

## SCIENTIFIC PROGRAM

### MAIN HALL (A)

#### 23 NOVEMBER 2022

**13.00 – 15.00** REGISTRATION

**15.00 – 15.20** welcome (CIS president + Representatives)

**15.20 - 16.00** EFIS invited speaker presentation **Prof. Bojan Polic** (Croatia), EFIS president-elect  
"Immuno-endocrine dance controlling glucose metabolism in infection"

**16.00 - 16.45** opening lecture **Prof. Paul Lehman** (USA), "Immune monitoring: taking a close look  
at antigen-specific memory B cells"

**16.45 -16.55** Coffee break

**16.55 - 17.15** Young immunologists' initiative presentation

**17.25 - 18.00** concert: "Dvorak ensemble" string quartet

**18.30 - 21.00** welcome party

#### 24 NOVEMBER 2022

**8.40 - 9.00** Presentation *AUSTRIAN Society*

Chair: Erika Jensen-Jarolim

**9.00 – 9.30** Erika Jensen-Jarolim - From allergen-specific to innate concepts in the management  
of allergic diseases

**9.30 - 9.50** Franziska Roth-Walter - Allergens at the crossroad: the lack of ecological interactions  
as a trigger for atopic diseases

**9.50 – 10.05** Irma Schabussova - Host-Microbiota interaction in health and allergic disease

**10.05 – 10.20** Lorenz Aglas - What makes a protein an allergen or hypoallergen

**10.20 – 10.35 Wolfram Hötzenecker** - Medical Specialization Allergology in Austria: Essential measure to improve care of allergic patients

**10.35 - 10.50 Coffee break**

**Chair: Eva Untersmayr-Elsenhuber**

**10.50 - 11.20 Eva Untersmayr-Elsenhuber** - Immunology of Covid and Long-Covid

**11.20 - 11.40 Riem Gawish** - Immunological determinants of COVID-19 severity

**11.40 - 11.55 Anna Repic** - Proteins involved in SARS-Cov-2 infection

**11.55 - 12.10 Wilfried Posch** - Protective features of anti-Covid 19 Immune response

**12.10 – 12.25 Sabine Altrichter** - Diagnosis of allergy to COVID vaccines

**12.25 – 14.00 Lunch time**

**14.00 – 14.20 Presentation CROATIAN Societies**

**Chair: Carmen Rožmanić**

**14.20 – 14.50 Carmen Rožmanić** - Early life cytomegalovirus infection extensively reshapes the transcriptional profile and functionality of NK cells

**14.50 - 15.10 Ildikó Bódi** - Human thymus contains epithelial cells with stem cell features long after birth

**15.10 – 15.25 Karlo Mladenić** - NKG2D-mediated immunosensing of metabolically stressed hepatocytes by innate-like T cells is essential for initiation of NASH and fibrosis

**15.25 – 15.40 Maša Filipović** - Transcriptome profiling of CCR2<sup>hi</sup> and CCR2<sup>lo</sup> osteoclast progenitor subpopulations associated with arthritis

**15.40 – 16.00 Communications**

**16.00 - 16.15 Coffee break**

**Chair: Asja Stipić Marković**

**16.15 - 16.45 Asja Stipić Marković** - Allergic diseases in urban and rural regions of Croatia

**16.45 - 17.05 Mirjana Turkalj** - Ragweed pollen and allergic symptoms in children:

Results from a three-year longitudinal study

**17.05 – 17.20 Liborija Lugović Mihić** - Effects of the COVID-19 pandemic and Zagreb earthquake on the psychological stress level and disease condition of atopic dermatitis patients

**17.20 – 17.35 Ivan Marković** - Allergic reactions to COVID-19 vaccine in Croatian high risk patients

**17.35 - 17.50 Communications**

**17.50 - 19.00 POSTER SESSION**

## **25 NOVEMBER 2022**

**8.40 - 9.00** *Presentation CZECH Societies*

**Chair: Luca Vannucci**

**9.00 – 9.30 Luca Vannucci** - Smouldering inflammation: from tissue remodelling to cancer niche

**9.25 - 9.45 Jitka Fucikova** - Immunological Configuration of Ovarian Carcinoma:  
The Impact on Disease Outcome and Response to Immunotherapy

