

P01 & OC02 - Systemic Dissemination of Commensal Bacteria is CX₃CR1-dependent and is Mediated by CD11c⁺ CD103⁺ Dendritic Cells

Valerio Rossini, Panagiota Stamou, Ana C. Hickey, Sreeram Udayan, Maria Esteban Torres, Mary O'Connell Motherway, Christian U. Riedel, Fergus Shanahan, Douwe van Sinderen, Silvia Melgar, Ken Nally

P02 & OC04 - The Role of Exopolysaccharide in Modulating Host Immune Responses towards *Bifidobacterium breve*

Ana C. Hickey, Valerio Rossini, Panagiota Stamou, Sreeram Udayan, Francesca Bottacini, Silvia Melgar, Douwe Van Sinderen, Ken Nally

P03 & OC06 - UVB light promotes intestinal homeostasis through Ahr activation

Else S. Bosman, Harry Sokol, Alain Stintzi, Bruce A. Vallance

P04 & OC12 - Effect of IL-33 targeting in fungal microbiota-induced asthma

Aurora Holgado, Inna Afonina, Harald Braun, Rudi Beyaert

P05 & OC14 - Synthesis and functions of symbiotic bacterial lipopolysaccharide partial structures

Atsushi Shimoyama, Keisuke Mizote, Tomoya Uto, Flaviana Di Lorenzo, Naoko Shibata, Yukari Fujimoto, Jun Kunisawa, Hiroshi Kiyono, Antonio Molinaro, Koichi Fukase

P06

P07 & OC17 - The food additive maltodextrin promotes endoplasmic reticulum stress-driven mucus depletion and exacerbates intestinal inflammation

Laudisi F., Di Fusco D., Dinallo V., Stolfi C.1, Di Grazia A., Marafini I., Colantoni A., Ortenzi A., Alteri C., Guerrieri F., Ceccherini-Silberstein F., Federici M., MacDonald T. T., Monteleone I. and Monteleone G.

P08 & OC18 - Antibiotic treatment induces recruitment and inflammatory activation of colonic iNKT cells

Claudia Burrello, Federica Garavaglia, Fulvia Milena Cribiù, Giulia Ercoli, Silvano Bosari, Flavio Caprioli, Federica Facciotti

P09

P10 & FP - Combined effects of nutrients and gut microbiota in the immunomodulation of DMD

Farini Andrea, Bella Pamela, Cassani Barbara, Guglielmetti Simone, Di Lorenzo Federica, Baselli Guido, Torrente Yvan

P11 & FP - Gemcitabine chemotherapy shapes microbiota promoting pro-inflammatory state of pancreatic cancer xenografted mice

Panebianco Concetta, Adamberg Kaarel, Jaagura Madis, Copetti Massimiliano, Fontana Andrea, Adamberg Signe, Kolk Kolk, Vilu Raivo, Andriulli Angelo, Pazienza Valerio

P12 & FP - Metagenomic analysis of gut microbiota in Myasthenia Gravis and Multiple Sclerosis patients

Consonni Alessandra, Rinaldi Elena, Sgheddu Valeria, Elli Marina, Milani Christian, Ventura Marco, Mantegazza Renato, Baggi Fulvio

P13 & FP - The postoperative gut microbiota impacts the weight loss and the general health improvement in obese patients

Giuseppina Campisciano, Silvia Palmisano, Marta Silvestri, Martina Guerra, Michela Giuricin, Biagio Casagrande, Manola Comar, Nicolò de Manzini

P14 & FP - Targeting bacterial adhesion: synthesis and on-cell NMR-binding studies of new FimH multivalent ligands

Cristina Airoidi, Alessandro Palmioli, Paola Sperandeo, Alessandra Polissi

P15 & FP - Effects of Probiotics and Prebiotics on Human Health

Zeaiter Z., De Giani A., Labra M., Regonesi ME, Di Gennaro P.

