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2002 - 2022
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June 15-17, 2022
Sitges, Barcelona, Spain
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2022 ISAPP Meeting Speakers and Experts

Margaret Alexander, University of California, San Francisco, Expert for Discussion Group 1

Dr. Alexander's research is focused on understanding the mechanistic interactions between diet, the microbiota, and immune responses and the functional consequences of these interactions for autoimmune diseases. Currently, she is working as a postdoctoral scholar in the laboratory of Dr. Peter Turnbaugh at the University of California, San Francisco in the department of Microbiology and Immunology.

Katherine Amato, Northwestern University, Expert for Discussion Group 5

Dr. Amato is a biological anthropologist at Northwestern University studying the influence of gut microbes on host ecology and evolution. Her research examines how changes in the gut microbiota impact host nutrition, energetics, and health. She uses non-human primates as models for studying host-gut microbe interactions in selective environments and for providing comparative insight into the evolution of the human gut microbiota. Her main foci are understanding how the gut microbiome may buffer hosts during periods of nutritional stress and how the gut microbiome programs normal inter-specific differences in host metabolism. In this realm, she is also interested in global variation in the human gut microbiome and its implications for local human adaptation. Dr. Amato obtained her A.B. in Biology from Dartmouth College and her Ph.D. in Ecology, Evolution and Conservation Biology from the University of Illinois at Urbana-Champaign. She completed a postdoc at the University of Colorado Boulder. She is now an Assistant Professor in the Department of Anthropology at Northwestern University. She is also affiliated with the Interdisciplinary Biological Sciences Graduate Program and sits on the Executive Committee of the Northwestern Institute on Complex Systems. Dr. Amato is the President of the Midwest Primate Interest Group, an Associate Editor at Microbiome, an Editorial Board member at Folia Primatologica, and a Fellow for the Canadian Institute of Advanced Research's 'Humans and the Microbiome' Program.

Clara Belzer, Wageningen University WUR, Expert for Discussion Group 3

Dr. C. Belzer is Associate Professor Microbiology at the Laboratory of Microbiology of Wageningen University. The Belzer group is called 'Microbes Mucus and Milk' and the research is focused on the interaction of the gut microbiome with host mucus and milk. After obtaining her Phd at the Erasmus Medical Center Dr. Belzer did a posdoc at Harvard medical school. By now Dr. Belzer has years of experience on gut microbiome studies on anaerobes, including synthetic communities and different biotic concepts, with a special interest for the Akkermansia muciniphila. The group of Dr. Belzer works on several microbiome HMO and mucus related topics funded by national and international grants, some also in collaboration medical centers and industry.

Laure Bindels, UCLouvain, Expert for Discussion Group 5

Laure Bindels is a pharmacist who trained at the Université catholique de Louvain, Belgium. During her PhD, she focused her research on the therapeutic interest of prebiotics and probiotics in the control of tumor progression and associated cachexia. She then moved to a postdoctoral position at the University of Nebraska-Lincoln, USA, where she studied the role of the gut microbiota in the metabolic benefits of resistant starches. Dr. Bindels is now an Assistant Professor at the Université catholique de Louvain, Belgium, where she is exploring the contribution of bacterial metabolites, derived from the gut microbiota, to metabolic and inflammatory disorders associated with cancer.

Michael Cabana, Children's Hospital at Montefiore/Albert Einstein College of Medicine, Expert for Discussion Group 3

Michael deCastro Cabana, MD, MPH, is a Professor of Pediatrics & the Chair of Pediatrics at the Albert Einstein College of Medicine and the Children's Hospital at Montefiore (CHAM) in the Bronx, NY.Dr. Cabana's research focuses on the prevention and management of common childhood conditions, particularly pediatric asthma. Dr. Cabana is Principal Investigator for the Trial of Infant Probiotic Supplementation (TIPS) to Prevent Early Markers of Asthma, as well as clinical trials focused on infant growth and colic. In addition, Dr. Cabana is the Principal Investigator for the IMPLEMENT Pediatric Quality Measures Center that is developing and testing new quality measures for childhood chronic conditions. His work has been funded by the National Institute of Heart, Lung and Blood Disorders, the National Center for Complementary and Alternative Medicine, the Agency for Healthcare Research and Quality and the Robert Wood Johnson Foundation. He is editor of the Five Minute Pediatric Consult. He is currently serving a four-year term as a member of the United States Preventive Services Task Force. He is a former member of the ISAPP Board of Directors.