**9.45 - 10.00 Dominik Filipp** - Cellular machinery for antigen distribution in the thymus

**10.00 - 10.15 Martin Schwarzer** - Intranasal application of defined bacterial components in prevention of airway allergic inflammation

**10.15 – 10.30 Ondrej Stepanek** - Unique roles of LCK in helper and cytotoxic T cells

**10.30 - 10.45 Coffee break**

**Chair: Petr Panzner**

**10.45 - 11.15 Petr Panzner** - Sensitization to inhalant allergens in allergy patients in Central Europe

**11.15 - 11.35 Zuzana Strizova** - Immune contextures of the tumor microenvironment: Solid tumor pre-conditioning to improve cancer immunotherapy

**11.35 - 11.50 Jirina Bartunkova** - Immunotherapy of solid tumors

**11.50 - 12.05 Jiří Litzman, Peter Slanina, Marcela Vlková** - Granulocytes in pathogenesis of common variable immunodeficiency (CVID)

**12.05 – 12.20 Anna Sediva** - Inflammation and metabolism in autoinflammatory diseases

**12.20 -14.00 Lunch time**

**14.00 - 14.20 Stipan Jonjić** - Congenital cytomegalovirus infection –neuroinflammation and brain pathology mechanisms (Croatia)

**14.20 - 14.40 Presentation HUNGARIAN Societies**

**Chair: Attila Mócsai**

**14.40 - 15.10 Attila Mócsai** - Intracellular signaling in inflammatory disease models

**15.10 - 15.30 Mihály Józsi** - Factor H family proteins as modulators of complement activation for better or worse

**15.30 – 15.45 Mária Harmati** - Extracellular vesicle-mediated intercellular communication in cancer

**15.45 – 16.00 Anett Mázló** - MSC-like cells increase the ability of monocyte-derived dendritic cells to polarize IL-17/IL-10-producing T cells via CTLA-4

**16.00 - 16.15 Zoltán Kellermayer** - Extramedullary hemopoiesis is decreased in the absence of Nkx2-3 transcription factor in mice

**16.15 – 16.30 Coffee break**

**Chair: Henriette Farkas**

**16.30 – 17.00 Henriette Farkas** - New aspects of HAE pathomechanism

**17.00 - 17.15 Gábor Papp** - The pathogenetic role of altered microRNA expression profiles in circulating follicular T helper and B cells in systemic lupus erythematosus

**17.15 – 17.30 Anikó Kapitány** - Regional differences in the activity of the skin immune system

**17.30 – 17.45 Péter Blaszó** - Reconstruction of polyreactive B-cell lineages helps understanding autoimmunity in RAG1/2 deficiency

**17.45 - 18.00 Mónika Sultész** - The trend of change of allergic rhinitis prevalence and risk factors from 2007-2019 (Three repeated surveys)

**19.30 - 22.30 SOCIAL DINNER**

**26 NOVEMBER 2022**

**8.30 - 8.55** *Presentation SLOVAKIAN Societies*

**Chair: Vladimir Leksa**

**8.55 – 9.25 Vladimir Leksa** - Milky way of immunity - galactic functions of lactoferrin in host defence

**9.25 - 9.45 Kristina Klučková** - Blood biomarkers that could aid screening and predict survival in glioma patients

**9.45 – 10.00 Juraj Javor** - CD33 rs3865444 polymorphism: a possible genetic link between multiple sclerosis and Alzheimer's disease?

**10.00 – 10.15 Miroslav Bajer** - Multisystem inflammatory syndrome in adults- our experience

**10.15 – 10.30 Branislav Kováčech** - Monoclonal antibodies targeting two immunodominant epitopes on the Spike protein neutralize emerging SARS-CoV-2 variants of concern

**10.30 - 10.45 Coffee break**

**10.45 - 11.15 Milos Jesenak, et al** - Monogenic autoinflammatory disorders in Slovakia – unexpected experience and data

**11.15 - 11.35 Anna Bobcakova, et al.** - Immunological predictive markers for COVID-19 outcome

**11.35 - 11.50 Martin Hrubisko, et al.** - Benefits of immunity profile measuring in oncology patients with radiotherapy

**11.50 - 12.05 Radovan Kosturiak** - Polymorphisms in vitamin D binding protein gene and allergic diseases

**12.05 - 12,20 Ivana Hulinkova, et al.** - Analysis of T-cell receptor excision circles in newborn from tertial clinical centre

