Poster Program

Poster Session 1

Sunday, February 11 2018 - 18:20-20:20

IMMUNITY AT EPITHELIAL BARRIERS/HOST CELL MICROBE INTERACTIONS

[P1.1.01]	**Paneth cells secrete lysozyme via secretory autophagy during bacterial infection of the intestine** S. Bel*[1], M. Pendse[1], Y. Wang[1], K.A. Ruhn[1], B. Hassell[1], T. Leal[1], S.E. Winter[1], R.J. Xavier[2], L.V. Hooper[1, 3], 1*The University of Texas Southwestern Medical Center, Dallas, TX 75390, USA, [2]Massachusetts General Hospital, Harvard Medical School, Boston, Massachusetts, USA, [3]The Howard Hughes Medical Institute, USA*
[P1.1.02]	**Sentinel goblet cells: Inflammasome driven guardians of the colonic crypt** G.M.H. Birchenough*, G.C. Hansson, *Gothenburg University, Sweden*
[P1.1.03]	**Th17 cells provide both systemic and mucosal immunity protective against an intracellular parasite** C.W. Cai*, J.R. Blase, C.S. Eickhoff, D.F. Hoft, *Saint Louis University School of Medicine, USA*
[P1.1.04]	**The macrophage - pericyte axis promotes tissue repair following acute injury** C.M. Minutti*, R. Tillu, D.M. Zaiss, *Centre for Immunity, Infection and Evolution, and the Institute for Immunology and Infection Research, School of Biological Sciences, University of Edinburgh, UK*
[P1.1.05]	**Bifidobacterium or fiber protect against diet-induced deterioration of the inner colonic mucus layer** B.O. Schroeder*, G.M.H. Birchenough, M. Ståhlman, L. Arike, M.E.V. Johansson, G.C. Hansson, F. Bäckhed, *Gothenburg University, Sweden*
[P1.1.06]	**Role of intestinal permeability and secretory IgA in a murine model of Kawasaki disease vasculitis** M. Noval Rivas*[1,2], D. Wakita[1], M. Abe[1], M. Franklin[1], S. Chen[1,2], K. Shimada[1,2], T.R. Crother[1,2], M. Arditi[1,2], *[1]Cedars-Sinai Medical Center, USA, [2]University of California Los Angeles (UCLA), USA*
[P1.1.07]	**Recombinant BCG expressing ESX-1 of Mycobacterium marinum combines low virulence with cytosolic Immune Signaling and improved tuberculosis protection** M-I. Gröschel*[1,2], F. Sayes[1], T-S. van der Werf[2], L. Majlessi[1], R. Brosch[1], *[1]Institut Pasteur, France, [2]University Medical Center Groningen, The Netherlands*
[P1.1.08]	**Runx3 function in resident macrophage is crucial for gut immune tolerance** S. Hantisteanu*, Y. Dicken, D. Leshkowitz, J. Lotem, D. Levanon, Y. Groner, *Weizmann Institute of Science, Israel*
[P1.1.09]	**IL10Ra deficient macrophages elicit IL23 and IL22 driven colitis** B. Bernshtein*, C. Thaiss, C. Curato, M. Kolesnikov, M. Gross, L. Chappell-Maor, E. David, E. Elinav, S. Jung, *Weizmann Institute of Science, Israel*
[P1.1.10]	**Regulatory circuits governing identity and function of human type 1 ILCs** P. Collins*, M. Cella, S. Porter, M. McCullen, M. Cook, J. Germino, M. Colonna, E. Oltz, *Washington University School of Medicine, USA*
[P1.1.11]	**Commensal fungi induce autophagy and LC3-associated phagocytosis in human intestinal epithelial cells** S. Cohen-Kedar*[1,2], H. Elad[2,3], Y. Ron[2,3], I. Dotan[1,2], *[1]Rabin Medical Center, Israel, [2]Tel Aviv University, Israel, [3]Tel Aviv Sourasky Medical Center, Israel*
[P1.1.12]	**Stromal cell-derived factor 1 mediates immune cell attraction upon urinary tract infection** B. Isaacson*, O. Mandelboim, *Hebrew University of Jerusalem, Israel*
[P1.1.13]	**Atg9b orchestrates epithelial-immune crosstalk during gut regeneration** A. Lasry*, Y. Ben-Neriah, *Hebrew University, Israel*
[P1.1.14]	**Th17 cells produce heterodimer IL-17A+/F+ protein and create neutrophilia in leprosy reversal reactions** C. Saini*[1], A. Sharma[1], V. Ramesh[3], I. Nath[2], *[1]All India institute of Medical Sciences, India, [2]National Institute of Pathology, India, [3]Safdarjung hospital, India*
[P1.1.15]	**Menstrual blood NK cells and memory of human pregnancy** M. Gamliel*[1], D. Goldman-Whol[1], S. Yagel[1], O. Mandelboim[1], *[1]Hebrew university, Israel, [2]hadassah medical center, Israel*
[P1.1.16]	**ATP released by intestinal bacteria limits the generation of protective IgA against enteropathogens** L. Perruzza*[1], M. Proietti[6], D. Scribano[2,3], F. Strati[1], M. Raffaelli[1], W.D. Hardt[4], E. Slack[4], M. Nicoletti[2], F. Grassi[1,5], *[1]Institute for Research in Biomedicine, Switzerland, [2]University Gabriele D'Annunzio, Italy, [3]University La Sapienza of Rome, Italy, [4]Institute of Microbiology, Switzerland, [5]Università degli Studi di Milano, Italy, [6]Universitätsklinikum Freiburg, Germany*
[P1.1.17]	**PTEN regulates pulmonary inflammatory signaling through interactions with the cystic fibrosis transmembrane conductance regulator channel (CFTR)** S.A. Riquelme*[1], B.D. Hopkins[2], A.L. Wolfe[3], E. DiMango[1], K. Kitur[1], R. Parsons[3], A. Prince[1], *[1]Columbia University, USA, [2]Weill Cornell Medicine, USA, [3]Icahn School of Medicine at Mount Sinai, USA*

[P1.1.18]	**Barrier dysfunction in human type 2 immunity arises from an altered basal cell state and reduced epithelial cellular diversity** J. Ordovas-Montanes*[1,2], D.F. Dwyer[3,4], S. Nyquist[1,2], K.M. Buchheit[3,4], C. Deb[1], N. Bhattacharyya[3,4], J.A. Boyce[3,4], N.A. Barrett[3,4], A.K. Shalek[1,2], [1]*Massachusetts Institute of Technology, USA,* [2]*Ragon Institute of MGH, MIT and Harvard, USA,* [3]*Brigham and Women's Hospital, USA,* [4]*Harvard Medical School, USA*
[P1.1.19]	**Bcl6 interacting corepressor contributes to T helper 17 cell formation by repressing foxo1 and CD27 signaling** J.A. Kotov*, M.D. Gearhart, D.I. Kotov, V.J. Bardwell, M.K. Jenkins, *University of Minnesota, USA*
[P1.1.20]	**ezh2 regulates langerhans cell migration and host protection against allergic contact dermatitis** J.T. Loh[1], B. Janela[1,3], M. Gunawan[1,3], L.G. Ng[1,3], F. Ginhoux[1,3], K.P. Lam[1,2], I-H. Su*[1], [1]*Nanyang Technological University, Singapore,* [2]*Bioprocessing Technology Institute, Singapore,* [3]*Singapore Immunology Network, Singapore*
[P1.1.21]	**Mouse colonic stromal cells induce a protective ILC3 phenotype in the absence of Nkx2.3 transcription factor** Z. Kellermayer*[1], D. Vojkovics[1], B. Kajtar[1], G. Berta[1], A. Schippers[2], N. Wagner[2], I. Nagy[3,4], E. Boros[3], B. Balint[4], P. Balogh[1], [1]*University of Pecs, Hungary,* [2]*University of Aachen, Germany,* [3]*Biological Research Center, Hungary,* [4]*Seqomics Biotechnology Ltd, Hungary*
[P1.1.22]	**NK cell activity during viral infection is modulated by non-apoptotic TRAIL function** L. Cardoso Alves, M. Berger, N. Kirschke, C. Lauer, N. Corazza, P. Krebs*, *University of Bern, Switzerland*
[P1.1.23]	**A follow-up analysis of the early dynamics of lung resident memory T cell responses in recurring influenza infection** A. Bencsik*[1], B. Ersek[1], N. Lupsa[1], I. Jankovics[1,2], J. Matko[1,3], E.I. Buzas[1], Z. Pos[1], [1]*Semmelweis University, Hungary,* [2]*National Center for Epidemiology, Hungary,* [3]*Eötvös Loránd University, Hungary*
[P1.1.24]	**Interleukin-25 enables small intestinal adaptability to eukaryotic pathosymbionts** C. Schneider*[1], C.E. O'Leary[1], J. von Moltke[1,2], H. Liang[1], Q.Y. Ang[1], P.J. Turnbaugh[1], S. Radhakrishnan[3], M. Pellizzon[3], A. Ma[1], R.M. Locksley[1], [1]*University of California San Francisco, USA,* [2]*University of Washington, USA,* [3]*Research Diets, Inc., USA*
[P1.1.25]	**Cell-type specific long ncrna dysregulation in the ileum of treatment naïve early onset crohn disease** Y. Haberman[1,2], M. BenShoshan*[2,3], A. Di Segni[2], P.J. Dexheimer[1], T. Braun[2], G. Efroni[2], B. Weiss[2], I. Barshack[2,3], Y. Anikster[2,3], L.A. Denson on behalf of the Crohn's & Colitis Foundation (CCF)-sponsored RISK study[1], [1]*Cincinnati Children's Hospital Medical Center, USA,* [2]*Sheba Medical Center, Israel,* [3]*Tel Aviv University, Israel,* [4]*Connecticut Children's Medical Center, USA,* [5]*Emory University, USA*
[P1.1.26]	**Immunoglobulin A as a critical regulator of demyelinating neuroinflammation** A-K. Pröbstel*[1], E. Cekanaviciute[1], R. Baumann[1], H. Miller[2], J. Bisanz[1], S. Sing[1], R. Gomez[1], B.A. Cree[1], S.L. Hauser[1], S.E. Baranzini[1], [1]*University of California San Francisco, San Francisco, USA,* [2]*University of California, Davis, USA*
[P1.1.27]	**Origin and potentiation of tissue-resident type 2 innate lymphoid cells** J. Lee*[1], C. Schneider[1], J.C. Nussbaum[1], H-E. Liang[1], R. Ricardo-Gonzalez[1], L.K. Smith[1], S.A. Villeda[1], R.M. Locksley[1,2], [1]*University of California, San Francisco, USA,* [2]*Howard Hughes Medical Institute, USA*
[P1.1.28]	**Probing the immuno-regulatory function of Lipocalin 2 in viral infections** M.L. Watzenböck*[1,2], P. Starkl[1,2], B. Drobits[1,2], A.D. Gorki[1,2], K. Lakovits[1,2], A. Hladik[1,2], S. Knapp[1,2], [1]*CeMM, Research Center for Molecular Medicine of the Austrian Academy of Sciences, Austria,* [2]*Medical University of Vienna, Austria*
[P1.1.29]	**Novel antimicrobial proteins in *eisenia andrei* earthworms: implications for immunity, development and regeneration** K. Bodó*[1], A. Boros[2], E. Rumpler[3], P. Németh[1], P. Engelmann[1], [1]*University of Pécs, Hungary,* [2]*Baranya County Institute of State Public Health Service, Hungary*
[P1.1.30]	**Group 1 Innate lymphoid cell lineage identity is determined by a *cis*-regulatory element marked by a long non-coding RNA** W.K. Mowel*[1], S.J. McCright[1], J.J. Kotzin[1], A. Williams[2], R.A. Flavell[3], J. Henao-Mejia[1], [1]*University of Pennsylvania, USA,* [2]*The Jackson Laboratory, USA,* [3]*Yale University, USA*
[P1.1.31]	**Mucus secreted from inter-crypt goblet cells is required for proper mucus layer formation in colon and protection against colitis** E. Nyström*, G. Birchenough, B. Martinez Abad, M. Johansson, *Gothenburg University, Sweden*
[P1.1.32]	**Long-lived TRM Th17 cells develop after bacterial immunization** M.C. Amezcua Vesely*[1,3], P. Pallis[1], P. Bielecki[1], N. Gagliani[1,2], R.A. Flavell[1,3], [1]*Yale University, USA,* [2]*University Medical Center Hamburg-Eppendorf, Germany,* [3]*Howard Hughes Medical Institute, USA*
[P1.1.33]	**Mucosal infection induces innate lymphoid cell plasticity leading to intestinal pathology** W.T. Muraoka[1,2], Q. Xia[2], E.P. Koroleva[1], L.W. Kummer[2], C.M. Spencer[2], J.S. Lin[2], M. Mohrs[2], A.V. Tumanov*[1,2], [1]*University of Texas Health San Antonio, USA,* [2]*Trudeau Institute, USA*