Maria Carmen Collado, IATA-CSIC, Expert for Discussion Group 2

PhD in Biotechnology (2005), Research Scientist at the Institute of Agrochemistry and Food Technology-Spanish National Research Council (IATA-CSIC), Valencia, Spain. Her research work is multidisciplinary and includes microbiology, food science and nutrition areas. Her interests are focused on probiotics, microbiota and health and nutrition during pregnancy and early life period. She has published over 200 papers in peer-reviewed and indexed scientific journals on the subject of microbiota, Probiotics and health. She has participated in more than 150 communications to national and international conferences. She leads various national and European projects (ERC Starting, EIT-FOOD; ERA-HDHL, Marie-Curie IEF-H2020). She supervised 6 PhD Theses (plus 5 ongoing) and over 10 MSc Theses and several student supervisions. She was involved in external expert working groups and also, develops activities in various national and international committees for the evaluation of research projects. She has received research awardees as ESPGHAN Young Researcher award (2015) from the European Society for Pediatric Gastroenterology Hepatology and Nutrition (ESPGHAN) and "Scientific Young Research in Nutrition-2021" from Fundación Jesus Serra. She is involved in the Executive Committee- International Society for Research in Human Milk and Lactation (ISRHML), Spanish Society of Microbiota, Probiotics and Prebiotics (SEMiPyP).

Paul Cotter, Teagasc, Expert for Discussion Group 6

Prof Paul Cotter is the Head of Food Biosciences at Teagasc and a Principal Investigator with the large Irish Research Centres, APC Microbiome Ireland, Vistamilk and Food for Health Ireland. He also co-ordinates an EU H2020 Innovation Action relating to microbiomes and the food chain, MASTER (€10.9 mi budget). In addition, Paul heads the Teagasc DNA high throughput sequencing facility and associated bioinformatics team. He is a molecular microbiologist, with a particular focus on the microbiology of foods (especially fermented foods), the food chain (especially dairy production and processing) and of humans (using in vitro, ex vivo, and in vivo approaches) as well as probiotics and postbiotics (including bacteriocins). Prof Cotter's diverse multi-disciplinary team are multiple winners at the Irish Laboratory of the Year Awards, he has received awards from the Society for Applied Microbiology, ESCMID and FEMS, and heads the Applied Microbiology section within Faculty of 1000 (Biology). Prof Cotter is also the author of >350 peer-reviewed publications resulting from research funded by industry as well as funding agencies and was included in the Clarivate list of highly cited researchers for 2018, 2019 and 2020. Paul is also a co-founder and CTO of SeqBiome, a spin-out company that provide custom DNA sequencing and bioinformatics services for microbiome analysis.

Marla Cunningham, Metagenics, IAC Sr. Representative to the Board of Directors

Marla Cunningham is the Global R&D Innovation Manager at Metagenics, a health science company specialising in science-driven dietary supplements and medical foods. Marla leads the development of a global product innovation pipeline to serve Metagenics' businesses throughout Europe, North America, Oceania and other global markets. Marla has a clinical background as a naturopath and a strong dedication to science leadership with 20 years of experience in the natural medicine industry, engaging with scientists, clinicians, and industry partners to create innovative product solutions, research programs and continuing professional education. Marla currently serves as the Industry Advisory Committee Representative to the ISAPP board, representing industry members' needs, insights and encouraging participation in ISAPP activities.

Brendan Daisley, University of Guelph, SFA Vice-President

Brendan Daisley, PhD (Postdoctoral Fellow at The University of Guelph and Vice President of The Students and Fellows Association; ISAPP-SFA) is passionately interested in how probiotic science can be applied to favourably impact human, wildlife, and overall planetary health. A major focus of his current work is to elucidate mechanisms by which beneficial strains of bacteria can directly and/or indirectly improve immunity, detoxification of pesticides, and the nutritional status of honey bees. In the past 5 years, he has helped to develop two novel honey bee-specific probiotic products (BioPatty and BioSpray) as well as a metataxonomic database tool (BEExact) allowing for high-resolution inference of yet-to-be characterized bee-associated microbial dark matter involved in multiple disease processes. Ultimately, he hopes to contribute to a sustainable future by establishing a framework by which microbial-based solutions can be applied to support the health of important pollinator insects that are critical to the global food supply.

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Eirini Dimidi, King's College London, Speaker

Dr Eirini Dimidi is a Lecturer in Nutritional Sciences at King's College London. In 2016, she was awarded a PhD from King's College London where she investigated the symptomatic, physiological and microbiological impact of probiotics in constipation. Dr Dimidi is undertaking research on nutrition-based interventions, including plant foods, prebiotics, probiotics, fermented foods, and the low FODMAP diet, in gastrointestinal and immune health. Her primary focus is to advance the understanding of the impact of dietary therapies in functional bowel disorders, including chronic constipation and irritable bowel syndrome. Other research interests include investigating the effect of diet on the gut microbiota and gut health, as well as exploring patients' experiences and perceptions of gut diseases. She has published in a number of peer-reviewed nutrition and gastroenterology journals, and has presented her work in national and international conferences. Dr Dimidi was awarded the 2022 ISAPP Glenn Gibson Early Career Research Prize for her research on probiotics, prebiotics and fermented foods. She also received the 2021 Rising Star and 2020 Elizabeth Washington awards by the British Dietetic Association. In 2016, Dr Dimidi was announced as the 2017 Postgraduate Competition Winner from the UK Nutrition Society, and was selected as the UK nominee for the 2018 International Early Career Nutrition Research Championship.