P16 & FP - DNase I-Degraded Bacterial Genomic DNA Augments Activation of Human Toll-Like Receptor 9 by Synthetic DNA Oligonucleotides

Emily Hsu, Daniel Podlesny, W. Florian Fricke

P17 & FP - HPV-mediated cytological abnormalities and high-risk HPV genotypes associate with altered gut microbiota composition and function in cart-treated HIV+ males

E. Merlini, C. Tincati, A. Pandolfo, B. Cassani, F. Bai, G. Ancona, A. Barassi, G. Bulfamante, A. d'Arminio Monforte, G. Marchetti

P18 & FP - Gut microbiota lipopolysaccharides: reverting the concept from bad to good

Flaviana Di Lorenzo

P19 & FP - Evaluation of bioinformatic methods to reveal drinking water microbial community

Agostinetto G., Sandionigi A., Bruno A., Bernabovi L., Casiraghi M.

P20 & FP - Investigation of Novel biomarkers and Definition of role of microbiome In Graves' Orbitopathy (GO) (INDIGO): Microbiota analysis of patients at recruitment

Filippo Biscarini, Giulia Masetti, Hedda Koehling, Danila Covelli, Petros Perros, Buchi Okosieme, Chantal Daumerie, Maria-Christina Burlacu, Mario Salvi, Giuseppe Colucci, Anja Eckstein, Sue Plummer, Julian Marchesi, Marian Ludgate and INDIGO consortium

P21 & FP - Phytochemistry and antibacterial activity of the essential oil of *Mentha Suaveolens* Ehrh

H. Zerkani, I. Tagnaout, S. Amalich et T. Zair

P22 & FP - NLRP3 lacking leucine-rich repeat domain can be fully activated by the canonical inflammasome pathway

Iva Hafner-Bratkovič, Petra Sušjan, Duško Lainšček, Ana Tapia-Abellan, Kosta Cerović, Lucija Kadunc, Diego Angosto-Bazarra, Pablo Pelegrín, Roman Jerala

P23 & FP - Development of a novel TNF-driven mouse model of gut & joint inflammation

Konstantina Zafeiropoulou, Ioanna Petta, Tino Hochepped, Julie Coudenys, Tine Decruy, Dirk Elewaut & Lars Vereecke

P24 & FP - Lipid-based nutrient supplement fortified with prebiotics increase SCFA production and enhance bifidobacterial growth in moderately undernourished infants' microbiota

Laeticia Celine Toe, Jana De Bodt, Frederiek-Maarten Kerckhof, Patrick Kolsteren, Jean Bosco Ouedraogo, Tom Van de Wiele

P25 & FP - Design and feasibility of a multicentric study assessing blood microbiota and diet in relation to adenoma and colorectal cancer risk: a three-year project funded by AIRC

Simone Guglielmetti, Marcello Cintolo, Paola Bertuccio, Federica Cavalcoli, Clorinda Ciafardini, Rossella Bonzi, Federica Mascaretti, Pietro Carnevali, Massimo Primignani, Aldo Airoidi, Roberto Penagini, Maurizio Vecchi, Carlo La Vecchia, Massimiliano Mutignani, Marta Rossi.

P26 & FP - Analysis of gut microbiota and immunological characterization in patients with Chronic Granulomatous Disease

M. Pellicciotta, M. Chiriaco, S. Di Cesare, R. Rigoni, A. Finocchi, B. Cassani

P27 & FP - Synergy between 15-lipoxygenase and sPLA2 promotes chronic inflammation by formation of TLR4 agonists from extracellular vesicles

Van Thai Ha, Duško Lainšček, Bernd Gesslbauer, Eva Jarc, Nejc Ilc, Katja Lakota, Matija Tomšič, Valery Bochkov, Toni Petan, Roman Jerala, Mateja Manček-Keber

P28 & FP - Structure of potential TLR4/MD-2 modulators from different bacterial sources

Mateusz Pallach, Flaviana Di Lorenzo, Fabio Facchini, Francesco Peri, Katarzyna A. Duda, Antonio Molinaro, Alba Silipo

P29 & FP - NLRP3 inflammasome is triggered by trimerisation of pyrin domains and can be specifically inhibited by designed peptides

Petra Sušjan, Duško Lainšček, Roman Jerala, Iva Hafner Bratkovič

P30 & FP - Airway mycobiota in severe asthma: isolation from the exhaled breath condensate

Piera Soccio, Giulia Scioscia, Donato Lacedonia, Grazia Pia Palladino, Maria Pia Foschino Barbaro, Giovanna, E. Carpagnano

P31 & FP - The involvement of microbiome in hair disorders: the example of Alopecia areata

Daniela Pinto, Barbara Marzani, Elisabetta Sorbellini, Giammaria Giuliani, Fabio Rinaldi

P32 & FP - Is microbiota linked to bergamot cardiovascular protection?