[P1.1.34]	**Stromal cell – Neutrophil interactions in Inflammatory bowel disease** E. Kvedaraite*[1,3], M. Lourda[1], A. Van Acker[1], D. Unnersjö Jess[2], R. Nadisauskaite[1,3], D. Gavhed[1], J. Mjösberg[1], M. Ideström[1,3], J-I. Henter[1,3], M. Svensson[1], [1]*Karolinska Institute, Sweden,* [2]*Royal Institute of Technology, Sweden,* [3]*Karolinska University Hospital, Sweden*
[P1.1.35]	**Study of the role of Interleukin 9 in basophil differentiation and function** A. Marcelino-Vega, J.L. Ramos Balderas, P. Licona-Limón*, *UNAM, Mexico*
[P1.1.36]	**ILC2s and type 2 immunity influence hair follicle stem cell proliferation and skin homeostasis** R.R. Ricardo-Gonzalez*[1], R.M. Locksley[1,2], [1]*University of California San Francisco, USA,* [2]*Howard Hughes Medical Institute, USA*
[P1.1.37]	**Defining group 2 innate lymphoid cell tissue niches** A.B. Molofsky*, S. Jones, M. Dahlgren, K. Cautivo-Reyes, S. Nozzari, *UCSF, USA*
[P1.1.38]	**Carbapenem-resistant *Klebsiella pneumoniae* exploit IFN-λ signaling to invade across the airway epithelium** M. Wickersham*[1,2], D. Ahn[1], H. Peñaloza[3], S. Bueno[3], A. Prince[1], [1]*Columbia University College of Physicians and Surgeons, USA,* [2]*Weill Cornell Medical College, USA,* [3]*Pontificia Universidad Católica de Chile, Chile*
[P1.1.39]	**COMMD10 regulates bacteria-specific innate immune response in monocytes and macrophages** S. Ben shlomo[1], O. Mouhadeb*[1], S. Gruber[1], I. Farkash[1], Z. Halpern[1], E. Burstein[2], C. Varol[1], N. Gluck[1], [1]*Tel-Aviv University, Israel,* [2]*University of Texas, USA*
[P1.1.40]	**An atlas of the mosquito immune system at single cell resolution** G. Raddi*[1,3], C. Barillas Mury[3], O. Billker[1], [1]*Wellcome Trust Sanger Institute, UK,* [2]*University of Cambridge, UK,* [3]*National Institutes of Health, USA,* [4]*National Institutes of Health / David Geffen School of Medicine at UCLA, USA*
[P1.1.41]	**Single cell analysis of human tissue CD3+ T cells in allergic inflammation** T. Wen[1], B.J. Aronow[1], P. Dexheimer[1], P. Putnam[1], V. Mukkada[1], M. Rochman[1], S. Darko[2], D. Douek[2], M.E. Rothenberg*[1], [1]*Cincinnati Childrens, USA,* [2]*NIH, USA*
[P1.1.42]	**Single cell analysis reveals novel subsets of cells infected by salmonella at early infection** D. Hoffman*, N. Bossel, S. Hen-Avivi, R. Avraham, *Weizmann institute of Science, Israel*
[P1.1.43]	**IL-10 producing non-pathogenic Th17 cells and their contribution to intestinal inflammation** J. Wolbert*, D. Schafflick, G. Meyer zu Hörste, *University Hospital Muenster, Germany*
[P1.1.44]	**The role of ripk1 in t lymphocytes and epithelial homeostasis** J. Huysentruyt*[1,2], N. Thiault[3], S. Kourula[1,2], F. Ghazavi[1,2], P. Tougaard[1,2], T. Oltean[1,2], T. Vanden Berghe[1,2], N. Takahashi[1,2], H. Cheroutre[3], P. Vandenabeele[1,2], [1]*Ghent University, Belgium,* [2]*VIB Center for Inflammation Research, Belgium,* [3]*La Jolla Institute for Allergy and Immunology, USA*
[P1.1.45]	**Single cell analysis of CD4+ T cells in the colon** E. Kiner*, D. Mathis, C. Benoist, *Harvard Medical School, USA*
[P1.1.46]	**TL1A exacerbates cytokine-induced acute gut inflammation and potentiates infiltration of intraepithelial NK cells in mice** P. Tougaard*[1,2], L.O. Martinsen[2], L.S.F. Andersen[2], L. Krych[2], D.S. Nielsen[2], T.B. Buus[2], A.E. Pedersen[2], A.K. Hansen[2], S. Skov[2], C.H.F. Hansen[2], [1]*University of Ghent, Belgium,* [2]*University of Copenhagen, Denmark*
[P1.1.47]	**Validated transcriptional regulatory models for innate lymphoid cells** M.V. Pokrovskii*[1], E.R. Miraldi[1,2], J.A. Hall[1], A. Watters[2], S.N. Waggoner[4], R. Bonneau[2,3], D.R. Littman[1,5], [1]*The Kimmel Center for Biology and Medicine of the Skirball Institute, New York University School of Medicine, USA,* [2]*Simons Center for Data Analysis, USA,* [3]*New York University, USA,* [4]*Cincinnati Children's Hospital Medical Center, USA,* [5]*Howard Hughes Medical Institute, USA*
[P1.1.48]	**Human monocytes and macrophages regulate immune tolerance via integrin αvß8-mediated TGFß activation** A. Kelly[1], E.E. Shuttleworth[1], C. Smedley[1], S.A. Houston[1], T.M. Fenton[1], S. Levison[3], E.R. Mann[2], M.A. Travis*[1], [1]*University of Manchester, UK,* [2]*University of Glasgow, UK,* [3]*Central Manchester University Hospital NHS Foundation Trust, UK*
[P1.1.49]	***Lactobacillus plantarum* modulates MR1-dependent activation of MAIT cells** J. Emgård*, J. Dias, C. Boulouis, E. Leeansyah, J.K. Sandberg, *Karolinska Institute, Sweden*
[P1.1.50]	**Targeting of antigen toward M cell enhances T cell activation in the Peyer's patches** M. Kolesnikov*[1], C. Curato[1], H. Florindo[2], H. Ohno[3], S. Jung[1], G. Shakhar[1], [1]*Weizmann Institute of Science, Israel,* [2]*Lisbon University, Portugal,* [3]*RIKEN Center, Japan*
[P1.1.51]	**Natural variants of methicillin-resistant Staphylococcus aureus differ in biofilm formation** H. Bergsten*, J. Snäll, S. Mairpady Shambat, P. Chen, N. Siemens, M. Svensson, A. Norrby-Teglund, *Karolinska Institutet, Sweden*
[P1.1.52]	**A novel locally maintained macrophage population in the intestine is defined by Tim-4 and CD4** T.N. Shaw*[1], S.A. Houston[1], K. Wemyss[1], H.M. Bridgeman[1], T.A. Barbera[1], T. Zangerle-Murray[1], P. Strangward[1], A.J.L. Ridley[1], P. Wang[1], J.R. Grainger[1], [1]*University of Manchester, UK,* [2]*National Institutes of Health, USA*
[P1.1.53]	**Antigen presenting group 3 innate lymphoid cells regulate T-dependent IgA responses to colonic bacteria** F. Melo-Gonzalez, M. Papadopoulou, M.R. Hepworth*, *University of Manchester, UK*