Joël Doré, INRAE, Expert for Discussion Group 3

Joël is Research Director at INRAE Micalis Institute "Food and Gut Microbiology for Human Health" and Scientific Director of MetaGenoPolis, offering unique expertise in quantitative and functional metagenomics. Gut microbial ecologist by training, Joel pioneered intestinal metagenomics towards food-microbe-host interactions as well as diagnostic applications. With > 35 years of academic research and > 230 publications (H Index 69), Joël aims to provide a better understanding of man-microbes symbiosis towards personalized preventive nutrition and precision medicine. Joel is laureate of the ERC-Advanced Homo.symbiosus ; co-founder and scientific advisor of www.maat-pharma.com, a startup company dedicated to provide safe and standardized microbiotherapy solutions for the reconstruction of host-microbes symbiosis in the context of cancer therapy. Member of the BoD of GMfH, he supports the www.gutmicrobiotaforhealth.com scientific web-platform.

Claire Gaiani, Université de Lorraine (LIBio), Expert for Discussion Group 1

Claire Gaiani is Professor at University of Lorraine, LIBio laboratory (France). Her research is thematically organized around the main area of the physicochemistry of food powders (structure, targeting, formulation). Her actual scientific activity addresses the stabilization of natural bioactive compounds (probiotics, glycans, polyunsaturated fatty acids, flavonoids) into food powder vehicles through the mastering of various processes (namely, spray-drying, encapsulation, emulsification, coating or freeze-drying). She successfully managed fundamental competitive programs including the French ANR (French National Agency for Research) and European projects (Excellent science section, Marie Sklodowska-Curie action). She also managed many industrial partnerships with leading international food companies (including Nestle, CNIEL, Arla Food). She is the author of more than 100 peer-reviewed articles, 2 books, 8 book chapters and 1 patent. She has given 79 international lectures (including 12 invited). Her h-index is 35 with > 5000 citations (Google Scholar, April 2022).

Glenn Gibson, University of Reading, Speaker

Professor of microbiology at one university and visiting professor at 2 others - highly ironic as he could not pass a school exam in biology. Main expertise is as a confidence trickster. Over 500 publications (none are worth the paper they are written on). Highlight of his career was helping to start ISAPP (not eye-SAPP), because he finally made some friends. Avid collector of one line, curt, officious, dismissive, rejections of grant applications and estimates that he has wasted about 50% of his life on these ego trips for potential sponsors. Supervised over 80 PhD students, all of whom said he was an absolute pleasure to work with and wished their projects had lasted 30 years not just 3. Compulsive fantasist. Proudest moments: coming second in a ping pong doubles tournament (number entered = 2), given a badge for drawing Disney characters, bronze membership of Hartlepool Mail's Kid's Tufty Club and St. Johns Ambulance Brigade junior cadet sergeant. Has achieved nothing in his life and his hands have never done any real work. Nearing the end of his research career and when that glorious day arrives he will be out of the door like a polecat - never to be seen again.

Francisco Guarner, Teknon Medical Center, Local Host, Speaker

Dr. Francisco Guarner graduated in Medicine at the University of Barcelona in 1973, trained Gastroenterology and Hepatology at Hospital Clinic (Barcelona); obtained PhD degree at University of Navarra (Spain). He was Research Fellow at Royal Free Hospital (London, UK), King's College Hospital (London, UK), and Wellcome Research Laboratories (Beckenham, UK). He is Consultant of Gastroenterology at the Teknon Medical Centre (Barcelona, Spain). Member of the Steering Committee of the International Human Microbiome Consortium (www.human-microbiome.org), member of the Scientific Committee of Gut Microbiota for Health Section of the European Society of Neurogastroenterology and Motility (www.gutmicrobiotaforhealth.com), and past member of the Board of Directors on the International Scientific Association for Probiotics and Prebiotics (isappscience.org). Co-author of 335 publications on original research or reviews (Web of Science), holds an h-index of 65.