**12.20 – 14.00 Lunch time**

**14.00 – 14.25** *Presentation SLOVENIAN Societies*

**Chair: Iva Hafner Bratkovič**

**14.25 - 14.55 Iva Hafner Bratkovič** - Deconstructing inflammasomes

**14.55 - 15.15 Mateja Manček Keber** - Oxidative stress derived extracellular vesicles promote inflammation in chronic diseases

**15.15 - 15.30 Andreja Nataša Kopitar** - Immune response in acute and post-acute multisystem inflammatory syndrome (MIS-C) (15')

**15.30 – 15.45 Jelka Pohar** - Regulatory T cells for Treatment of Autoimmune Disorders

**15.45 – 16.00 Sara Orehek** - Antitumor immunity boosted by GSDMD-induced necrosis

**16.00 - 16.15 Coffee break**

Chair: Urška Bidovec-Stojković

**16.15 - 16.45 Urška Bidovec-Stojković** - Immunological and inflammatory profiles in hospitalized patients with COVID-19

**16.45 - 17.05 Maja Čemažar**- Gene therapy with interleukin-12; from bench to phase one clinical trial

**17.05 – 17.20 Urša Žibert** - IL-6, suPAR and MR-proADM as prognostic factor of outcome in COVID-19 patients

**17.20 – 17.35 Maša Bošnjak** - Immunogenicity of plasmid DNA electrotransfer in different skin cell types

**17.35 - 17.50 Jerneja Debeljak** - Novel combination of experimental and bioinformatic approaches for epitope identification in allergic diseases

**17.50 - 18.15 Awards & Farewell**

## **PARALLEL SESSIONS**

**SALON (B)**

**24 NOVEMBER 2022**

## Session 1

Chair: Anett Mázló

**9.45 – 9.55 Ladislav Sivak et al (Marek Kovar)** - Ritonavir derivate bound to HPMA copolymer carrier has potent antitumor activity which synergizes with IL-2 based immunotherapy

**9.55 – 10.05 \* Ioana Plesca et al. (Iva Benešová)** - Clinical significance of tumor-infiltrating conventional and plasmacytoid dendritic cells in pancreatic ductal adenocarcinoma

**10.05 – 10.15 \* Anietie Francis Udoumoh et al.** - Gut microbiota manipulation with oral antibiotics enhance the therapeutic response of MC-38 tumours to anti-PD1

**10.15 – 10.30 Bristol-Myers-Squibb presentation: Marek Šťastný** - Why immunotherapy represents (r)EVOLUTION in cancer therapy?

**10.35 - 10.50 Coffee break**

## Session 2

Chair: Milos Jesenak

**11.40 - 11.50 \* Jiri Hrdý et al.** - The impact of early postnatal administration of probiotic strain Escherichia coli O83:K24:H31 on maturation of immune system

**11.50- 12.00 \* Betul Ogan et al.** - Role of FAM83H in immune system homeostasis

**12.00 - 12.10 \* Eva Kriváková et al.** - Effect of Pseurotin D on MEC-1 human lymphoma cells

**12.10 – 12.20 \* Marek Jedlička et al.** - Metabolic changes of in vitro expanded NK cells

**12.25 – 14.00 Lunch time**

## Session 3

Chair: Carmen Rožmanić

**15.10 – 15.20 Marcela Hortová-Kohoutková et al.** - CaN-NFAT controls immunometabolic reprogramming of human monocytes and contributes to immunoparalysis in sepsis

**15.20 - 15.30 \* Maja Cokarić Brdovčak et al.** - Recombinant cytomegaloviruses expressing NKG2D ligands as candidates for T-cell based vaccines and vaccine vectors

**15.30 – 15.40 \* Veronika Niederlová et al.** - Functional characterization of unconventional naïve CD8+ 4-1BB+ T cells using a novel inducible monoclonal TCR mouse model

**15.40 – 15.55 MABTECH presentation: Avinash Ravindran** - A new dimension of immune profiling with FluoroSpot analysis on Mabtech IRIS

**16.00 - 16.15 Coffee break**

#### **Session 4**

**Chair: Asja Stipičić Marković**

**17.05 - 17.15 \* Viktor Černý et al.** - Immunomodulatory effect of metabolites secreted by probiotic strain of Escherichia coli O83:K24:H31