[P1.1.54]	**Social stress increases the risk for microbiota-dependent autoimmunity** M. Werbner, Y. Barsheshet, N. Werbner, I. Averbuch, O. Ziv, B. Brant, S. Gelberg, M. Titelbaum, O. Koren, O. Avni*, *Bar-Ilan University, Israel*
[P1.1.55]	**Functionally specialized tissue resident MAIT cell populations in human oral mucosa** M.J. Sobkowiak, H. Davanian, A. Gibbs, A. Tjernlund, J. Dias, S. Aleman, E. Leeansyah, R. Heymann, M. Sällberg-Chen, J.K. Sandberg*, *Karolinska Institutet, Sweden*
[P1.1.56]	**Cross talk between the Wnt and MAPK signals in intestine homeostasis and cancer** B. Su*[1,2], N. Wu[1], H. Sun[1], X. Zhao[1], Z. Liu[1], Y. Qi[1], X. Niu[1], Q. Wang[1], D. Liu[2], [1]*Shanghai Jiao-Tong University School of Medicine, China,* [2]*Yale University School of Medicine, USA*
[P1.1.57]	**Alveolar macrophages are migratory cells that actively patrol the alveolar lumen** A.S. Neupane*[1,2], A. Thanabalasuriar[1,2], P. Kubes[1,2], [1]*University of Calgary, Canada,* [2]*Calvin, Phoebe, and Joan Snyder Institute for Chronic Diseases, Canada*
[P1.1.58]	**Sensing of microbiota-derived natural products by host GPCRs** A. Jarret*, R. Jackson, R.A. Flavell, *Yale University, USA*
[P1.1.59]	**Missense variants in NOX1 and p22phox in a case of very-early-onset inflammatory bowel disease are functionally linked to NOD2** S. Lipinski*[1], B.S. Petersen[1], M. Barann[1], [1]*Christian-Albrechts-University Kiel, Germany,* [2]*University Hospital Schleswig-Holstein, Germany*
[P1.1.60]	**C-type lectin receptors orchestrate anti-fungal immunity in the gut** I.M. Dambuza*, G.D. Brown, *Institute of Medical Sciences, UK*
[P1.1.61]	**T cell regulation of gut IgA responses** I. Gribonika*, K. Schön, N. Lycke, *University of Gothenburg, Sweden*
[P1.1.63]	**Deletion of (NF-κB1) subunit increases innate immune response and protects host from *H. pylori colonization*** S. Gupta*[1], K. Ponnusamy[1], T. Habib[2], R. Chaturvedi[1], [1]*Jawaharlal Nehru University, India,* [2]*Biomedical Informatics Division, Sidra Medical and Research Center, Qatar*
THE META-ORGANISM: MICROBIOME AND ITS HOST	
[P1.2.01]	**An intestinal organ culture system uncovers a role for the nervous system in microbe-immune crosstalk** N. Yissachar*[1,2], I.M. Chiu[2], D. Mathis[2], C. Benoist[2], 1*Bar-Ilan University, Israel,* [2]*Harvard Medical School, USA*
[P1.2.02]	**Fixed antibody repertoire results in a complete abrogation of allergic airway responses via changes in microbiota composition** T.P. Wypych*[1], C. Pattaroni[1], A. Rapin[2], N.L. Harris[2], B.J. Marsland[1], 1*University of Lausanne, Switzerland,* [2]*École Polytechnique Fédérale de Lausanne (EPFL), Switzerland*
[P1.2.03]	**A gut commensal controls pulmonary mycobacterial infection through targeting gut-lung axis** C.S. Lin*, H.C. Lai, *Chang Gung University, Taiwan*
[P1.2.04]	**Herbal mushroom polysaccharides counteract obesity through a novel commensal-rewired gut microbiome and intestinal integrity** T.R. Wu, C.S. Lin, C.J. Chang, H.C. Lai*, *Chang Gung University, Taiwan*
[P1.2.05]	**IgA-targeted gut microbiota by defective purinergic control of T follicular helper cells in altered host metabolism** L. Perruzza[1], F. Strati*[1], G. Gargari[2], A.M. D'Erchia[3], B. Fosso[3], G. Pesole[3], S. Guglielmetti[2], F. Grassi[1], 1*Institute for Research in Biomedicine, Switzerland,* [2]*niversità degli Studi di Milano, Italy,* [3]*National Research Council, Italy*
[P1.2.06]	**Impaired AhR ligands production by the gut microbiota is a key factor in metabolic syndrome** J.M. Natividad[1], B. Lamas[1,2], A.C. Jarry[3], R. Martin[1], M.L. Michel[1], M.L. Richard[1], P. Langella[1], R.J. Xavier[4], H. Duboc[3,5], H. Sokol*[1,3], 1*INRA, France,* [2]*UPMC, France,* [3]*INSERM, France,* [4]*Harvard, USA,* [5]*APHP, France*
[P1.2.07]	**A lantibiotic-producing, commensal *Blautia* species confers colonization resistance against vancomycin-resistant *Enterococcus*.** S. Kim*, R. Seok, E. Littmann, I. Leiner, L. Ling, R. Carter, S. Caballero, S. Becattini, D. Banh, Z. Wang, *Sloan Kettering Institute, USA*
[P1.2.08]	**dbBact: A bacterial community knowledge base** A. Amir[2], E. Ozel[1], R. Knight[2], N. Shental*[1], 1*The Open University of Israel, Israel,* [2]*UCSD, USA*
[P1.2.09]	**Within-subject variation in gut microbioal composition precede Crohns disease flares** T. Braun[1], A. DiSegni[1], N. Levhar[1,3], M. Bubis[1,3], D. Shouval[1], R. Eliakim[1,3], S. Ben-Horin[1,3], U. Kopylov[1,3], Y. Haberman*[1,2], 1*Sheba Medical Center, Israel,* [2]*Cincinnati Children's Hospital Medical Center, USA,* [3]*Israeli IBD Research Nucleus, Israel*
[P1.2.10]	**Probing the human skin virome in primary immunodeficiency using shotgun metagenomics** O. Tirosh*, S. Conlan, C. Deming, C. Ng, S. Lee-Lin, N.I.S.C. Comparative Sequencing Program, J.A. Segre, H.H. Kong, *National Institutes of Health Bethesda, USA*
[P1.2.11]	**Pathogen diversity drives the evolution of promiscuous peptide binding of human mhc-ii alleles** M. Manczinger*[1,2], G. Boross[2], L. Kemény[1], T. Lenz[3], B. Papp[2], C. Pál[2], 1*University of Szeged, Hungary,* [2]*Hungarian Academy of Sciences, Hungary,* [3]*Max Planck Institute for Evolutionary Biology, Germany*

[P1.2.12]	**Staphylococcal phenol-soluble modulins are functional ligands for signal inhibitory receptor on leukocytes-1** M. Rumpret*, M. van der Linden, J. van Strijp, N.M. van Sorge, L. Meyaard, *University Medical Center Utrecht, The Netherlands*
[P1.2.13]	**Compositional change of the gut microbiota in HIV infected humanized mice** S. Nakaoka*[1, 2], Y. Koyanagi[3], K. Sato[3], 1*JST PRESTO, Japan,* [2]*The University of Tokyo, Japan,* [3]*Kyoto University, Japan*
[P1.2.14]	**Dual OxidaseE (DUOX) 2 upregulation alters mucus composition in patients with ulcerative colitis after pouch surgery** K.M. Rabinowitz*[1, 2], S. Cohen-Kedar[1, 2], K. Chait[3], E. Contijoch[4], J. Faith[4], M. Pasmanik-Shorr[2], S. Shen-Orr[3], I. Dotan[1, 2], 1*Rabin Medical Center, Israel,* [2]*Tel Aviv University, Israel,* [3]*Technion, Israel,* [4]*Mount Sinai School of Medicine, USA*
[P1.2.15]	**Linking diet, gut immunity and microbiota in the pathogenesis of type 1 diabetes** I. Cosorich*, L. De Giorgi, C. Sorini, A. Mario Bolla, E. Bosi, R. Ferrarese, R. Zuppardo, D. Esposito, F. Canducci, M. Falcone, *San Raffaele Scientific Institute, Italy*
[P1.2.16]	**Dact3-JNK pathway plays a key role in the anti-Inflammatory effects of the commensal bacterium Faecalibacterium prausnitzii** M. Lenoir[1], R. Martin[1], H. Sokol[2], P. Langella*[1], F. Chain[1], L. Bermudez-Humaran[1], 1*Université Paris-Saclay, France,* [2]*Sorbonne Universités, France*
[P1.2.17]	**The clinical determinants shape gut microbial profile of inflammatory bowel disease patients** B. Yilmaz*[1], P. Juillerat[2], R. Wiest[2], A.J. Macpherson[1, 2], 1*University of Bern, Switzerland,* [2]*Inselspital, Switzerland*
[P1.2.18]	**The identification of a novel secreted bacterial sialidase that enables intestinal mucus degradation by commensal bacteria** G.H. van Muijlwijk*, J.P.M. van Putten, M.R. de Zoete, *Utrecht University, The Netherlands*
[P1.2.19]	**Early life microbial colonization of the skin may play a role in the development of allergies** A. Rapin*[1], E.M. Rehbinder[2], C. Pattaroni[3], J.T. Lunde[4], B. Nordlund[5], H.O. Skjerven[2], N.L. Harris[1], K.C. Lødrup Carlsen[2], B.J. Marsland[3], 1*EPFL, Switzerland,* [2]*University of Oslo, Norway,* [3]*Centre Hospitalier Universitaire Vaudois (CHUV), Switzerland,* [4]*Østfold Hospital, Norway,* [5]*Karolinska University Hospital, Sweden*
[P1.2.20]	**Gut micorbiota-brain axis shift in pulmonary tuberculosis patients.** S. Sahu*[1], M. Das[1], S.C. Bishwal[1], S. Debnath[2], R. Bhowmick[2], R. Debnath[2], A. Das[2], R.K. Nanda[1], 1*International Centre for Genetic Engineering and Biotechnology, India,* [2]*Agartala Government Medical College, India*
[P1.2.21]	**Gut microbiota influences the toxicity to platinum compounds by orchestrating drug pharmacokinetics** S. Roy*[1], R. Das Neves[1], L. Amable[2], C. Smith[1], A. Dzutsev[1], R. Costa[1], A. Huang[1], B. Edwards[1], Y. Kim[1], G. Trinchieri[1], 1*NCI-Bethesda, NIH, USA,* [2]*NIMHD, NIH, Bethesda, USA,* [3]*NCI, NIH, Shady Grove, USA*
[P1.2.22]	**Unraveling microbial driving factors of hyperglycemia** I. Kalka*, M. Pevsner-Fischer, E. Soffer, T. Korem, D. Zeevi, N. Godneva, E. Elinav, E. Segal, *Weizmann Institute of Science, Israel*
[P1.2.23]	**The importance of the combinatorial effect of diet and probiotics interactions in the context of colorectal cancer therapy** K.G. Greenhalgh*[1], J.R.G. Ramiro Garcia[1], A.H. Heinken[1], J.B. Baginska[1], E.L. Letellier[2], R.H. Halder[1], A.F. Frachet[1], P.U. Ullman[2], S.H. Haan[2], P.W. Wilmes[1], 1*Luxembourg Centre of Systems Biomedicine, Luxembourg,* [2]*Life Science Research Unit, Luxembourg*
[P1.2.24]	**The high-resolution landscape microbial ecology of the human face** M. Brandwein*[1, 2], G. Fuks[4], A. Israel[2], E. Hodak[5], M. Harari[2], D. Steinberg[1], Z. Bentwich[2], A. Szitenberg[2], N. Shental[3], S. Meshner[2], 1*The Hebrew University of Jerusalem, Israel,* [2]*The Dead Sea and Arava Science Center, Israel,* [3]*The Open University of Israel, Israel,* [4]*The Weizmann Institute of Science, Israel,* [5]*Rabin Medical Center, Israel*
[P1.2.25]	**Human-derived bacterial species that can affect CD8 T cells in intestinal lamina propria** M. Furuichi*, T. Tanoue, K. Atarashi, K. Honda, *Keio university, Japan*
[P1.2.26]	**Intestinal colonization by oral origin *Klebsiella* induces TH1 responses and inflammation.** K. Atarashi*[1, 2], W. Suda[2], T. Kawaguchi[1, 2], M. Hattori[2], K. Honda[1, 2], 1*Keio University School of Medicine, Japan,* [2]*RIKEN Center for Integrative Medical Sciences, Japan*
[P1.2.27]	**Nlrp6 links intestinal dysbiosis with atherosclerotic disease** P. Duewell*[1, 2], A. Christ[2, 4], C. Thaiss[3], M. Schnurr[1], E. Elinav[3], E. Latz[2, 4], 1*Klinikum der Universität München, Germany,* [2]*University of Massachusetts Medical School, USA,* [3]*Weizmann Institute of Science, Israel,* [4]*Universität Bonn, Germany*
[P1.2.28]	**The gut microbiota regulates intestinal macrophage homeostasis to prevent T-cell dysfunction** E.R. Mann*[1], P. Andersen[1, 2], C. Alcon-Giner[1, 4], C. Leclaire[1, 4], S. Caim[1, 4], H. Wessel[1, 3], A. Bravo-Blas[1, 3], C. Thomson[1, 3], V. Kästele[1, 3], J. Connolly[1, 3], 1*University of Manchester, UK,* [2]*Johns Hopkins Medicine, USA,* [3]*University of Glasgow, UK,* [4]*Quadram Institute, UK,* [5]*Eli Lilly, USA*