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Miguel Gueimonde, Instituto de Productos Lácteos de Asturias, Expert for Discussion Group 6

MSc in Biological Sciences (1997) and PhD (2002), both at the University of Oviedo. From 2002 to 2005 postdoctoral researcher at the Functional Foods Forum of the University of Turku (Finland). Adjunct Professor at the University of Turku (2006-now), and Research Scientist at IPLA-CSIC (2008-now). The main research interest is on the area of fermented foods, probiotics and intestinal microbiota and the factors determining its composition in different human population groups. During the last 25 years my research activity has had an special focus on the study and characterization of probiotic microorganisms and the assessment of their impact on the intestinal microbiota and health. During these years I have authored more than 190 publications in scientific journals included in the SCI, as well as various book chapters and popular articles. These works have accumulated over 11000 citations (index H = 56). I have also also participated in different working groups of the European Food Safety Authority (EFSA) and the International Dairy Federation (IDF).

Genelle Healey, University of British Columbia, Expert for Discussion Group 1

Dr Genelle Healey undertook her PhD in Nutritional Science at Massey University, New Zealand. Her PhD research aimed to determine what influence habitual dietary fibre intake has on gut microbiota response to a prebiotic intervention. Prior to commencing her PhD, Genelle worked as a Dietitian caring for patients with gastrointestinal cancer, inflammatory bowel disease (IBD) and renal disease. In 2017, she moved to Vancouver, Canada to start a postdoctoral fellowship with Drs Bruce Vallance and Kevan Jacobson at the University of British Columbia. The focus of her research is to better understand the impact nutrition, particularly fibre, has on the gut microbiome and disease outcomes for IBD patients. During her postdoctoral fellowship she has utilized models of IBD to investigate the therapeutic potential of novel nutritional interventions with the hope that these therapies can one day be used to positively impact the health and wellbeing of IBD patients. Her future research aspirations include investigating the effect diet has in modulating the mycobiome and virome, as most research focuses on bacterial changes only. She also plans to undertake research to better understand the factors involved in inter-individual responses to dietary interventions and immunotherapy in IBD patients.

Lindsay Hall, Technical University of Munich, Expert for Discussion Group 5

Prof Lindsay Hall is Chair of Intestinal Microbiome at the Technical University of Munich and a Group Leader at the Quadram Institute, UK. She is also a Wellcome Investigator. Her lab's research focus involves defining microbe/microbiota interactions during the early life developmental window. She obtained a BSc in Microbiology from the University of Glasgow, a PhD in Microbiology and Immunology from the University of Cambridge (Wellcome Trust Sanger Institute), and was a postdoctoral fellow at University College Cork, Ireland (APC Microbiome Institute). She returned to the UK to take up a Senior Lectureship at the University of East Anglia before moving to Quadram end of 2015.

Colin Hill, APC Microbiome Ireland, ISAPP Board of Directors, Speaker

Colin Hill has a Ph.D in molecular microbiology and is a Professor in the School of Microbiology at University College Cork, Ireland. He is also a founding Principal Investigator in APC Microbiome Ireland, a large research centre devoted to the study of the role of the gut microbiota in health and disease. His main interests lie in the role of the microbiome in human and animal health. He is particularly interested in the effects of probiotics, bacteriocins, and bacteriophage. In 2005 Prof. Hill was awarded a D.Sc by the National University of Ireland in recognition of his contributions to research. In 2009 he was elected to the Royal Irish Academy and in 2010 he received the Metchnikoff Prize in Microbiology and was elected to the American Academy of Microbiology.He has published more than 600 papers and holds 25 patents. He was president of ISAPP from 2012-2015. More than 80 PhD students have been trained in his laboratory. Google Scholar.

Daragh Hill, APC Microbiome Ireland, Chair for SFA Program

Daragh Hill is a postdoctoral researcher based in Cork at APC Microbiome Ireland under the supervision of Prof Paul Ross. As part of her work, she is interested in how bacteria can be used to promote health. In particular, on how secondary metabolites could have a beneficial effect on health directly, or through inclusion in food. Exopolysaccharide and bacteriocin production by lactic acid bacteria are her main research areas of focus. Daragh is also interested in elucidating the genes responsible for the production of these metabolites through whole genome sequencing. She joined the ISAPP-SFA committee in 2020 as the communications and outreach officer, and is looking forward to her first in person conference as a committee member.

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Andrew Holmes, The University of Sydney, Expert for Discussion Group 1

Andrew has general interests understanding the role of microbial communities in both human and environmental health. An often-overlooked aspect of host control of microbes is via regulation of intestinal nutrient availability. He has particular interests in the relationship between the availability of food in the environment, how this shapes the behaviour of animals and the role of gut microbes in influencing the animal health outcomes. A focus of his work has been the application of the geometric framework to investigate mechanisms of manipulation of host-microbe interaction in the gut via diet regimes or food supplements. Such understanding is applied in the development of modelling tools that enable the prediction of diet intervention outcomes or can inform development of regulatory guidelines. Andrew is in the School of Life and Environmental Sciences at the University of Sydney where he is also Microbiome Project node leader in the Charles Perkins Centre, and Co-leader of the Food for Health theme of the Centre for Advanced Food Engineering. He is a Fellow of Food Standards, Australia, New Zealand (FSANZ) and Editor-in-Chief, Reviews for The ISME Journal.