Antonella Riva, Pietro Allegrini, Davide Berlanda, Giulia Masetti, Sara Botti

P33 & FP - Age-dependent effect of whey protein on body weight, lipid metabolism and gut microbiota in high-fat diet fed mice

Serena Boscaini, Raul Cabrera-Rubio, Oleksandr Nychyk, John F. Cryan, Paul D. Cotter, Kanishka N. Nilaweera

P34 & FP - The more the better: effect of cell concentration on the persistence of four probiotic strains in the human intestine

Valentina Taverniti, Ranjan Koirala, Alessandro Dalla Via, Giorgio Gargari, Elena Leonardis, Stefania Arioli, Simone Guglielmetti

P35 - "Akkermansia muciniphila's lipopolysaccharides"

Pilar García-Vello, Antonio Molinaro, Willem M. De Vos, Cristina De Castro

P36 - Cloacal microbiome is linked to ecological features of individuals in the Barn swallow

Andrea Franzetti, Isabella Gandolfi, Margherita Corti, Manuela Caprioli, Diego Rubolini, Alessandra Costanzo, Nicola Saino, Roberto Ambrosini

P37 - Characterization of probiotic strains for their role as antimicrobial agents and their possible effects on epithelial intestinal cell lines

A. De Giani, F. Bovio, P. Di Gennaro

P38 - Soil microbiome before and after fertilization with bovine manure

Penati M., Grilli G., Carraro L., Cagnardi P., Piccirillo A.

P39 - Riboflavin supplementation enhances antigen specific humoral and cellular immune responses to oral vaccines

Albutti, A., McEntee, C.P., Longet, S., Holmgren, J., Lavelle, E.C

P40 - Probiotics modify body weight together with anxiety states via pro-inflammatory factors in HFD-treated Syrian golden hamster

Avolio E., Ferraro S., Romano L., Marchetti M., De Lorenzo A.

P41 - BLF501 A synthetic compound as intestinal barrier protector and immunomodulator in inflammatory animal model of IBD

Barbara La Ferla, Ivan Monteleone, Cristiano Rumio

P42 - Structure of potential agonist and antagonist LPS/LOS from marine and halophilic bacteria

Clara Barrau, Flaviana Di Lorenzo, Antonio Molinaro, Alba Silipo

P43 - Efficacy of the treatment with *Bifidobacterium breve* B632 and *Bifidobacterium breve* BR03 on endocrine response to the oral glucose tolerance test in pediatric obesity: a cross-over double blind randomized controlled trial

Arianna Solito, Francesca Archero, Nicole Bozzi Cionci, Irene Aloisio, Roberta Ricotti, Giulia Genoni, Lucia Vannini, Marco Pane, Angela Amoruso, Luca Mogna, Tiziana Cena, Simonetta Bellone, Diana Di Gioia, Flavia Prodam

P44 - Effects of microbiota modulation on tumor microenvironment in glioma

Giuseppina D'Alessandro, Alessandra Porzia, Clotilde Lauro, Francesca Pagani, Cristina Limatola

P45 - Linking diet gut immunity and microbiota in the pathogenesis of Type 1 Diabetes

Cosorich I, De Giorgi L, Sorini C, Bolla AM, Bosi E, Ferrarese R, Zuppardo R, Mariani A, Esposito D, Canducci F, Saibene A, Devecchi E, Dimaano M, Jabri B, Falcone M

P46 - Integrated multi-omic analysis of unique transgenic animal models uncovers the tissue omega-6/omega-3 fatty acid imbalance as a critical risk factor for chronic disease

Kanakaraju Kaliannan, Xiang-Yong Li, Bin Wang, Chih-Yu Chen, Lei Hao, Shanfu Xie, Qian Pan, Jing X. Kang

P47 - Gut inflammation and modifications in microbiota composition trigger intestinal activation of islet-reactive T cells and autoimmune diabetes

Marta Lo Conte, Chiara Sorini, Ilaria Cosorich, Lorena De Giorgi, Federica Facciotti, Roberta Lucianò, Martina Rocchi, Roberto Ferrarese, Francesca Sanvito, Filippo Canducci, Marika Falcone