**17.15 - 17.25 \* Zuzana Jackova et al.** - TNBS colitis severity is influenced by gut microbiota composition

**17.25 – 17.35 \* Dagmar Šrůtková et al.** - The role of skin and intestinal microbiota in pathogenesis of atopic dermatitis and food allergy in mouse model

**17.35 – 17.45 \* Paolo Tenti et al.** - Gut microbioma can influence the function of even the thymus

### ***25 NOVEMBER 2022 - YOUNG IMMUNOLOGISTS' DAY***

**9.45-10.30 Session 1 : Meeting together**

**Co-chairs: Iva Benešová and Veronika Niederlová**

**9.45 – 10.30** Networking and sharing experience from labs across Europe

**10.35 - 10.50 Coffee break**



## **11.40 -12.20 Session 2 : Oral presentations part I**

**Chair: Jan Věcek**

**11.40 - 11.50 Katja Knapp** - Immune regulatory programs in human dendritic cells upon immunization with live and UV-inactivated *Chlamydia trachomatis* (Austrian Society of Allergology and Immunology)

**11.50- 12.00 Michaela Přibíková** - CMTM4 is a subunit of the IL-17 receptor and mediates autoimmune pathology (Czech Immunological Society)

**12.00 - 12.10 Petra Kern** - The challenges and limitations of choosing targets for CAR-T cell therapy (Immunology Society of Slovenia)

**12.10 – 12.20 Zsolt Cimmerer** - The epigenetic state of IL-4-polarized macrophages enables activated NFkB-p65 cistrome expansion and extended synergistic responses to LPS/TLR ligands resulting in hyperinflammatory gene expression (Hungarian Society for Immunology)

**12.25 – 14.00 Lunch time**

## **15.10 – 15.50 Session 3: Oral presentations part II**

**Chair: Sabína Vančíková**

**15.10 – 15.20 Adam Markocsy** - Our experiences with clinical manifestations of patients with Common Variable Immunodeficiency from specialised centre for primary immunodeficiencies in Martin, Slovakia (Slovakian Allergology and Clinical Immunology Society)

**15.20 - 15.30 Birivan Nabová** - COVID-19 postinfection and postvaccination immune response in paediatric patients with primary immunodeficiencies (Slovak Society of Immunology)

**15.30 – 15.40 Tomáš Milota** - Covid-19 severity and postvaccination outcomes after BNT162b2 vaccine administration in patients with inborn errors of immunity (Czech Society of

Allergology and Clinical Immunology)

**15.40 – 15.50 Tea Govednik** - SARS-CoV-2 cell entry mechanism and its inhibition using antioxidant compounds (Immunology Society of Slovenia)

**16.00 - 16.15 Coffee break**

**17.05 – 17.45 Session 4: Oral presentations part III**

**Chair: Eliška Miková**

**17.05 - 17.15 Judit Danis** - Evaluation of the role of free nucleic acids in IL-23 production of human keratinocytes and their connections to psoriasis pathogenesis (Hungarian Society for Immunology)

**17.15 - 17.25 Larisa Janžič** - Innate immune response to different isolates of *Streptococcus agalactiae* (Immunology Society of Slovenia)

**17.25 – 17.35 Ajda Medved** - Upregulation of retinoic acid-inducible gene-I-like receptors after electrotransfer of plasmid encoding Interleukin-12 in vitro (Immunology Society of Slovenia)

**17.35 – 17.45 Conclusions**

**26 NOVEMBER 2022**

**Session 1**

**Chair: Ilja Striz**

**9.45 – 9.55 Ines Mrakovčić-Šutić** - Clinical significance of MMP-2, MMP-9, their tissue inhibitors TIMP-1 and TIMP-2 and innate immune cells in patients with colorectal cancer

**9.55 – 10.05 \* Pavol Lukáč et al.** - 3D cell models and their use in the study of immunological changes associated with human colorectal carcinoma

**10.05 - 10.15 \* V. Král et al.** The role of IgG4 in immune response.

**10.15 – 10.25 \* Lenka Rajsiglová et al.** - In vitro and in vivo evaluation of ferric-based nanoparticles

in theranostic perspective

**10.35 - 10.45 Coffee break**

**Session 2**

**Chair: Andreja Nataša Kopitar**

**11.20 - 11.40 \* Daniela Rubanová et al.** - Dexamethasone based polymer therapeutics for treatment of rheumatoid arthritis

**11.20 - 11.40 \* P. Slanina et al.** - Optimization of in-vitro differentiation and activation of monocytes before the analysis of PLAUR gene expression

**11.55 - 12.10 \* Viktorija Mikulášková et al.** - Could we use degradation capacity of histamine as a laboratory marker for diagnostic and monitoring histamine intolerance ?