Hannah Holscher, University of Illinois, Expert for Discussion Group 6

Dr. Hannah Holscher is an Associate Professor of Nutrition in the Department of Food Science and Human Nutrition and a member of the Division of Nutritional Sciences, the Institute of Genomic Biology, and the National Center for Supercomputing Applications at the University of Illinois. Dr. Holscher's laboratory uses clinical interventions and computational approaches to study the interactions of nutrition, the gastrointestinal microbiome, and health. Her creative use of machine learning approaches to determine microbial biomarkers of food intake and human health status earned her recognition as a 2017 New Innovator in Food and Agricultural Research and a 2020 National Academy of Medicine Emerging Leader. She also received the 2021 American Society for Nutrition's Mead JohnsonYoung Investigator Award for her series of work on nutrition and the human microbiome.She has received grant funding from the United States Department of Agriculture (USDA), the Foundation for Food and Agriculture Research, food commodity boards, and private industry. She has published more than 60 peer-reviewed manuscripts and given many invited presentations at locations including the National Academy of Medicine, National Institutes of Health, USDA, universities, and national society meetings of nutrition scientists, food scientists, and dietitians.

Bob Hutkins, University of Nebraska, ISAPP Board of Directors, Co-chair for Discussion Group 5

Bob Hutkins is the Khem Shahani Professor of Food Microbiology at the University of Nebraska. He received his Ph.D. from the University of Minnesota and was a postdoctoral fellow at Boston University School of Medicine. Prior to joining the University of Nebraska, he was a research scientist at Sanofi Bio Ingredients. The Hutkins Lab studies bacteria important in human health and in fermented foods. His group is particularly interested in understanding factors affecting persistence and colonization of probiotic bacteria in the gastrointestinal tract and how prebiotics shift the intestinal microbiota and metabolic activities. The lab also conducts clinical studies using combinations of pro- and prebiotics (synbiotics) to enhance health outcomes. More recently we have developed metagenome-based models that can be used in personalized nutrition. Professor Hutkins has published widely on probiotics, prebiotics, and fermented foods and is the author of the recently published 2nd edition of Microbiology and Technology of Fermented Foods.

Purna Kashyap, Mayo Clinic, Co-chair for Discussion Group 4

Dr. Purna Kashyap is Professor of Medicine and Physiology, Co- Director of the Microbiome and High-Definition Therapeutics program in the Center for Individualized Medicine and Director of the germ-free mouse facility at Mayo Clinic, Rochester, MN. The Gut Microbiome laboratory led by Dr. Kashyap is interested in understanding the complex interactions between diet, gut microbiome and host physiology and strives to move the field beyond associations of microbiome with different diseases to defining the functional role of gut microbes in regulating host physiology. The laboratory uses germ-free mouse models in conjunction with measures of gastrointestinal physiology in vitro and in vivo to investigate effects of gut microbial products on host gastrointestinal function. In parallel, they use a systems approach incorporating multi-omics, patient metadata, and physiologic tissue responses in human studies, to aid in discovery of novel microbial drivers of disease. The overall goal of the program is to develop novel microbiota-targeted therapeutic agents such as genetically engineered microbes that will restore altered microbial functions in diseases such as Irritable Bowel Syndrome. His research is driven primarily by his clinical practice which is focused on patients with gastrointestinal motility disorders. Dr. Kashyap has published over 80 peer reviewed articles including journals like Cell, Cell Host Microbe, Science Translational Medicine, Nature Communications, and Gastroenterology. He was inducted to American Society of Clinical Investigation in 2021. He has previously served on the scientific advisory board of American Gastroenterology Association Gut Microbiome Center, and on the council of American Neurogastroenterology and Motility Society. He now serves on the council and the research committee of American Gastroenterology Association, in editorial roles for Gut Microbes and Neurogastroenterology and Motility journal and as an ad-hoc reviewer on NIH study sections.

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Michiel Kleerebezem, Wageningen University, Speaker

Michiel Kleerebezem obtained his PhD in Molecular Microbiology at the University of Utrecht in 1995. From 1995 until 2015, he worked at NIZO food research as a principal scientist. Since 2007 he has held a position as professor of "Bacterial Metagenomics and Host Microbe Interactions" at the Host Microbe Interactomics Group of the Wageningen University where he was full-time appointed in 2015. His expertise centers around the genomics, molecular biology and physiology of bacteria, with a special focus on lactic acid bacteria, probiotics, and the human (intestinal) microbiota. Over the past decade, he has expanded his research field to the (post-genomic) molecular analysis of mechanisms of communication between bacteria and the mucosal tissues of the host. Michiel Kleerebezem has (co-)authored over 300 peer-reviewed publications and is an inventor on more than 30 patent applications.