[P1.2.29]	**A gut pathobiont breaches both gut lymphatic and vascular barriers to initiate systemic autoimmunity** R. Fine*, S.M. Vieira, N. Khan, C. Dehner, D.Z. Ruiz, V. Kumar, A.L. Goodman, M.A. Kriegel, *Yale University, USA*
[P1.2.30]	**Dynamic transition of the human skin microbial patterns associated with atopic dermatitis pathology** E. Kawakami*[1], H. Kawasaki[1,2], S. Obata[2], A. Honda[2], A. Fukushima[2], T. Sasaki[2], W. Suda[2], K. Honda[1,2], T. Ebihara[2], M. Amagai[1,2], 1*RIKEN, Japan,* [2]*Keio University, Japan*
[P1.2.31]	**Host genetics and gut microbiome underlie the variance of regulatory proteins circulating in the blood** A. Kurilshikov*[1], D. Zhernakova[1,2], T. Le[1], B. Atanasovska[1], M.J. Bonder[1], S. Sanna[1], F. Kuipers[1], C. Wijmenga[1], A. Zhernakova[1], J. Fu[1], 1*University Medical Center Groningen, The Netherlands,* [2]*St. Petersburg State University, Russia*
[P1.2.32]	**Autoantibody cross-reactivity with a microbial protein from a prevalent human gut commensal in antiphospholipid syndrome** W.E. Ruff*, C. Dehner, A.S. Roth, A. Goodman, M.A. Kriegel, *Yale University, USA*
CELLULAR AND ORGANISMAL HOMEOSTASIS	
[P1.3.01]	**Engineered specific human T regulatory cells suppress via contact-dependent and -independent pathways** D.W. Scott*, Y.C. Kim, J.H. Yoon, A.H. Zhang, *Uniformed Services University, USA*
[P1.3.02]	**Balancing autoimmunity and immunity: The role[s] of ADAR1 in viral infection** M.M. Maurano*, D.B. Stetson, *University of Washington, USA*
[P1.3.03]	**IL-1b production by immune cells is regulated by platelets** V. Rolfes*[1], L. Böttcher[1], S. Maasewerd[1], L.S. Ribeiro[1], S. Schmidt[1], H.J. Stunden[1], E. Latz[1,2], B.S. Franklin[1], 1*University of Bonn, Germany,* [2]*University of Massachusetts Medical School, USA*
[P1.3.04]	**Retinoic acid receptor alpha directly represses a Th9 transcriptional and epigenomic program** D.M. Schwartz*[1], T. Farley[1], N. Richoz[1], H-Y. Shih[1], F.P. Davis[1], Y. Kanno[2], R. Siegel[1], A. Laurence[1], F. Meylan[1], J.J. O'Shea[1], 1*NIAMS, NIH, USA,* [2]*John Radcliffe Hospital, University of Oxford, UK*
[P1.3.05]	**Uncovering the role of the inflammatory response in promoting mammalian digit tip regeneration** K.R. Mesa*[1,2], D.R. Littman[1], 1*New York University, USA,* [2]*Howard Hughes Medical Institute, USA*
[P1.3.06]	**Pre-conditioning of naive T cells is required to maintain their effector differentiation potential** T. Kreutzberg[1], C. Schmitt-Mbamunyo[1], G.J. Hämmerling[2], N. Garbi*[1], 1*University of Bonn, Germany,* [2]*German Cancer Research Center, Germany*
[P1.3.07]	**A chloride sensing pathway regulates phagocyte homeostasis during apoptotic cell clearance** J.S.A. Perry*, S. Morioka, C. Medina, M. Raymond, C. Robertson, L. Shankman, S. Onengut-Gumuscu, K.S. Ravichandran, *University of Virginia School of Medicine, USA*
[P1.3.08]	**Quantitative shotgun proteomics to solve identity issues of human regulatory T cells** E. Cuadrado[1], S. de Kivit[1], R. Opstelten[2], M. Slot[2], A. Meijer[1], R. van Lier[1], M. van den Biggelaar[1], J. Borst[1], D. Amsen*[1], 1*Sanquin, The Netherlands,* [2]*The Netherlands Cancer Institute, The Netherlands*
[P1.3.09]	**Regulation of human T cells by tonicity signals** J. Matthias, R. Noster, C.E. Zielinski*, *Technical University of Munich, Germany*
[P1.3.10]	**Toll-like receptor signaling in thymic epithelial cells increases cooperative antigen transfer an enforces the induction of immune tolerance** M. Voboril*[1,2], J. Dobes[1], M. Dobesova[1], T. Brabec[1], A. Cepkova[1], V. Benes[3], D. Filipp[1], 1*Institute of Molecular Genetics of the ASCR, Czech Republic,* [2]*Charles University in Prague, Czech Republic,* [3]*European Molecular Biology Laboratory (EMBL), Germany*
[P1.3.11]	**The transcription factor BCL6 regulates the developmental program of innate-like T lymphocytes** M. Verykokakis, *BSRC Alexander Fleming, Greece*
[P1.3.12]	**New identity of extrathymic aire-expressing cells involved in peripheral T-cell tolerance** J. Dobeš[1,2], T. Yamano[3], M. Voboril[1,2], M. Dobešová[1], L. Klein[3], D. Filipp*[1], 1*Institute of Molecular Genetics, AS CR, Czech Republic,* [2]*Charles University, Czech Republic,* [3]*Institute for Immunology, LMU Munich, Germany*
[P1.3.13]	**Study of regulated intron retention in immune system** Z. Zeng[1], Y. Tian[1], Y. Zhao[1], N. Weng[2], J. Zhu[2], W. Peng*[1], 1*George Washington University, USA,* [2]*NIH, USA*
[P1.3.14]	***N*-Glycolylneuraminic acid (Neu5Gc) and anti-Neu5Gc antibodies promote calcification in native and bioprosthetic heart valves** A. Paul*[1], S. Leviatan Ben-Arye[1], L. Govani[1], H. Yu[2], I. Fellah-Hebia[3], B. Tomaso[4], G. Cesare[5], J. Christian Roussel[3], X. Chen[2], V. Padler-Karavani[1], 1*Tel Aviv University, Israel,* [2]*University of California-Davis, USA,* [3]*University Hospital, INSERM UMR1087, France,* [4]*University of Padua, Italy,* [5]*Avantea, Via Porcellasco, Italy*
[P1.3.15]	**Immune cellular homeostasis is determined by genetic variants of cellular production and turnover** T. Dubovik*[1], E. Starosvetsky[1], B. Leroy[2], R. Normand[1], Y. Admon[1], A. Ziv-Kennet[1], M. G'Sell[2], S. Shen-Orr[1], [1]*Technion, Israel,* [2]*Carnegie Mellon University, USA*
[P1.3.16]	**A computational model of the inter-cellular immune network reveals novel signaling targets** K. Kveler*[1], E. Starosvetsky[1], A. Ziv-Kenet[1], Y. Kalugny[1], Y. Gorelik[1], G. Shalev-Malul[1], N. Aizenbud-Reshef[1], T. Dubovik[1], J. Campbell[2], S.S. Shen-Orr[1], [1]*Technion-Israel Institute of Technology, Israel,* [2]*Northrop Grumman IT Health Solutions, USA,* [3]*Max Planck Institute of Biochemistry, Germany,* [4]*Bnai Zion Medical Center, Israel*

[P1.3.17]	**Zmynd8, a repressor of metastasis-linked genes, facilitates efficient AID targeting of immunoglobulin switch regions to promote class switch recombination** D. Rosen*[1], V.D. Benito[2], M.C. Nussenzweig[1], M. Di Virgilio[2], 1*The Rockefeller University, USA,* [2]*Max Delbruck Center for Molecular Medicine, USA*
[P1.3.18]	**Design features of macrophage-fibroblast cell circuit** X. Zhou*[1,2], R.A. Franklin[1,2], M. Adler[3], J.B. Jacox[1,2], A. Mayo[3], U. Alon[3], R. Medzhitov[1,2], [1]*Yale School of Medicine, USA,* [2]*Howard Hughes Medical Institute, USA,* [3]*Weizmann Institute of Science, Israel*
[P1.3.19]	**Sexual dimorphism in the immune system transcriptome** S. Gal-Oz*[1], H. Yoshida[2], N. Elbaz[1], H. Ner-Gaon[1], C. Benoist[2], T. Shay[1], 1*Ben-Gurion University, Israel,* [2]*Harvard Medical School, USA*
[P1.3.20]	**Elevated glucocorticoid signaling in pancreatitis promotes Kras-driven pancreatic tumorigenesis associated with Cachexia** C.N. Shen*[1,3], C.R. Huang[1], C.C. Su[1], C.C. Hsieh[1], Y.M. Shyr[2], S.E. Wang[2], T.H. Chen[2,3], 1*Academia Sinica, Taiwan,* [2]*Taipei Veterans General Hospital, Taiwan,* [3]*National Yang-Ming University, Taiwan*
[P1.3.21]	**Identifying differentially spliced genes in the mouse immune system** H. Ner-Gaon*, A. Magen, T. Shay, T. ImmGen Consortium, *Ben-Gurion University of the Negev, Israel*
[P1.3.23]	**Disarming the alarm button: Salmonella disrupts host response via sphingolipid metabolism** O. Zucker*, N. Bossel Ben-Moshe, S. Hen Avivi, R. Avraham, *Weizmann Institute of Science, Israel*
[P1.3.24]	**High resolution longitudinal immune profiling reveals immunosenescence dynamics and attractor states** Y. Pickman*[1], D. Furman[2], A. Alpert[1], E. Starosvetsky[1], S. Schaffert[2,3], R. Gaujoux[1], P. Khatri[2,3], H. T.Maecker[2], S. Shen-Orr[1], M. Davis[2,4], 1*Technion institute of technology, Israel,* [2]*Stanford University, USA,* [3]*Biomedical Informatics Research, USA,* [4]*The Howard Hughes Medical Institute, USA*
[P1.3.25]	**Do autoimmune susceptibility alleles, such as PTPN22, play a role in the development of autoimmunity linked to homeostatic T cell expansion?** J.A. Knipper*, R. Zamoyska, *University of Edinburgh, UK*
[P1.3.26]	**Macrophages sense extracellular matrix mechanics to regulate tissue repair** M.L. Meizlish*[1], L. Meyaard[3], R. Medzhitov[1,2], 1*Yale University, USA,* [2]*Howard Hughes Medical Institute, USA,* [3]*University Medical Center Utrecht, The Netherlands*
[P1.3.27]	**Antracyclines inhibit NF-kB-dependent transcription by blocking p65** A.B. Barros*, A.N. Costa, D. Pedroso, L.F. Moita, *Instituto Gulbenkian de Ciência, Portugal*
[P1.3.28]	**Single Cell RNA-sequencing reveals distinct clusters of kidney-infiltrating T cells in patients with ANCA-associated Glomerulonephritis** C.F. Krebs*, H.J. Paust, C. Kilian, A. Borchers, J.E. Turner, T.B. Huber, N. Gagliani, S. Huber, U. Panzer, *University Medical Center Hamburg-Eppendorf, Germany*
[P1.3.29]	**Understanding the role of specific immune cell populations in IBD pathophysiology using paired blood and intestinal samples** N. Maimon*[1,2], H. Bar-Yosef[2], E. Starosvetsky[1], Y. Chowers[2], S. Shen-Orr[1], 1*Technion, Israel,* [2]*Rambam Health Care Campus, Israel*
[P1.3.30]	**Prevention of melanoma brain colonization by inhibiting cytokine secretion from activated astrocytes** S. Pozzi*, P. Ofek, A. Scomparin, E. Yeini, D. Ben-Shushan, A. Eldar-Boock, R. Satchi-Fainaro, *Tel Aviv University, Israel*

