

Workshop 1		COVID-19 and Immunology
<i>Chairs/Discussants:</i>		<i>Sefik Alkan, Önder Ergönül, Yadong Gao</i>
14:15 - 14:25	W01	Sarah Adamo Profound dysregulation of T cell homeostasis and function in patients with severe COVID-19
14:25 - 14:35	W02	Damir Zhakparov Prediction of SARS-CoV-2 infection status and COVID-19 disease severity based on clinical data with Machine Learning
14:35 - 14:45	W03	Farzad Fatehi Multiscale within-host modelling of antiviral strategies against COVID-19 in healthy and immunocompromised patients
14:45 - 14:55	W04	Michael Horn Serological testing for SARS-CoV-2 antibodies in clinical practice: a diagnostic accuracy study
14:55 - 15:05	W05	Raavi Gupta Caspases and therapeutic potential of caspase inhibitors in moderate-severe SARS-CoV-2 infection and long COVID
15:05 - 15:15	W06	Justyna Sieber Long-term SARS-CoV-2 antibody persistence in mildly affected school-children
15:15 - 15:25	W07	Pia Gattinger Neutralization of SARS-CoV-2 requires antibodies against conformational receptor-binding domain epitopes
Workshop 2		Development of Effector and Regulatory T Cells
<i>Chairs/Discussants:</i>		<i>Günnur Deniz, Valerie Verhasselt, Fintan Moriarty, Oscar Palomares</i>
14:15 - 14:25	W08	Fabian Luther PPAR-gamma promotes proliferation of pathogenic Th2 cells through regulation of IL-2 signaling
14:25 - 14:35	W09	Jana Koch Translational regulation in differentiating human Th1 cells
14:35 - 14:45	W10	Clara Milhem Development of a unique molecular signature for the monitoring of human natural and induced regulatory T cells
14:45 - 14:55	W11	Cui Yang Opposite outcomes of THEMIS deficiency on peripheral CD4+ T cell responses upon TCR triggering <i>in vitro</i> and antigen recognition <i>in vivo</i>
14:55 - 15:05	W12	Alyssa Silva Cayetano Tfh cell mislocalisation and a reduced FDC network impairs the GC response in aged mice
15:05 - 15:15	W13	Ismail Ögülür Single cell sequencing of peripheral mononuclear cells reveals CHAPLE-specific distinct signaling pathways
15:15 - 15:25	W14	Fabien Prodjinotho Helminthic dehydrogenases drive PGE2 and IL-10 production in monocytes and microglia to potentiate regulatory T cell induction

Best Workshop Presentation Awards

„BioLegend Best Workshop Presentation Awards“ will be distributed to one best presenter of each workshop. The winners of the cash awards will be selected by the chairs right after each workshop and honored during the digital meeting.

Workshop 3 Innate Immune Response*Chairs/Discussants:* Yaqi Peng, Pal Johansen, Zsolt Komlosi, Hideaki Morita

- 14:15 - 14:25 W15 **Melanie Neeland**
Mapping local and systemic immunity in childhood respiratory disease
- 14:25 - 14:35 W16 **Kerry Hilligan**
Intravenous BCG vaccination remodels the pulmonary myeloid compartment to support early control of *Mycobacterium tuberculosis*
- 14:35 - 14:45 W17 **Xiaoying Zhou**
A positive feedback loop reinforces the allergic immune response in human peanut allergy
- 14:45 - 14:55 W18 **Marloes Hofstee**
Staphylococcus aureus abscess communities and myeloid-derived suppressor cells: *in vivo* and *in vitro* studies
- 14:55 - 15:05 W19 **Shuto Kanameishi**
Lymphotoxin b receptor signaling and CD11c-positive dendritic cells form high endothelial venule-like vessels in the skin in murine atopic dermatitis model
- 15:05 - 15:15 W20 **Leobardo Emmanuel Alvarez de León**
Identification of metabolically activated macrophages in human adipose tissue and their possible role in differentiation of preadipocytes

Workshop 4 B Cell Subsets and Immune Regulation*Chairs/Discussants:* Nicole Joller, Pattaporn Satitsuksanoa, Hermelijn H. Smits, Monique Vogel

- 14:15 - 14:25 W21 **Janina Linnik**
Inferring patient-specific differences in vaccine-induced germinal center dynamics and memory responses from antibody titers
- 14:25 - 14:35 W22 **Ibon Eguiluz Gracia**
Allergen-driven mucosal class switch recombination to IgE and peripheral plasma cell proliferation in local allergic rhinitis patients
- 14:35 - 14:45 W23 **Jhon Enterina**
Glycan remodeling modulates B-cell responses in the germinal centre
- 14:45 - 14:55 W24 **Zoe Quake**
Increased peanut-specific IgA levels in plasma and stool are associated with oral immunotherapy of peanut-allergic subjects
- 14:55 - 15:05 W25 **Andrei Slabodkin**
Individualized VDJ recombination predisposes the available Ig sequence space
- 15:05 - 15:15 W26 **Nicole Joller**
Viral Infections License CD4⁺ T Cells for Antigen-Independent Recruitment and Activation

Best Workshop Presentation Awards

„BioLegend Best Workshop Presentation Awards“ will be distributed to one best presenter of each workshop. The winners of the cash awards will be selected by the chairs right after each workshop and honored during the digital meeting.