Isabelle Laforest-Lapointe, Université de Sherbrooke, Expert for Discussion Group 3

Isabelle Laforest-Lapointe is an Assistant Professor at Université de Sherbrooke since January 2020 where she holds a Canada Research Chair Tier II in Applied Microbial Ecology. She completed her PhD in microbial ecology at the Université du Québec à Montréal (Kembel Lab, 2012-2017) as well as a Postdoctoral Fellowship at the Cumming School of Medicine of the University of Calgary (Arrieta Lab, 2017-2019). She also completed a MSc in Terrestrial Ecology and Biodiversity Management at the Universitat Autonoma de Barcelona (2011) and the courses of a Master in Statistics at the Universitat Politecnica de Catalunya (2012). As a microbial ecologist, she uses ecology, microbiology, bioinformatics, statistics, and genomics to study host-microbe interactions in plants and human ecosystems.

Martin Laursen, Technical University of Denmark, Speaker

Dr. Laursen, Senior Researcher at the Technical University of Denmark, has first-authored 13 peer-reviewed articles and his research has more than 500 citations. In his PhD thesis work he has demonstrated how key environmental and dietary factors are shaping the bacterial colonization process in the infant gut, for which he received the DTU's Young Researcher Award in 2018. In his postdoctoral work he demonstrated how bacteria and human milk oligosaccharides present in breast milk influence the infant gut microbiome and identified gut microbes that are inversely linked to excessive weight gain in early life. He has published several invited reviews about the key factors that govern the microbial colonization of the gut in early life. Recently, has he discovered a mechanism by which breastmilk promoted gut microbes may affect the immune system through production of aromatic amino acid catabolites in the infant gut.

Sarah Lebeer, UAntwerpen, ISAPP Board of Directors, Speaker, Co-chair for Discussion Group 3

Sarah Lebeer is a research professor at the Department of Bioscience Engineering of the University of Antwerp, Belgium. She has studied bioscience engineering, with a specialisation in cell and gene technology/food & health and obtained her Master at KU Leuven (Belgium). In 2008, she obtained a PhD degree with a topic on the mode of action of gastro-intestinal probiotics in inflammatory bowel diseases and a scholarship in the team of Prof. Jos Vanderleyden (KU Leuven). After a postdoc on the interaction between lactobacilli, viruses and mucosal immunology, in November 2011, she was offered a tenure track position at the University of Antwerp. Since then, she is leading the Laboratory for Applied Microbiology and Biotechnology of the ENdEMIC research group. In 2020, she was awarded with an ERC Starting Grant that enables her to gain more in-depth knowledge of the evolutionary history and ecology of lactobacilli. This rationale was also an important driving force to revise the Lactobacillus genus taxonomy with a large international consortium. Within the ERC project, Sarah has also launched the Isala citizen-science project to gain new insights in the role of vaginal lactobacilli for women's health. Since 2018, Sarah is an academic board member of the International Scientific Association on Probiotics and Prebiotics. Communicating about beneficial microbes and probiotics for experts and laymen is an important inspiration for her daily work.

Irene Lenoir-Wijnkoop, Utrecht University, Expert for Discussion Group 1

After a first experience in clinical nutrition, Irene Lenoir-Wijnkoop successively joined executive and senior management positions in the pharmaceutical industry (Upjohn Company) and a food company (Danone Group) at the international R&D center and at Corporate level. She co-conceived ISAPP by organizing the first -seminal- meeting in 1999 in New York. Her career continued to expand through her dynamic involvement in ILSI Europe, in several International Societies and in Advisory Boards. She received the Elie Metchnikoff Prize 2010 Award of Recognition. Through her passion for tackling preventable food-related diseases that weigh (too) heavily on healthcare resources, she pioneered the field of Nutrition Economics. Her strong personal engagement in combination with a multi-disciplinary professional experience gives her a unique perspective for catalyzing new ideas and concepts. Since a few years Irene also provides independent consultancy services in the field of Nutrition & Public Health.

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Greg Leyer, Chr. Hansen, Expert for Discussion Group 2

Dr. Leyer received his PhD in Food Microbiology and Toxicology from the University of Wisconsin – Madison. He started his probiotic-focused post-graduate career during a five-year stint with Abbott Laboratories, and held several probiotic leadership positions in a 15-year career at Danisco - DuPont. In 2013, Greg joined forces to acquire UAS Labs serving as Chief Scientific Officer. After the Chr. Hansen acquisition of UAS Labs in 2020, Greg is now active as Sr. Director – Scientific Affairs. Greg has authored and co-authored numerous papers in the areas of probiotic clinical benefits, application know-how, and microbial safety parameters.