**12.10 – 12.20 \* Csikós Máté et al.** - Studying the potential of “trained immunity” in human oral epithelial cells using *Candida* species

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**24 NOVEMBER 2022    POSTER SESSION**

Note: Posters that are selected to be presented orally are listed in the Parallel Sessions and marked with an asterisk (\*)

**1 P**

**Aberrant autophagy and skewed inflammatory and tolerogenic functions in STAT1 gain-of-function dendritic cells.** Zuzana Parackova - Department of Immunology, 2nd Faculty of Medicine Charles University, University Hospital in Motol, Prague, Czechia

**2 P**

**The changes of innate immunity during antiinflammatory diet in obese patients.** Ines Mrakovčić-Šutić<sup>1,2</sup>, Gordana Kendel Jovanović<sup>3</sup>, Sanja Klobučar Majanović<sup>4</sup>, Ingrid Šutić Udović<sup>5</sup> - <sup>1</sup>Department of Physiology, Immunology and Pathophysiology, University of Rijeka, Medical Faculty, Rijeka, Croatia; <sup>2</sup>Department of Basic Medical Sciences, University of Rijeka, Faculty of Health Studies Rijeka; <sup>3</sup>Department of Health Ecology, Teaching Institute of Public Health of Primorsko-Goranska County, Rijeka, Croatia; <sup>4</sup>Department of Internal Medicine, University of Rijeka, Croatia, Medical Faculty Rijeka; <sup>5</sup>Clinical Hospital Center Rijeka, Croatia

### 3 P

**Mechanobiology of lymphocyte motility.** E. Miková<sup>1</sup>, Z. Ježková<sup>1</sup>, P. Jůda<sup>1</sup>, M. Hons<sup>1</sup> - <sup>1</sup>BIOCEV, First Faculty of Medicine, Charles University

### 4 P

**Interleukin-31 (IL-31) serum levels are increased in kidney allograft rejection.** Cečrdlova E, Fialova M, Krupickova L, Novotny M, Viklicky O, Striz I. - Institute for Clinical and Experimental Medicine, Prague, Czech Republic

### 5 P

**High-risk neuroblastoma therapeutics, topotecan and 13-cis retinoic acid, modulate autophagy through epigenetic changes in cord blood-derived hematopoietic stem and progenitor cells and 13-cis-retinoic acid potentiates monocyte activity.** Laznickova P.<sup>1</sup>, Bendickova K.<sup>1</sup>, Kohoutkova M.H.<sup>1</sup>, De Zuani M., Jose S.S.<sup>1</sup>, Kepak T.<sup>3,4</sup>, Krenova Z.<sup>3,4</sup>, Fric J.<sup>1,5</sup> - <sup>1</sup>Cellular and Molecular Immunoregulation Group (CMI), Center for Translational Medicine (CTM), International Clinical Research Center (ICRC), St. Anne's University Hospital Brno, Czech Republic ; <sup>3</sup>Pediatric Oncology Translational Research (POTR), International Clinical Research Center (ICRC), St. Anne's University Hospital Brno, Czech Republic; <sup>4</sup>Pediatric Hematology and Oncology, University Hospital, Brno, Czech Republic; <sup>5</sup>Institute of Hematology and Blood Transfusion, Prague, Czech Republic.

### 6 P

**Immunity following SARS-CoV-2 vaccination in autoimmune neurological disorders treated with rituximab or ocrelizumab.** P. Nytrova<sup>1</sup>, D. Stastna<sup>1</sup>, A. Tesar<sup>1</sup>, I. Menkyova<sup>2</sup>, H. Posova<sup>3</sup>, H. Koprivova<sup>3</sup>, V. Mikulova<sup>3</sup>, G. Smela<sup>3</sup>, J. Hrdy<sup>4</sup>, D. Horakova<sup>1</sup>, K. Doleckova<sup>1</sup>, I. Rysankova<sup>1</sup>, M. Tyblova<sup>1</sup> - <sup>1</sup>First Faculty of Medicine, Charles University in Prague and General University Hospital, Department of Neurology and Centre of Clinical Neuroscience, Prague, Czech Republic; <sup>2</sup> Faculty of Medicine, Comenius University, Department of Neurology, Bratislava, Slovakia; <sup>3</sup> First Faculty of Medicine, Charles University in Prague and General University Hospital, Laboratory of Clinical Immunology and Allergology, Institute of Clinical Biochemistry and Laboratory Diagnostics, Prague, Czech Republic; <sup>4</sup> First Faculty of Medicine, Charles University and General University Hospital, Institute of Immunology and Microbiology, Prague, Czech Republic