Poster Session 2 **Monday, February 12 2018 18:15-20:15**	
IMMUNITY IN CANCER AND OTHER DISEASED TISSUES	
[P2.1.01]	**Enhancing antibody-mediated immune response against tumor-associated carbohydrate antigens** P. Weitzenfeld*, J.V. Ravetch, *Rockefeller University, USA*
[P2.1.02]	**CD74 is a novel transcription regulator** N. Gil-Yarom*, L. Radomir, L. Sever, *Weizmann, Israel*
[P2.1.03]	**HNRNPR regulates the expression of classical and nonclassical MHC class I proteins** A. Reches*, O. Mandelboim, *Hebrew University Hadassah Medical School, Israel*
[P2.1.04]	**Innate immune landscape in early stage lung adenocarcinoma by paired single cell analysis** Y. Lavin*[1], S. Kobayashi[1], A. Leader[1], E.D. Amir[1], N. Elefant[2], C. Bigenwald[1], R. Remark[1], R. Sweeney[1], A. Rahman[1], M. Merad[1], [1]*Icahn School of Medicine at Mount Sinai, USA,* [2]*Weizmann Institute of Science, Israel*
[P2.1.05]	**UVB-induced mutational load and tumor heterogeneity dictates anti-tumor immune response against melanoma** Y. Wolf*[1], G. Bar-Eli[1], A. Jimenez-Sanchez[1,2], R. Levy[1], S. Patkar[1,3], E. Barnea[1,4], M. Miller[1,2], A. Admon[1,4], E. Ruppin[1,3], Y. Samuels[1], [1]*The Weizmann Institute of Science, Israel,* [2]*University of Cambridge, UK,* [3]*University of Maryland, USA,* [4]*Technion, Israel*
[P2.1.06]	**Latent HIV reservoirs exhibit inherent resistance to elimination by Cytotoxic T-Lymphocytes** S.H. Huang[1], Y. Ren[1], S. Patel[1,2], C. Bollard[1,2], R.B. Jones*[1], [1]*The George Washington University, USA,* [2]*Children's National Health System, USA*
[P2.1.07]	**Chronic inflammation inverts CD200 receptor function and perpetuates type I immune responses** M. van der Vlist*, M.I. Ramos, L. van den Hoogen, S. Hiddingh, R.J. Lebbink, T.R.D.J. Radstake, L. Meyaard, *UMC Utrecht, The Netherlands*
[P2.1.08]	**Early growth response gene (Egr) 2 and 3 reciprocally regulate proliferation and effector function of T cells** T. Miao, A. Symonds, S. Li, P. Wang*, *Blizard Institute - Queen Mary University of London, UK*
[P2.1.09]	**Development of an anti-NKp46 mAb for the evaluation of NKp46 activities** O. Berhani*, O. Mandelboim, *The Hebrew University, Israel*
[P2.1.10]	**Immune evasion by oncogenic fusion proteins of acute myeloid leukemia** S. Elias*[1], S. Kahlon[1], T. Unger[2], O. Mandelboim[1], [1]*Hebrew University of Jerusalem, Israel,* [2]*Weizmann Institute of Science, Israel*
[P2.1.11]	**Western diet triggers a NLRP3-dependent persistent functional reprograming of myeloid cells** A. Christ*[1,2], P. Guenther[3], M. Lauterbach[1], P. Duewell[7], N. Riksen[5], Y. Li[6], M. Fitzgerald[4], M. Netea[5], J. Schultze[3], E. Latz[1], [1]*UMass Medical School, USA,* [2]*Institute of Innate Immunity, Germany,* [3]*Life and Medical Science Institute, Germany,* [4]*MGH, USA,* [5]*Radboud University Medical Center, The Netherlands,* [6]*University of Groningen Medical Center, The Netherlands,* [7]*Klinikum der Universitaet Muenchen, Germany*
[P2.1.12]	**Neoadjuvant chemotherapy induces sample-specific T cell activation in high-grade serous ovarian cancer** A. Jiménez-Sánchez*[1], K. LaVigne[2], P. Cybulska[2], T. Walther[2], E. Sala[2], A. Snyder[2], M.L. Miller[1], [1]*University of Cambridge, UK,* [2]*Memorial Sloan Kettering Cancer Center, USA*
[P2.1.13]	**IL-5 positive effector innate type 2 lymphoid cells (ILC2) modulate the functions of inflamed adipose tissue (AT) and lung** T. Aychek*[1], D. Moulin[2], A. Waget[3], I. Gabanyi[4], F. Déjardin[1], S. Dulauroy[1], R. Burcelin[3], L. Peduto[5], G. Eberl[1], [1]*Microenvironment and Immunity unit Institut Pasteur, France,* [2]*University of Lorraine, France,* [3]*Paul Sabatier University Toulouse, France,* [4]*Perception and Memory unit Institut Pasteur, France,* [5]*Stroma, Inflammation and Tissue Repair Institut Pasteur, France*
[P2.1.14]	**Engineered switches using nuclear receptors and small molecule ligands to control chimeric antigen receptor T cells** J.H. Esensten*[1], C.Y. Wu[2], J. Taunton[1], W.A. Lim[1,3], [1]*University of California, San Francisco, USA,* [2]*Amgen Inc., USA,* [3]*Howard Hughes Medical Institute, USA*
[P2.1.15]	**Tumor glycolysis as a mechanism of immune evasion in breast cancer and melanoma** I.J. Cohen*, N. Socci, R. Khanin, R.G. Blasberg, *Memorial Sloan Kettering Cancer Center, USA*
[P2.1.16]	**Identification of a new vascular marker correlating with colorectal cancer metastatization to the liver** A. Bertocchi*[1], I. Spadoni[1], S. Carloni[1], S. Ravenda[1], G. Bertalot[1], S. Pece[1,2], P. Di Fiore[3,2], G. Viale[1,2], G. Penna[1], M. Rescigno[1,2], [1]*European Institute of Oncology, Italy,* [2]*University of Milan, Italy,* [3]*Istituto FIRC di Oncologia Sperimentale, Italy*

[P2.1.17]	**The transcriptional profile of synovial macrophages in rheumatoid arthritis reveal distinct disease subtypes** A.M. Mandelin[1], P.J. Homan[1], A.M. Shaffer[1], C.M. Cuda[1], S.T. Dominguez[1], A.V. Misharin[1], G.R.S. Budinger[1], R.M. Pope[1], H. Perlman[1], D.R. Winter*[1], [1]*Northwestern University, USA,* [2]*University of Alabama, USA,* [3]*Columbia University, USA,* [4]*Washington University, USA,* [5]*University of Michigan, USA,* [6]*Mayo Clinic, USA,* [7]*University of Birmingham, UK,* [8]*Queen Mary University of London, UK*
[P2.1.18]	**Transcriptional dynamics reveals a critical role of the Xcl1-Xcr1 communication axis in chronic virus infection** J. Argilaguet[1], M. Pedragosa[1], A. Esteve-Codina[3,4], G. Riera[1], C. Peligero[1,5], G. Bocharov[6], S. Heath[3,4], A. Meyerhans*[1,2], [1]*Universitat Pompeu Fabra, Spain,* [2]*Institució Catalana de Recerca i Estudis Avançats, Spain,* [3]*Centre for Genomic Regulation, Spain,* [4]*Institute of Science and Technology, Spain,* [5]*Weizmann Institute of Science, Israel,* [6]*Russian Academy of Sciences, Russia*
[P2.1.19]	**TNF primes intestinal regeneration following damage via activation of reserve cell pool** U. Das Adhikari*[1], A. Lasry[1], N. Amsalem[2], E. Kadosh[2], S. May[2], E. Winter[2], S. Itzkovitz[2], Y. Ben Neriah[2], [1]*Hebrew University of jerusalem, Israel,* [2]*Weizman Institute of Science, Israel*
[P2.1.20]	**The effects of IBD biologic drugs on the propagation of lymphomatous transformation of EBV-infected peripheral blood mononuclear cells** N. Levhar*[1], B. Ungar[1], U. Kopilov[1], M. Yavzori[1], E. Fudim[1], O. Picard[1], Y. Shemer-Avni[2], A. Lev[1], N. Amariglio[1], S. Ben-Horin[1], [1]*Tel-Aviv University, Israel,* [2]*Ben-Gurion University, Israel*
[P2.1.21]	**Oncogene-induced senescence in hematopoietic progenitors promotes inflammation, myeloid skewing and histiocytosis** R. Biavasco*[1,2], E. Lettera[1,2], M. Norelli[1], B. Camisa[1], M. Ponzoni[1], A. Bondanza[1], L. Dagna[1], R. Di Micco[1,2], E. Montini[1,2], [1]*San Raffaele Scientific Institute, Italy,* [2]*San Raffaele - Telethon Institute for Gene Therapy, Italy*
[P2.1.22]	**Shedding light on the dynamics of HIV-1 infection in humanized mouse model through virological and omics approaches** K. Sato*[1,2], S. Nakaoka[3,4], E. Kawakami[5], N. Misawa[1], K. Shiroguchi[4,5], Y. Koyanagi[1], [1]*Kyoto University, Japan,* [2]*JST CREST, Japan,* [3]*The University of Tokyo, Japan,* [4]*JST PRESTO, Japan,* [5]*RIKEN, Japan*
[P2.1.23]	**Defining cell states coupled with response to checkpoint blockade in melanoma** K. Yizhak*[1], M. Sade Feldman[1,2], S. Bjorgaard[1,2], J. Ray[1,2], K. Flaherty[2], J. Wargo[3], G. Boland[2], R. Sullivan[2], G. Getz[1,2], N. Hacohen[1,2], [1]*Broad Institute of the Massachusetts Institute of Technology (MIT) and Harvard, USA,* [2]*Massachusetts General Hospital, USA,* [3]*University of Texas, USA*
[P2.1.24]	**Small molecules co-targeting CKIα and P-TEFb control acute myeloid leukemia in a mouse model** W. Minzel*, A. Venkatachalam, A. Fink, E. Hung, I. Snir-Alkalay, Y. Ben-Neriah, *hebrew university, Israel*
[P2.1.25]	**Lymphotoxin beta receptor signaling inhibits colitis-associated cancer.** E.P. Koroleva[1], E. Macho-Fernandez[3], N.A. Mitkin[2], I. Albino Flores[1], W.T. Muraoka[1], D.V. Kuprash[2], A.V. Tumanov*[1,2], [1]*University of Texas Health San Antonio, USA,* [2]*Engelhardt Institute of Molecular Biology, Russia,* [3]*Trudeau Institute, USA*
[P2.1.26]	**Tumor cGAS induces the anti-tumor response of NK cells** A. Marcus*[1], R.E. Vance[1,2], D.H. Raulet[1], [1]*UC Berkeley, USA,* [2]*Howard Houghes Medical Institute, USA*
[P2.1.27]	**Global immunogenomic profiling and discovery of mjor humoral antigens in gastric cancer.** S. Ishikawa*, H. Katoh, D. Komura, *Tokyo Medical and Dental University, Japan*
[P2.1.28]	**Myeloid-targeted immunotherapies act in synergy to induce a subpopulation of inflammatory tumor-associated macrophages and anti-tumor immunity** A.R. Munoz-Rojas*, C.J. Perry, K. Miller-Jensen, S.M. Kaech, *Yale University, USA*
[P2.1.29]	**Unveiling the cellular and molecular immune microenvironment in glioblastoma** P. Magod*[1], L. Ruosso-Noori[1], L. Agemy[2], D. Friedman-Morvinski[1], [1]*Tel Aviv University, Israel,* [2]*Weizmann Institute of Science, Israel*
[P2.1.30]	**The immune system profoundly restricts tumor clonal heterogeneity** I. Milo*[1,2], M. Bedoura-Faure[1], Z. Garcia[1,2], L. Périe[3,4], G. Shakhar[5], L. Deriano[1], P. Bousso[1,2], [1]*Institut Pasteur, France,* [2]*Inserm, France,* [3]*Institut Curie, France,* [4]*CNRS, France,* [5]*Weizmann Institue, Israel*
[P2.1.31]	**Neutrophils are protective in sarcoma carcinogenesis by maintaining unconventional T cell antitumor potential** A. Ponzetta*[1], M. Barbagallo[1], M. Molgora[1], M. Galdiero[4], E. Bonavita[3], E. Magrini[1], N. Polentarutti[1], C. Garlanda[2,1], A. Mantovani[2,1], S. Jaillon[2,1], [1]*Humanitas Clinical and Research Center, Italy,* [2]*Humanitas University, Italy,* [3]*Cancer Research UK, UK,* [4]*Federico II University of Naples, Italy*
[P2.1.32]	**Casein kinase I alpha (CKIα) inhibitors are novel immuno-modulating agents with high therapeutic potential** A. Fink*, E. Hung, W. Minzel, A. Venkatachalam, A. Zinger, I. Snir-Alkalay, Y. Ben-Neriah, *Hebrew University of Jerusalem, Israel*
[P2.1.33]	**IL-1R8: A novel checkpoint regulating anti-tumor and anti-viral activity of NK cells** M. Molgora*[1], E. Bonavita[1], A. Ponzetta[1], F. Riva[1], M. Barbagallo[1], S. Jaillon[1], B. Popovic[2], G. Bernardini[3], E. Magrini[1], F. Gianni[1], [1]*Humanitas Research Hospital, Italy,* [2]*Faculty of Medicine, University of Rijeka, Croatia,* [3]*Istituto Pasteur-Fondazione Cenci Bolognetti, Università di Roma, Italy*