P48 - Bacterial inhabitants of the human not-tumoral, peri-tumoral, and tumoral prostate tissue

I Cavarretta*, R Ferrarese*, W Cazzaniga, D Saita, R Lucianò, ER Ceresola, I Locatelli, L Visconti, G Lavorgna, A Briganti, M Nebuloni, C Doglioni, N Mancini, M Clementi, F Montorsi, F Canducci, A Salonia

P49 - Microbial and Immune characterization of human colorectal cancer

Nannini G., Nicolai E., Russo E., Ricci F., Bacci G., Chiellini C., Fagorzi C., Taddei A., Ringressi MN., Cianchi F., Mengoni A., de Almeida CV., Borrelli R., Fani R., Amedei A.

P50 - Biotherapeutic agents and vaginal health: effect of a combination of lactobacilli and lactoferrin

Rosario Russo, Lucia Bertuccini, Francesca Iosi, Fabiana Superti

P51 - Gut microbiome and immune system alteration at the onset of Multiple Sclerosis: a pilot study

Simona Rolla, Valentina Bardina, Ilario Ferrocino, Stefania De Mercanti, Alessandra Gai Via, Anna Lamberti, Roberta Lanzillo, Luca Simone Cocolin, Marinella Clerico

P52 - Probiotic modulation of the gut microbiota in the 3xTG Alzheimer's Disease mouse model is associated with improvements in cognitive capacity and lipid and inflammatory profiles

Davies, TS., Masetti, G., Michael, DR., Turner, S., Kerry-Smith, J., Amblin, M., Rees, M., Allen, M., Glymenaki, M., Li, J., Marchesi, J., Good, MA., Plummer, SF., Hughes, TR.

P53 - Metagenomic analysis of gut microbiota in patients with Parkinson's disease

Valeria Unida, Daniele Pietrucci, Rocco Cerroni, Mariangela Pierantozzi, Alessio Farcomeni, Alessandro Stefani, Silvia Biocca, Alessandro Desideri1

P54 - Evaluation of *Lactobacillus plantarum* adhesion capacity to intestinal mucosa in vitro and in vivo

Noemi Venditti, Irene Magnifico, Franca Vergalito, Marco Cutuli, Laura Pietrangelo, Cinzia Di Cesare, Autilia Cozzolino, Antonella Angiolillo, Roberto Di Marco

P55 - *Akkermansia muciniphila*, a commensal of intestinal microbiota, protects from enteropathogenic *Escherichia coli* infection in the *Galleria mellonella* host-model

Franca Vergalito, Marco Cutuli, Irene Magnifico, Noemi Venditti, Autilia Cozzolino, Raffaele Coppola, Mariantonietta Succi, Roberto Di Marco

P56 - Effects of microbial metabolites on human intestinal epithelium

Mayorgas A, Ferrer-Picón E, Dotti I, Corraliza A, Planell N, Esteller M, Carrasco A, Masamunt MC, Esteve M, Panés J, Salas A

P57 - Cancer immunotherapy of TLR4 agonist-antigen constructs enhanced with pathogen-mimicking magnetite nanoparticles and checkpoint blockade of PD-L1

Giordano Traini, Ane Ruiz-de-Angulo, Juan C. Mareque-Rivas

P58 - Drinking water microbiota: exploring the neglected biodiversity from the source to the tap

Bruno A., Sandionigi A., Magnani D., Panio A., Orizio F., Labra M., Casiraghi M.

P59 & OC08 – The host microbiota contributes to early protection against lung colonization by *Mycobacterium tuberculosis*

Alexia Dumas, Dan Corral, André Colom, Antonio Peixoto, Denis Hudrisier, Yannick Poquet, Olivier Neyrolles

P60 – $\gamma\delta$ T Cells are involved in gut Junctional Complexes integrity in primary HIV infection

Elvira Stefania Cannizzo, Delfina Tosi, Federica Savi, Gaetano Bulfamante, Carmelo Luigiano, Antonella d'Arminio Monforte and Giulia Marchetti

P61 - Preliminary data on the physiological responses of Enterococci to human derived bioactive compounds

Scardaci R., Lazzarini F., Cirrincione S., Musso T., Mazzoli R., Pessione E.