### 7 P

**Sertoli cell – The cardinal intermediary of fertility.** B. Porubská<sup>1,2</sup>, V. Somova<sup>1</sup>, D. Vašek<sup>1</sup>, M. Krulová<sup>1,2</sup> - <sup>1</sup>Department of Cell Biology, Faculty of Science, Charles University, Prague, Czech Republic; <sup>2</sup>Department of Nanotoxicology and Molecular Epidemiology, Institute of Experimental Medicine of the Czech Academy of Sciences, Prague, Czech Republic

### 8 P

**Changes in the immune system during cold acclimatization.** D. Vašek<sup>1</sup>, P. Holíček<sup>2</sup>, B. Porubská<sup>1,3</sup>, F. Galatík<sup>4</sup>, J. Žurmanová<sup>4</sup> and M. Krulová<sup>1,3</sup> - <sup>1</sup> Department of Cell Biology, Faculty

of Science, Charles University, Prague, Czech Republic - <sup>2</sup>Sotio Biotech, Prague, Czech Republic - <sup>3</sup> Department of Nanotoxicology and Molecular Epidemiology, Institute of Experimental Medicine of the Czech Academy of Sciences, Prague, Czech Republic - <sup>4</sup> Department of Physiology, Faculty of Science, Charles University, Prague, Czech Republic

## 9 P

**Acute- and late-stage Lyme disease patient's sera reactivities with distinct morphological forms of *Borrelia burgdorferi sensu lato* bacteria.** Sloupenska Kristyna<sup>1</sup>, Dolezilková Jana<sup>2</sup>, Koubkova Barbora<sup>3</sup>, Horak Pavel<sup>4</sup>, Hutyrova Beata<sup>1,3</sup>, Racansky Mojmir<sup>1,3</sup>, Mares Jan<sup>5</sup>, Miklusova Martina<sup>5</sup>, Raska Milan<sup>1</sup>, Krupka Michal<sup>1\*</sup> - <sup>1</sup> Department of Immunology, Faculty of Medicine and Dentistry, Palacky University Olomouc, Czech Republic; <sup>2</sup> Laboratory of Medical Parasitology and Zoology, Public Health Institute Ostrava, Czech Republic; <sup>3</sup> Department of Allergology and Clinical Immunology, University Hospital Olomouc, Czech Republic; <sup>4</sup> Third Department of Internal Medicine-Nephrology, Rheumatology and Endocrinology, University Hospital Olomouc, Czech Republic; <sup>5</sup> Department of Neurology, University Hospital Olomouc and Faculty of Medicine and Dentistry, Palacky University Olomouc, Czech Republic.\* m.krupka@upol.cz

## 10 P

**Immune response to gut fungal microbiota in inflammatory bowel disease.** Natalie Galanova<sup>1,2</sup>, Lukas Bajer<sup>3</sup>, Stepan Coufal<sup>1</sup>, Sabina Vancikova<sup>1,2</sup>, Martin Kostovcik<sup>1</sup>, Zuzana Jackova<sup>1,2</sup>, Zuzana Reiss<sup>1</sup>, Marketa Vavreckova<sup>1,2</sup>, Zuzana Jiraskova Zakostelska<sup>1</sup>, Pavel Drastich<sup>3</sup>, Helena Tlaskalova-Hogenova<sup>1</sup>, Miloslav Kverka<sup>1</sup>, Klara Kostovcikova<sup>1</sup> - <sup>1</sup> Institute of Microbiology of the Czech Academy of Sciences (Prague, Czech Republic), <sup>2</sup> Charles University, Faculty of Science (Prague, Czech Republic); <sup>3</sup> Institute for Clinical and Experimental Medicine (Prague, Czech Republic)