[P2.1.34]	**Natural and induced invariant natural killer T (iNKT) cell regulation of intestinal tumor immunity** Y. Wang[1], S. Sedimbi[2], L. Löfbom[1], A.K. Singh[1], S.A. Porcelli[3], H. Yagita[4], S. Cardell*[1], [1]*University of Gothenburg, Sweden,* [2]*Karolinska Institute, Sweden,* [3]*Albert Einstein College of Medicine, USA,* [4]*Juntendo School of Medicine, Japan*
[P2.1.35]	**Inflammasome-associated cytokines induce antigen-presenting properties in human ILCs** A. Rao[1], M. Bruchard[2], E. Kokkinou[1], V. Konya[1], U. Lindforss[1], H. Spits[2], J. Mjösberg*[1], [1]*Karolinska Institutet, Sweden,* [2]*Academic Medical Center, The Netherlands*
[P2.1.36]	**Salt-responsive gut commensal modulates TH17 axis and disease** N. Wilck*[1,5], M.G. Matus[3], S. Kearney[3], S. Olesen[3], S. Jörg[2], K. Forslund[4], P. Bork[4], R. Linker[2], E.J. Alm[3], D.N. Müller[5,1], [1]*Charite-Universitätsmedizin, Germany,* [2]*Friedrich-Alexander-University Erlangen-Nuremberg, Germany,* [3]*Center for Microbiome Informatics and Therapeutics, and Department of Biological Engineering, Massachusetts Institute of Technology, USA,* [4]*European Molecular Biology Laboratory, Structural and Computational Biology Unit, Germany,* [5]*Max Delbrück Center for Molecular Medicine, Germany*
[P2.1.37]	**Role of inflammation and crosstalk in PCB126-induced metabolic defects** A. Caron*[1,2], C. Aguer[1,2], [1]*University of Ottawa, Canada,* [2]*Institut du Savoir Montfort, Canada*
[P2.1.38]	**The heterogeneity of human circulating and tissue mononuclear phagocytes unraveled using single cell omics** C.A. Dutertre*[1,2], A. Bertoletti[2], F. Ginhoux[1], [1]*Singapore Immunology Network (SIgN), A*STAR, Singapore,* [2]*Duke-NUS Medical School, Singapore*
[P2.1.39]	**Autoantibodies against skin antigens favor the development of adverse events during anti-PD1 therapy in non-small cell lung cancer patients** O. Hasan Ali[1,2], D. Bomze[2], M. Fässler[1], A. Braun[3], S. Diem[2], A. Cozzio[1], E. Schmidt[1], D. Zillikens[1], C. Sadik[1], L. Flatz*[1], [1]*University of Zurich, Switzerland,* [2]*Kantonsspital St.Gallen, Switzerland,* [3]*University of Lübeck, Germany*
[P2.1.40]	**Immunogenomics and cancer immunotherapy: Single cell analysis of patients developing immune-related adverse events in response to checkpoint blockade** S.K. Khan, *UT Southwestern Medical Center, USA*
[P2.1.41]	**The delivery of antigens to dendritic cells is a potent future option for anti-tumor therapies** C.H.K. Lehmann*[7], L. Heger[7], S. Yamazaki[2], G.F. Heidkamp[7], N. Eising[7], A.B. Krug[4], J.H.W. Leusen[6], J. Ravetch[5], F. Nimmerjahn[3], D. Dudziak[7], [1]*TU-Munich, Germany,* [2]*Hokkaido University, Japan,* [3]*Friedrich-Alexander Universität Erlangen-Nürnberg, Germany,* [4]*Ludwig-Maximilians-University, Germany,* [5]*The Rockefeller University, USA,* [6]*University Medical Center Utrecht, The Netherlands,* [7]*University Hospital Erlangen, Germany*
[P2.1.42]	**Antigen targeting of Fc-receptors induces strong T cell responses *in vivo* independent of ITAM signaling but dependent on dendritic cell subsets** C.H.K. Lehmann*[1], A. Baranska[1,6], G.F. Heidkamp[1], M. Seeling[2], D. Soulat[1], A.B. Krug[3], J.V. Ravetch[4], J.H.W. Leusen[5], F. Nimmerjahn[2], D. Dudziak[1], [1]*University Hospital of Erlangen, Germany,* [2]*Friedrich-Alexander-University Erlangen-Nürnberg, Germany,* [3]*Ludwig-Maximilians-University Munich, Germany,* [4]*The Rockefeller University, USA,* [5]*University Medical Center Utrecht, The Netherlands,* [6]*Aix Marseille Université, France*
[P2.1.43]	**Advanced host-directed therapy for new therapeutic insights from the toxoplasma gondii** C-S. Yang, *Hanyang University, Republic of Korea*
[P2.1.44]	**Organ-specific co-organization of tumor and T cells in metastatic breast cancer** E. Greenstein*[1], L. De Mattos-Arruda[2], C. Caldas[2], N. Friedman[1], [1]*Weizmann Institute of Science, Israel,* [2]*Cambridge University, UK*
[P2.1.45]	**(CA)n simple repeat modulates Ctcf binding and regulates susceptibility to autoimmunity in a sex-specific manner** G. Fernandez Lahore*, M. Johannesson, M. Förster, K.S. Nandakumar, R. Holmdahl, *Karolinska Institutet, Sweden*
[P2.1.46]	**Modeling of NK cell detachment from target cells: Killing as a social effect** L. Fidel*[1], M. Anft[2], C. Watzl[2], R. Mehr[1], [1]*Bar-Ilan University, Israel,* [2]*IfADo - Leibniz Institute for Occupational Research, Germany*
[P2.1.47]	**Relationships and transitions between B and plasma cell populations in SLE patients** R. Goldenberg[1], C. Tipton[2], S. Jenks[2], E.H.F. Lee[2], I. Sanz[2], R. Mehr*[1], [1]*Bar-Ilan University, Israel,* [2]*Emory University, USA*
[P2.1.48]	**Macrophages from animals with Lewis lung carcinoma enhance the angiogenic potential of endothelial cells** T.V. Nikolaienko*, L.V. Garmanchuk, D.V. Shelest, V.V. Nikulina, *Taras Shevchenko National University of Kyiv, Ukraine*
[P2.1.49]	**Integrative analysis reveals CD38 as a therapeutic target for plasma cell-rich pre- and established rheumatoid arthritis and systemic lupus erythematosus** S. Cole*[1], A. Walsh[1], X. Yin[1], M. Wechalekar[2], M. Smith[2], S. Proudman[3], D. Veale[4], U. Fearon[5], C. Pitzalis[6], F. Humby[6], [1]*Johnson&Johnson, USA,* [2]*Flinders University, Australia,* [3]*University of Adelaide, Australia,* [4]*Trinity College Dublin, Ireland,* [5]*University College Dublin, Ireland,* [6]*Queen Mary University of London, UK*