Tine Licht, National Food Institute, Technical University of Denmark, Expert for Discussion Group 3

Tine Rask Licht, born 1968, is professor and head of the Research Group on Gut, Microbes and Health at the National Food Institute, Technical University of Denmark. She holds an MSc in Microbiology, and a PhD in Molecular Microbial Ecology. Her research has revolved around intestinal microbial ecology already long before the emergence of next generation sequencing made the gut microbiome a 'hot topic'. Today, her group focuses on effects of diet on the intestinal bacterial community, which they study in humans, animal models, and in vitro model systems. The research group has contributed significantly to the understanding of the role of human milk and complementary diet on establishment of the microbiota in young infants, and of the impact of the metabolic activities of specific bifidobacteria. Other contributions to the field include identification of the link between intestinal transit time and bacterial metabolism in the human gut, and highlighting the impact of human donor variability in faecal transplantation studies with gnotobiotic mice. From 2012 to 2018, Prof. Licht was heading the research center 'Gut, Grain and Greens', and she is currently heading the major research effort 'PRIMA' - towards Personalized dietary Recommendations based on the Interaction between diet, Microbiome and Abiotic conditions in the gut, recently funded by the Novo Nordisk Foundation. She is chair of the panel of Global Grants for Gut Health, supported by Yakult and Nature Research.

Susan Lynch, University of California, San Francisco, Expert for Discussion Group 3

Dr. Lynch received her undergraduate and graduate degrees in Microbiology from University College Dublin, Ireland, before postdoctoral training as a Dean's Fellow in the Department of Microbiology and Immunology at Stanford University in the laboratory of Dr. A.C. Matin. She is currently a Professor in the Division of Gastroenterology and serves as Director of the UCSF Benioff Center for Microbiome Medicine at the University of California San Francisco. Dr. Lynch's research program focuses primarily on the gut and airway microbiome and chronic inflammatory disease, with a focus on allergy and asthma and inflammatory bowel disease. Her integrative research program examines microbiome functional relationships with chronic inflammatory outcomes to inform cellular and molecular mechanisms underlying these relationships that can be tested experimentally. The goal of her research program is develop microbiome-based interventions to engineer microbiomes composition and productivity as a means to regulate inflammation. She has served on the National Academy of Science and Engineering committee on Advancing Understanding of the Implications of Environmental-Chemical Interactions with the Human Microbiome, and as an American Society of Microbiology, Distinguished Lecturer (2017-2019). She was awarded the Rebecca Buckley Lectureship from the AAAAI in 2015, The Odell lectureship from University of Wisconsin in 2022 and named as one of Foreign Policy Magazine's "Global Thinkers" in 2016. She co-founded Siolta Therapeutics Inc, in 2017, a biotech company whose lead live biotherapeutic for the prevention of childhood allergic sensitization and asthma is currently undergoing human clinical testing.

Maria Marco, University of California, Davis, ISAPP Vice President, Speaker, Co-chair for Discussion Group 1

Maria Marco is a Professor in the Department of Food Science and Technology and Chair of the Food Science Graduate Group at the University of California, Davis. She received her PhD in microbiology from the University of California, Berkeley and then was a postdoc and project leader at NIZO Food Research, The Netherlands. Dr. Marco has 20 years' experience investigating fermented foods, probiotics, and diet-dependent, host-microbe interactions in digestive tract. Her laboratory at UC Davis is broadly engaged in the study of food and intestinal microbiomes and the ecology and genetics of lactic acid bacteria.

Ludovica Marinelli, Ghent University, Expert for Discussion Group 4

Ludovica Marinelli is a PostDoctoral researcher at the Center for Microbial Ecology and Technology (CMET) at Ghent University, in the team of Prof. Tom Van de Wiele. Her multidisciplinary research focuses on studying the mechanisms of host-microbiota interaction in the intestinal environment, through the development of in vitro models simulating the ecology and epithelia of human small intestine and colon. She was awarded her PhD from Sorbonne University (Paris) in 2018 on "Physiology, physiopathology and therapeutics" with a thesis on the description of cellular mechanisms involved in the bacterial activation of the transcription factor aryl hydrocarbon receptor (AhR) in intestinal epithelial cells, embodied in the European Project FP7 MetaCardis and performed at the French National Institute for Agriculture Food and Environment (INRAE, Jouy-en-Josas). As PostDoc fellow at INRAE, she worked on the optimization of high-throughput functional screenings to decipher the mechanisms of action of probiotic strains on epithelial inflammation, metabolism and secretory functions, in collaboration with DuPont Nutrition&Health. She joined the team of Prof. Van de Wiele in February 2021 with a project aimed at identifying the microbial and cellular signatures for Short Bowel Syndrome, for which she was awarded the Marie Skłodovska Curie PostoDoctoral Fellowship in 2022. Her scientific curiosity is oriented toward the development of novel approaches to mimic in vitro the intestinal environment, in particular the poorly accessible small intestine, to characterize the microbial ecology and study the mechanisms of host-bacteria cross-talk in the epithelium.