## 11 P

**Early postnatal supplementation with probiotic strain *E. coli* O83:K24:H31 decreases inflammatory responsiveness of intestine-associated professional antigen-presenting cells and drives endotoxin tolerance.** Jan Věček<sup>1</sup>, Viktor Černý<sup>1</sup>, Petra Petrásková<sup>1</sup>, Olga Novotná<sup>1</sup>, Eliška Krčmářová<sup>1</sup>, Jiří Hrdý<sup>1</sup> - <sup>1</sup> Institute of Immunology and Microbiology, First Faculty of Medicine, Charles University

## 12 P

**Exopolysaccharide isolated from *Lactocaseibacillus rhamnosus* LOCK900 modulate immune response in mouse model of allergic airway inflammation.** <sup>1</sup>Dagmar Srutkova, <sup>2</sup>Sabina Gorska, <sup>1</sup>Hana Kozakova, <sup>1</sup>Petra Petr Hermanova, <sup>1</sup>Tereza Novotna, <sup>1</sup>Tomas Hudcovic, <sup>1</sup>Marek Sinkora and <sup>1</sup>Martin Schwarzer - <sup>1</sup>Laboratory of Gnotobiology, Institute of Microbiology of the Czech Academy of Sciences, Novy Hradek, Czech Republic; <sup>2</sup>Laboratory of Microbiome Immunobiology, Hirszfild Institute of Immunology and Experimental Therapy, Polish Academy

**13 P**

**Ketogenic diet decreases severity of experimental autoimmune encephalomyelitis.** Kraus M.<sup>1</sup>, Jirásková Zakostelská Z.<sup>1</sup>, Kostovčíková K.<sup>1</sup>, Jacková Z.<sup>1</sup>, Thon T.<sup>1</sup>, Vavrečková M.<sup>1</sup>, Vančíková S.<sup>1</sup>, Udoumoh A. F.<sup>1</sup>, Tlaskalová-Hogenová H.<sup>1</sup>, and Kverka M.<sup>1</sup> - <sup>1</sup> Institute of Microbiology of the Czech Academy of Sciences, v. v. i., 142 20 Prague, Czech Republic

**14 P**

***ELANE* mutations causing severe congenital neutropenia in humans, but induce only a weak neutropenic phenotype in mouse.** Michał Kanoza<sup>1\*</sup>, Jakub Kwieciński<sup>1</sup>, Izabela Ciastoń<sup>1</sup>, Jan Potempa<sup>1,2</sup>, Joanna Kozieł<sup>1</sup> - <sup>1</sup> Microbiology Department, Faculty of Biochemistry, Biophysics and Biotechnology, Jagiellonian University, Gronostajowa 7, 30-387 Kraków, Poland; <sup>2</sup> Department of Oral Immunity and Infectious Diseases, University of Louisville School of Dentistry, University of Louisville, Louisville, Kentucky, United States of America

**15 P**

**Viability Status-Dependent Effect of *Bifidobacterium longum* ssp. *longum* CCM 7952 on Prevention of Allergic Inflammation in Mouse Model.** Marcelina Joanna Pyclik <sup>1</sup>, Dagmar Srutkova<sup>2</sup>, Agnieszka Razim<sup>1</sup>, Petra Hermanova<sup>2</sup>, Tereza Svabova<sup>2</sup>, Katarzyna Pacyga<sup>1</sup>, Martin Schwarzer <sup>2</sup> and Sabina Górska<sup>1</sup> - <sup>1</sup> Laboratory of Microbiome Immunobiology, Hirsfeld Institute of Immunology and Experimental Therapy, Polish Academy of Sciences, Wrocław, Poland; <sup>2</sup> Laboratory of Gnotobiology, Institute of Microbiology, Czech Academy of Sciences, Novy Hradek, Czechia

**16 P****Long-term Covid-19 antibody dynamics in fully vaccinated individuals**

Urška Bidovec-Stojković; Julij Šelb; Ana Koren; Petra Svetina; Mojca Novak; Katja Vrankar; Viktorija Tomič; Maruša Ravnik; Žan Kogovšek; Urša Žibert; Monika Šohar; Ines Hasanović; Luka Dejanović; Nina Rupar; Ajda Demšar Luzar; Aleš Rozman; Peter Korošec; Matija Rijavec University Clinic of Respiratory and Allergic Diseases, Golnik, Slovenia