[P2.1.50]	**Accelerated aging of monocytes in childhood and adolescent cancer survivors** P. Burilova, K. Bendickova, S.S. Jose, T. Kepak, Z. Krenova, J. Fric*, *St. Anne's University Hospital Brno, Czech Republic*
[P2.1.51]	**Omental fat in ovarian cancer induces metabolic and immune alterations** M. Suarez-Carmona*[2], N.A. Valous[1], M. Hampel[2], B.M.A. Lenoir[2], S. Schott[2], I. Zoernig[2], D. Jaeger[2], N. Halama[2], *[1]German Center for Cancer Research (DKFZ), Germany, [2]University Clinics Heidelberg, Germany*
[P2.1.52]	**Propagating cancer vaccine reprograms the tumor microenvironment by increasing angiogenesis and synergizes with the adaptive immune response** S. Ring[1, 2], D. Bomze[2], L. Onder[2], J. Cupovic[2], S. Schmidt[3], K. Orlinger[3], T. Bald[4], D. Speiser[6], A. Bergthaler[5], L. Flatz*[1], *[1]University of Zurich, Switzerland, [2]Kantonsspital St.Gallen, Switzerland, [3]Hookipa Biotech, Austria, [4]QIMR Berghofer, Australia, [5]Center for Molecular Medicine CeMM, Austria, [6]University of Lausanne, Switzerland*
[P2.1.53]	**Analysis of immune biomarkers association with cervical cancer in KwaZulu- Natal, (South Africa)** D. Sebastian*, A.G.H. Assounga, *University of KwaZulu-Natal, South Africa*
[P2.1.54]	**Actin retrograde flow controls NK cell cytotoxicity by regulating SHP-1 conformation state** O. Matalon, A. Ben-Shmuel*, J. Kivelevitz, B. Sabag, N. Joseph, E. Noy, G. Biber, M. Barda-Saad, *Bar-Ilan University, Israel*
[P2.1.55]	**Live biotherapeutics and immuno-oncology: From discovery to efficacy studies** A. Ettorre*, A. Holt, D. Panzica, P. Cowie, S. Yuille, H.M. Savignac, E. Raftis, M. Delday, N. Reichardt, I. Mulder, *4D Pharma Research Ltd, UK*
[P2.1.56]	**SLAMF6 is a regulatory receptor for T cell activation** E. Hajaj*, G. Eisenberg, A. Geiger-Maor, S. Frankenburg, M. Lotem, *Hadassah Hebrew University Medical Center, Israel*
[P2.1.57]	**Active EMMPRIN vaccination that reduces tumor growth and metastasis also improves DSS-induced colitis** E. Simanovich[1], V. Brod[1], M.A. Rahat*[1, 2], *[1]Carmel Medical Center, Israel, [2]Ruth and Bruce Rappaport Faculty of Medicine, Israel*
[P2.1.58]	**Posttranscriptional control by HuR of $CD4^+$ $Foxp3^+$ Treg generation and function** U. Atasoy*[1, 2], J. Ellis[1, 2], J. Glascock[2], S. Ridenhour[2], *[1]University of Michigan, USA, [2]University of Missouri, USA*
[P2.1.59]	**ASC on the crossroad of dendritic cell metabolism during chlamydia infection** D. McKeithen[1], Y. Omosun[1], K. Ryans[1], T. Simoneaux[1], F. Eko[1], C. Black[2], J. Igietseme[2], Q. He*[1], *[1]Morehouse School of Medicine, USA, [2]Centers for Disease Control & Prevention, USA*
[P2.1.60]	**ADAR1 is essential for lung CD103+ dendritic cells, alveolar macrophages and pulmonary host defense** H. Hackstein*[1], S. Cunningham1[1], H.L. Obermann[3], A. Lippitsch[1], A. Gruber[2], A. Kaufmann[3], G. Bein[1], S. Bauer[3], N. Baal[1], *[1]University of Giessen, Germany, [2]Freie Universität Berlin, Germany, [3]Philipps University Marburg, Germany*
[P2.1.61]	**Graft-versus host-disease leads to systemic elimination of innate lymphoid cells and abolishes their development.** P. Vinci*[1], E. Garcia-Martinez[1, 2], M.H. O'Connor[1], A. Egorova[1], C.D. Geary[3], A.M. Mertelsmann[1], E. Nicoletti[1], J.C. Sun[3], A.M. Hanash[1, 3], *[1]Memorial Sloan Kettering Cancer Center, USA, [2]University Hospital Morales Meseguer, Spain, [3]Weill Cornell Medical College, USA*
[P2.1.62]	**A novel epigenetic program induced in intestinal inflammation** I. Ansari*[1], D. Cohen[1], G. Raddatz[2], F. Lyko[2], Y. Bergman[1], *[1]Institute for Medical Research Israel Canada, Hebrew University Medical School, Israel, [2]DKFZ ZMBH Alliance, German Cancer Research Center, Germany*
[P2.1.63]	**NGS analysis for PDGFRA and ESR1 mutations in a case with testicular seminoma case** A. Atak Yucel*[1], A. Uner[2], E.U. Bagriacik[1], R. Karakus[1], G. Tahtaci[2], B. Kurt Inci[2], F. Gurler[2], *[1]Gazi University, Faculty of Medicine, Department of Immunology, Turkey, [2]Gazi University, Faculty of Medicine, Department of Internal Medicine, Section of Oncology, Turkey*
[P2.1.64]	**A novel genomic locus involved in intrinsic immune response in macrophages** P. Arumugam*, D. Shankaran, K. Joshi, V. Scaria, V. Rao, *Institute of Genomics and Integrative Biology, India*
TECHNOLOGIES FOR DISCOVERY OF NOVEL IMMUNOLOGICAL INSIGHTS	
[P2.2.01]	**Spatial reconstruction of immune niches by combining photoactivatable fluorescent reporter and single-cell RNA-seq** C. Medaglia[1], A. Giladi[1], L.S. Barak[1], M. De Giovanni*[2], T.M Salame[1], A. Biram[1], E. David[1], M. Iannacone[2], Z. Shulman[1], I. Amit[1], *[1]Weizmann Institue of Science, Israel, [2]San Raffaele Scientific Institute, Italy*
[P2.2.02]	**Synthetic peptides immune checkpoint inhibitors engineering for cancer immunotherapy** S.V. Podlesnykh[1], E.A. Kolosova[1], D.N. Shcherbakov[1], S.A. Johnston[2], A.F. Lazarev[1], A.I. Chapoval*[1], *[1]Altai State University, Russia, [2]Arizona State University, USA, [3]Altai Regional Cancer Center, Russia*
[P2.2.03]	**Immunogenicity prediction through repertoire-wide TCR-peptide contact profiles** M. Ogishi*[1, 2], H. Yotsuyanagi[1], *[1]The University of Tokyo, Japan, [2]National Center for Global Health and Medicine Hospital, Japan*
[P2.2.04]	**Regulatory T cell dynamics and diversification revealed by single-cell RNAseq** D. Zemmour*, J. DiSpirito, C. Li, R. Zilionis, A. Klein, C. Benoist, D. Mathis, *Harvard Medical School, USA*

[P2.2.05]	**Cell-specific metabolic models reveal targets that mitigate pathogenicity in Th17 cells: From single-cell RNA-Seq to actionable metabolic targets** A. Wagner*[1], C. Wang[2], D. DeTomaso[1], A. Koul[2], A. Regev[2,4], V.K. Kuchroo[2,3], N. Yosef[1], [1]*University of California Berkeley, USA,* [2]*Broad Institute, USA,* [3]*Harvard University, USA,* [4]*Massachusetts Institute of Technology, USA*
[P2.2.06]	**TCR affinity influences helper T cell differentiation by biasing dendritic cell interactions** D.I. Kotov*[1], J.S. Mitchell[1], T. Pengo[1], J.A. Kotov[1], C. Ruedl[2], S.S. Way[3], R.A. Langlois[1], B.T. Fife[1], M.K. Jenkins[1], [1]*University of Minnesota, USA,* [2]*Nanyang Technological University, Singapore,* [3]*University of Cincinnati, USA*
[P2.2.07]	**Naturally occurring human knockout genes disclose hidden immunological patterns that are not seen in murine models** D.M. Mevorach*[1], N.K. Karbian[1], O.F. Furman[2], Y.E. Eisenbach[1], O.P. Peles[1], A.T. Tabib[1], [1]*Hadassh-Hebrew University, Israel,* [2]*Hebrew University, Israel,* [3]*Weizmamnn Institute, Israel*
[P2.2.08]	**Unsupervised identification of TCR clonotypes participating in immune response from TCR repertoire data** M.V. Pogorelyy*[1], I.Z. Mamedov[1], D.M. Chudakov[1,3], Y.B. Lebedev[1], T. Mora[2], A.M. Walczak[2], [1]*IBCH RAS, Russia,* [2]*ENS, France,* [3]*Skoltech, Russia*
[P2.2.09]	**Open-source RNA-based high-resolution HLA typing system.** A.A. Minervina*, M.V. Pogorelyy, E.A. Komech, M.A. Spektor, Y.B. Lebedev, I.Z. Mamedov, *IBCh RAS, Russia*
[P2.2.11]	**Proteomic analysis of adipose tissues highlights proteins involved in metabolic inflammation in peripartum cows** M. Zachut*[1], G. Kra[1], Y. Levin[2], S.R. Montgomery[3], L.K. Mamedova[3], B.J. Bradford[3], [1]*Agriculture Research Organization, Israel,* [2]*The Nancy and Stephen Grand Israel National Center for Personalized Medicine, Israel,* [3]*Kansas State University, USA*
[P2.2.12]	**CD8+ T-cells with characteristic TCRbeta motif are found in patients with ankylosing spondylitis** E.A. Komech*[1,3], M.V. Pogorelyy[1], E.I. Shmidt[2], E.S. Egorov[1], A.G. Bochkova[4], I.Z. Mamedov[1,3], Y.B. Lebedev[1,3], D.M. Chudakov[1,3], I.V. Zvyagin[1,3], S.A. Lukyanov[3], A.A. Klimenko[1], N.A. Shostak[1], [1]*Shemyakin-Ovchinnikov Institute of Bioorganic Chemistry, Russia,* [2]*Pirogov City Clinical Hospital #1, Russia,* [3]*Pirogov National Research Medical University, Russia,* [4]*Agat medical centre, Russia*
[P2.2.13]	**Advancing immuno-oncology with pancancer IO 360™ gene expression panel & services** S. Ong*, P. Danaher, S.E. Warren, J.M. Beechem, A. Cesano, *NanoString Technologies, USA*
[P2.2.14]	**Immunohumix – an unprecedented coculture model of intestinal epithelial cells, immune populations and *clostridium* species to study the interactions between anaerobic commensal bacteria and host intestinal tissue** J. Baginska*[1], J.V. Fritz[1], M. Mac Giolla Eain[1], K. Greenhalgh[1], A. Frachet-Bour[1], T. Tanoue[2], K. Atarashi[2], K. Honda[2,3], P. Wilmes[1], [1]*University of Luxembourg, Luxembourg,* [2]*Keio University School of Medicine, Japan,* [3]*RIKEN Center for Integrative Medical Sciences, Japan*
[P2.2.15]	**Discovery of broad subtypes of Sjögren's Syndrome using nonlinear, data-driven analysis** P. Bost*[1], J.E. Gottenberg[2], B. Schwikowski[1], [1]*Institut Pasteur, France,* [2]*University of Strasbourg, France*
[P2.2.16]	**The molecular landscape of anti-drug antibodies following treatment with TNFA antagonist** A. Vaisman-Mentesh*, S. Rosenstein, I. Benhar, Y. Wine, *Tel Aviv University, Israel*
[P2.2.17]	**Unbiased study of the DC – T cell interactome in the antigen-challenged lymph node** C. Curato*[1], E. Zupancic[1,2], L. Maor[1], D.A. Jaitin[1], A. Giladi[1], H. Florindo[2], I. Amit[1], S. Jung[1], [1]*Weizmann Institute of Science, Department of Immunology, Israel,* [2]*Lisbon University, Portugal*
[P2.2.18]	**Diagnosis and prognosis using next generation sequencing of immune receptor repertoires: A case study of hepatitis C virus** O. Sharabi[1], S. Eliahu[1], F. Vigneault[2], M. Gal-Tanamy[1], G. Yaari*[1], [1]*Bar Ilan University, Israel,* [2]*Abvitro, USA*
[P2.2.19]	**High-throughput paired sequencing of single-cell RNA and T cell receptor variable region** A.A. TU*, T. Gierahn, M. Wardsworth, T. Hughes, A. Shalek, J.C. Love, *Massachusetts Institute of Technology, USA*
[P2.2.20]	**Live cell imaging in microwell arrays reveals induction of CD4 T cell memory by local cellular collectivity** M. Polonsky[1], J. Rimer[1], A. Kern-Perets[1], C. Borenstein[1], E. David[1], N. Kopelman[1], Z. Porat[1], B. Chain[2], N. Friedman*[1], [1]*Weizmann Institute of Science, Israel,* [2]*University College London, UK*
[P2.2.21]	**The Impact of previous BCG vaccination in enhancing the effectiveness of tuberculosis drugs to control mycobacterial growth *Ex-Vivo*** S.A. Prabowo*, A. Zelmer, L. Stockdale, S. Smith, K. Seifert, H.A. Fletcher, *London School of Hygiene and Tropical Medicine, UK*
[P2.2.22]	**High dimensional immune phenotyping reveal robust recovery of viable and functional cells from frozen gastrointestinal tissue** L. Konnikova*[1,2], G. Boschetti[4], A. Rahman[4], S. Wall[1], M. Field[1], C. Richmond[1], V. Tomov[3], M. Bewtra[3], D. Breault[1], M. Merad[4], [1]*University of Pittsburgh, USA,* [2]*Harvard University School of Medicne, USA,* [3]*University of Pennsylvania School of Medicine, USA,* [4]*Mount Sinai School of Medicine, USA*