Workshop 5 Metabolism and Immunity*Chairs/Discussants: Oral Alpan, Antonios Kolios, Arthur Mortha, Joost van Neerven*

- 14:15 - 14:25 W27 **Juan Rodriguez-Coira**
Metabolic signature of effector and regulatory T cells is linked to their inflammatory profile and clinical allergic phenotype
- 14:25 - 14:35 W28 **Alexandra Goretzki**
Interaction of metabolic activation and cytokine response in myeloid DCs activated by a flagellin: allergen fusion protein
- 14:35 - 14:45 W29 **Joost van Neerven**
Short chain fatty acids (SCFA) potentially inhibit activation of T-cells and myeloid cells, and may induce innate immune tolerance
- 14:45 - 14:55 W30 **Kim Ohl**
Nrf2 regulates redox metabolism of CD4+T cells in chronic inflammatory conditions
- 14:55 - 15:05 W31 **Bastian Höchst**
Intracellular glycation of arginine - how MDSC regulate T cell function
- 15:05 - 15:15 W32 **Grazyna Domanska**
1-methyltryptophan shifts tryptophan catabolism towards the kynurenic acid branch – an immunosuppressive mode of action?

Workshop 6 SARS-CoV-2 Vaccines*Chairs/Discussants: Shayenne Eduarda Ramos Vanderley, Mayda Gürsel, Tayfun Carli, Thomas Kündig*

- 14:15 - 14:25 W33 **Nathan Richards**
Quantitative assessment of IgG to SARS-CoV-2 elicited by mRNA vaccines: comparison to natural infection
- 14:25 - 14:35 W34 **Jan Kisielow**
High resolution profiling of MHC-II peptide presentation capacity, reveals CD4 T-cell targets in SARS-CoV-2 and mechanisms of immune-escape
- 14:35 - 14:45 W35 **Yongjun Sui**
Protection against SARS-CoV-2 infection by a mucosal vaccine in rhesus macaques
- 14:45 - 14:55 W36 **Maria Oliver**
A whole blood-based cytokine release assay identifies IL-2 as a biomarker for rapid determination of vaccine-induced SARS-CoV-2-specific T cell immune responses
- 14:55 - 15:05 W37 **Mona Mohsen**
Safety and immunogenicity of intranasal VLP-based vaccine against SARS-CoV-2
- 15:05 - 15:15 W38 **Daryl Geers**
SARS-CoV-2 variants of concern partially escape humoral but not T-cell responses in COVID-19 convalescent donors and vaccinees

Best Workshop Presentation Awards

„BioLegend Best Workshop Presentation Awards“ will be distributed to one best presenter of each workshop. The winners of the cash awards will be selected by the chairs right after each workshop and honored during the digital meeting.

Workshop 7		Allergy and Asthma
<i>Chairs/Discussants:</i>		<i>Ibon Equiluz Gracia, Remo Frei, Kenji Kabashima, Musa Khaitov</i>
14:15 - 14:25	W39	Goran Abdurrahman The extracellular serine protease (Esp) from <i>Staphylococcus epidermidis</i> elicits a type 2 immune response in atopic dermatitis patients
14:25 - 14:35	W40	Xiaorui Han Targeted DNA methylation approach to identify food allergy associated DNA methylation signatures
14:35 - 14:45	W41	Maria Leite de Moraes MAIT cells and the pathogenesis of asthma in children
14:45 - 14:55	W42	Xinyue Chang Low-affinity but high-avidity interactions may offer an explanation for IgE-mediated allergen-cross-reactivity
14:55 - 15:05	W43	Mariem Radhouani Skin infection induced eosinophil mobilization and its effect on subsequent allergic airway sensitization
15:05 - 15:15	W44	<i>withdrawn</i>
Workshop 8		Biologicals, Vaccines and Immunomodulation
<i>Chairs/Discussants:</i>		<i>Ioana Agache, Sharon Chinthrajah, Ozge Uluckan, Ruby Pawankar</i>
14:15 - 14:25	W45	Litty Johnson A toolbox for early-stage suitability assessment of (nano-) particulate systems in AIT vaccine development
14:25 - 14:35	W46	Monali Manohar Novel insights into the immune mechanism of desensitization through omalizumab-adjunctive multifoed oral immunotherapy
14:35 - 14:45	W47	Zuzanna Kotkowska Photochemical internalization (PCI): a novel vaccination method for induction of cytotoxic CD8 T-cell responses
14:45 - 14:55	W48	Amin Kraiem Immunomodulation of birch pollen extract-induced dendritic cell maturation by recombinant IL-10 and TGF-beta 1
14:55 - 15:05	W49	Sigrídur Jónsdóttir Development of a preventive allergen immunotherapy in horses
15:05 - 15:15	W50	Alexander Eggel Fast acting disruptive IgE inhibitors rapidly desensitize allergic effector cells and resolve IgE-mediated anaphylaxis

Best Workshop Presentation Awards

„BioLegend Best Workshop Presentation Awards“ will be distributed to one best presenter of each workshop. The winners of the cash awards will be selected by the chairs right after each workshop and honored during the digital meeting.