Abs generated by insertions of genomic DNA encoding human inhibitory receptors (LAIR1) into antibody genes... – Read More

The path to sterilizing immunity against tuberculosis 2

Darrah et al., showed that BCG-IV resulted in superior T cell and antigen-presenting cell recruitment to the lung compared to other vaccination strategies. In addition to T cell and innate immunity, BCG-IV also induced superior... - Read More

The path to sterilizing immunity against tuberculosis 1

Dr Flynn began her talk with a brief overview of how M.tb infection can lead to the development of granulomas (structured organisation of cells that aim to contain M.tb replication). The majority of Dr Flynn research utilises non-human primate (NHPs) models, specifically cynomolgus (latent to active TB) and rhesus (almost always active TB) macaques, that represent the full
spectrum of human TB infection and disease. In this summary, we shall focus on findings presented that relate to natural infection. — Read more

Harnessing innate immunity from cancer therapy to COVID-19

In this webinar, Eric Vivier describes novel immunotherapies that aim to improve cancer and COVID-19 pathogenesis by targeting promoting NK cell-mediated and blocking C5a mediated immunity, respectively — Read more

Immunoregulation and the tumor microenvironment

The first webinar of the year featured a talk by Pamela Ohashi — Read more