[P2.2.23]	**Next generation analysis of inflammatory infiltrate in atherosclerosis by mass cytometry and single cell RNA-sequencing** H. Winkels*[1], E. Ehinger[1], M. Vassallo[1], K. Buscher[1], A. Hamers[1], P.A. Bala[1], A.K. Ghosh[1], C. Hedrick[1], K. Ley[1], D. Wolf[1,2], [1]*La Jolla Institute for Allergy and Immunology, USA,* [2]*University of Freiburg, Germany*
[P2.2.24]	**A novel T-lymphocyte receptor detected by a monoclonal antibody unimab in peripheral blood from cancer patients** S.D. Banerjee*, S.B. Kumaraswamy, S. Amingard, D. Manjunath, H.P. Manjunath, A. Thomas, *Priti center for Oncology, India*
[P2.2.25]	**Controlling CD4+ Tcell balance by chemical modification of signaling pathways** N. Moret*, A. Palmer, N. Gray, C. Benoist, P.K. Sorger, *Harvard Medical School, USA*
[P2.2.26]	**Individuality and universality in the responses of human hosts to bacterial pathogens** S. Hen-Avivi[1], N. Bossel Ben-Moshe*[1], M. Doppenberg-Oosting[2], M. Netea[2], R. Avraham[1], [1]*Weizmann Institute of Science, Israel,* [2]*Redboud University, The Netherlands*
[P2.2.27]	**The human immunopeptidome project** A. Admon, *Technion, Israel*
[P2.2.28]	**Found in translation: A statistical model for improving mouse to human inference** R. Normand*[1], W. Du[2], M. Briller[1], R. Gaujoux[1], E. Starosvetsky[1], G. Shalev-Malul[1], R. Tibshiran[2], S. Shen-Orr[1], [1]*Technion, Israel,* [2]*Stanfors, USA*
[P2.2.29]	**Adaptation of *salmonella typhimurium* to the macrophages metabolic switch during host pathogen interaction** G. Rosenberg*, N. Bossel, O. Solomn, R. Avraham, *Weizmann Institute of Science, Israel*
[P2.2.30]	**ARPC1B-deficient macrophages have a migratory defect** G. Leung*, R. Murchie, S.A. Hutchinson, A.M. Muise, *Hospital for Sick Children, Canada*
[P2.2.31]	**Alignment of single cell trajectories for comparative analysis of cellular expression dynamics** A. Alpert*, L. Moore, T. Dubovik, S. Shen-Orr, *Technion, Israel*
[P2.2.32]	**An *in vitro* model to analyse the immune function of human type 2 dendritic cells** G. Anselmi, K. Vaivode, P. Guermonprez*, *King's College London, UK*
[P2.2.33]	**Identity of human lymphoid organ dendritic cells is predominantly dictated by ontogeny, not tissue microenvironment** G.F. Heidkamp[1], J. Sander[2], J.L. Schultze[2], D. Dudziak*[1], [1]*University Hospital Erlangen, Germany,* [2]*University Bonn, Germany*
[P2.2.34]	**Single cell transcriptomics for characterizing the human immune response to yellow fever vaccination** J.J.A. Calis, S.A. Uhl, R. Caron, B.R. Rosenberg*, *Icahn School of Medicine at Mount Sinai, USA*
[P2.2.35]	**Quantitative multi-analyte detection of key cytokine release syndrome biomarkers: Workflow optimization with an automated, microfluidic immunoassay system** D. Finkel*, R. Grant, S. Thayer, S. Leske, M. Anderson, T. Munn, P. Johnson, K. Shorter, M. Schwartz, K. Brumbaugh, *R&D Systems, USA*
[P2.2.36]	**Lung interstitial macrophages encompass disctinct macrophage subsets** J. Schyns[1], D. Pirottin[1], F. Bureau[1,2], T. Marichal*[1,2], [1]*Liege University, Belgium,* [2]*Welbio, Belgium*
[P2.2.37]	**Diagnosis of glioma tumors using circulating cell-free DNA** V. Palande*, D. Raviv-Shay, M. Frenkel-Morgenstern, *Bar-Ilan University, Israel*
[P2.2.38]	**Systems approaches in humoral immune profiling in tuberculosis** L.L. Lu[1], J. Das*[1,2], P.S. Grace[1], S.M. Fortune[3], D. Lauffenburger[2], B.I. Restrepo[4], G. Alter[1], [1]*Ragon Institute of MGH, MIT and Harvard, USA,* [2]*Massachusetts Institute of Technology, USA,* [3]*Harvard School of Public Health, USA,* [4]*University of Texas School of Public Health, USA*
[P2.2.39]	**Placenta-derived mesenchymal stromal-like cells promote neutrophil and monocyte migration, neutrophil differentiation, and macrophage phenotypic switch to an M2 phenotype** N. Sher*, R. Shaked-Nitzan, H. Allen, T. Prezma, Z. Aberman, R. Ofir, *Pluristem, Israel*
[P2.2.40]	**A modular platform for targeted RNAi therapeutics** N. Veiga*, R. Kedmi, I. Benhar, D. Peer, *Tel Aviv University, Israel*
THE IMMUNE SYSTEM AND ITS NEURO-METABOLIC INTERACTIONS	
[P2.3.01]	**The role of EBI2 for T cell-mediated autoinflammation** F. Wanke[7], F.C. Kurschus*[7], [1]*Max Planck Institute for Heart and Lung Research, Germany,* [2]*Novartis Institutes for BioMedical Research, Switzerland,* [3]*The Weizmann Institute of Science, Israel,* [4]*University Hospital Münster, Germany,* [5]*Max-Delbrueck-Center for Molecular Medicine, Germany,* [6]*The FIRC Institute of Molecular Oncology, Italy,* [7]*University Medical Center of the Johannes Gutenberg-University Mainz, Germany*
[P2.3.02]	**NK cells' metabolism affect their function** T. Toledano*, A.J. Zacharia, N.M. Kogan, A. Moussaieff, O. Mandelboim, *Hebrew University, Israel*
[P2.3.03]	**Sympathetic crosstalk with the immune system in obesity** C.M. Larabee*[1], D.A. Jaitin[2], I. Amit[2], A.I. Domingos[1], [1]*Instituto Gulbenkian de Ciência, Portugal,* [2]*Weizmann Institute, Israel*

[P2.3.04]	**Role of phospholipase C in inflammasome activation** T. Prochnicki*[1], M.S. Mangan[1,3], D. Wachten[1,2], E. Latz[1,3], [1]*University of Bonn, Germany,* [2]*Research Center caesar, Germany,* [3]*German Center of Neurodegenerative Diseases (DZNE), Germany*
[P2.3.05]	**Influences of microenvironmental cues on the metabolic function of Th17 cells** M. Villa*, E.L. Pearce, *Max Planck Institute of Immunobiology and Epigenetics, Germany*
[P2.3.06]	**Characterisation of the inflammasome-mediated secretome on bystander cells** M.S. Mangan*[1,2], S. Herthsal[3], J.L. Schultze[2,3], E. Latz[1,2], [1]*Institute of Innate Immunity, Germany,* [2]*German Centre for Neurodegenerative diseases, Germany,* [3]*Life & Medical Sciences-Institute, Germany*
[P2.3.07]	**An insular engram of the gut inflammatory response** T. Koren*, M. Krot, B. Korin, H. Azulay-Debby, T.L. Ben-Shaanan, M. Schiller, N.T. Boshnak, T. Bergman, F. Hakim, A. Rolls, *Rappaport Faculty of Medicine, Technion, Israel*
[P2.3.08]	**Spatial and temporal dynamics of adipose lymphocyte dysregulation in obesity** N. Yudanin*, T. Mahlakoiv, L.C. Rankin, D.A. Artis, *Weill Cornell Medicine, USA*
[P2.3.09]	**Deciphering the neuro-immune network and its effects on immune responses** K.R. Berman*, S. Shen-Orr, *Technion, Israel*
[P2.3.10]	**Tracking adipose-tissue treg provenance, dependencies, and activities via T cell receptor transgenic mice** C. Li*, J. DiSpirito, D. Zemmour, R.G. Spallanzani, W. Kuswanto, C. Benoist, D. Mathis, *Harvard Medical School, USA*
[P2.3.11]	**Differential reliance on lipid metabolism as a salvage pathway underlies functional differences of T cell subsets in poor nutrient environments** C. Ecker*[1], L. Guo[1], S. Voicu[1], L. Gil-de-Gómez[1], J. Pajda[2], A. Varela-Rohena[2], I. Blair[1], J. Riley[1], [1]*University of Pennsylvania, USA,* [2]*Thermo Fisher Scientific, USA*
[P2.3.12]	**Single cell transcriptomics identifies the disease-specific expression profile of cerebrospinal fluid cells** T. Lautwein, D. Schafflick, C. Gross, S.G. Meuth, H. Wiendl, G. Meyer zu Hörste*, *University Clinic Münster, Germany*
[P2.3.13]	**Stimulus dependent gene repression** S. Pope*, R. Medzhitov, *Yale University, USA*
[P2.3.14]	**High-throughput analysis of metabolic regulation in B cell activation using CRISPR/Cas9 screening** H.R. Steach*[1], W. Bailis[1], J.A. Shyer[1], J.E. Craft[1], R.A. Flavell[1,3], [1]*Yale University School of Medicine, USA,* [2]*Howard Hughes Medical Institute, Yale University School of Medicine, USA*
[P2.3.15]	**TREM2 maintains microglial metabolic fitness in Alzheimer's disease** T.K. Ulland*[1], W.M. Song[1], S.C. Huang[1], J.D. Ulrich[1], A. Sergushichev[2], W.L. Beatty[1], A.A. Loboda[2], Y. Zhou[1], N.J. Cairns[1], A. Kambal[1], [1]*Washington University in St. Louis, USA,* [2]*ITMO University, Russia*
[P2.3.16]	**How to avoid allergens? Characterizing the neuroimmune mechanisms of food aversion** E.B. Florsheim*, M. Dietrich, R. Medzhitov, *Yale University School of Medicine, USA*
[P2.3.17]	**The phagocytic receptor MSR1 promotes a M2/M1 macrophage phenotypic switch in adipose tissue macrophage polarization** A.S. Hartlova*[1,2], M. Guo[2], J. Peltier[1,2], N Martinez-Lopez[1], M. Trost[1,2], [1]*Newcastle University, UK,* [2]*University of Dundee, UK*
[P2.3.18]	**Host resistance to endotoxic shock requires the neuro-endocrine regulation of group 1innate lymphoid cells** L. Quattrini, S. Ugolini*, *Aix Marseille Univ, CNRS, INSERM, France*
[P2.3.19]	**Hepatic cellular stress induces periportal ductal progenitor cells proliferation which contributes to inflammatory response and hypermetabolism after severe trauma injury** L. Diao*[1,2], Y. Yousuf[1,2], S. Amini-Nik[1,2], M.G. Jeschke[1,2], [1]*Sunnybrook Research Institutue, Canada,* [2]*University of Toronto, Canada*
[P2.3.20]	**Understanding mast cell decision-making process in response to action signals of different nature.** N. Gaudenzio*[1,2], R. Sibilano[1], T. Marichal[3], P. Starkl[1], L. Reber[1], N. Cenac[4], B. McNeil[5], X. Dong[5,6], J. Hernandez[1], R. Sagi-Eisenberg[7], [1]*Stanford University, USA,* [2]*UDEAR - UMR 1056 Inserm, France,* [3]*University of Liège, Belgium,* [4]*INSERM, France,* [5]*The Solomon H. Snyder Department of Neuroscience, USA,* [6]*Johns Hopkins University, USA,* [7]*Tel-Aviv University, Israel,* [8]*Stanford University School of Medicine, USA*
[P2.3.21]	**Mitochondrial hyperpolarization induced by complex-V restriction maintains naïve CD8$^+$ T-cells at check** M. Berger*, A. Saragovi, *Hebrew University Medical School, Israel*
[P2.3.22]	**Characterizing the roles of the cutaneous neuroimmune interface in modulating host-microbiota dialog** W. Kulalert*, Y. Belkaid, *National Institutes of Health, USA*