Kristina Martinez-Guryn, Midwestern University, Expert for Discussion Group 4

Kristina is an Assistant Professor in the Biomedical Sciences Program at Midwestern University located in Downers Grove, IL. Kristina began her career by receiving her BS in Human Nutrition and Dietetics in 2006 from the University of North Carolina at Greensboro (UNCG). During the last year of her undergraduate degree, Kristina joined the lab of Dr. Michael McIntosh where she studied the adverse side effects of the weight loss supplement, conjugated linoleic acid, using primary cultures of human adipocytes. She remained in the same lab to complete her PhD in Nutrition. Upon earning her PhD, she entered the Dietetic Internship program at UNCG and obtained her credentials as a Registered Dietitian. Kristina completed her post-doctoral training at the University of Chicago in the Department of Medicine/Section of Gastroenterology, Hepatology, and Nutrition in the laboratory of Dr. Eugene B. Chang, where she investigated host-microbe interactions in the small intestine that regulate fat absorption in mice. Following her postdoc, Kristina joined the Midwestern University's Biomedical Sciences Program, as a faculty member in 2017 where she continues to study host-microbe interactions that lead to the development of obesity and diabetes with a specific focus on interrogating the small intestinal microbiome. In addition to her research, Kristina course-directs and teaches Principle of Biostatistics, Nutrition Therapy, and provides lectures in courses such as Pathophysiology and Public Health Nutrition. Kristina is a member of the Academy of Nutrition and Dietetics (AND), the American Society for Nutrition (ASN), and the American Gastroenterological Association (AGA). She also serves as an associate editor of the Journal of Nutritional Biochemistry.

Silvia Melgar, APC Microbiome Ireland, UCC, Expert for Discussion Group 4

Dr Silvia Melgar is a Senior Research Co-ordinator and Funded Investigator at APC Microbiome Ireland (APC), University College Cork (UCC), Cork, Ireland. She received a Ph.D. in Immunology from Umeå University, Sweden, and joined AstraZeneca R&D Mölndal, Sweden as a post-doctoral fellow followed by a position as senior research scientist in the Department of Integrative Pharmacology. She was recruited to the APC-GlaxoSmithKline (GSK) collaboration as a principal scientist and in vivo research co-ordinator, based in UCC. Her current research aims to identify molecular mechanisms regulated by environmental factors such as diet and dietary components, bacteria-host interactions, and their relevance in health and in intestinal disorders such as inflammatory bowel disease, colon cancer and metabolic syndrome. Her group uses a combination of in vitro cell systems, primary ex vivo cultures such as organoids and biopsy explants and in vivo preclinical models. Her research is funded by Science Foundation Ireland, Irish Research Council, and the European Commission (MSCA and Horizon Europe). Dr Melgar has a h-Index 32 (Google Scholar) and has over 50 Peer-Review publications in the areas of immunology, gastroenterology, and microbiome.

Daniel Merenstein, Georgetown University, ISAPP President, Co-chair for Discussion Group 2

Dr. Daniel Merenstein is a Professor with tenure of Family Medicine at Georgetown University, where he also directs Family Medicine research. Dr. Merenstein has a secondary appointment in the undergraduate Department of Human Science, in the School of Nursing and Health Studies. Dr. Merenstein teaches two undergraduate classes, a research capstone and a seminar class on evaluating evidence based medical decisions. He has been funded by the NIH, USDA, Foundations and Industry, for grants over $100 million. Dr. Merenstein is the President of the board of directors of the International Scientific Association of Probiotics and Prebiotics. The primary goal of Dr. Merenstein's research is to provide answers to common clinical questions that lack evidence and improve patient care. Dr. Merenstein is a clinical trialist who has recruited over 2,100 participants for 10 probiotic trials since 2006. He is an expert on probiotics, antibiotic stewardship in outpatient settings and also conducts HIV research in a large women's cohort. He sees patients in clinic one day a week.

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Lorenzo Morelli, Università Cattolica del Sacro Cuore, Expert for Discussion Group 2

Lorenzo Morelli is Chair Professor of Agro-Food Microbiology and Director, DiSTAS – Department for Sustainable Food Process Faculty of Agriculture, Food and Environmental Sciences Piacenza, Italy. Research activities are summarised in an h-index (Scopus) of 50 and more 160 renzo-morelli/profilo papers published on indexed journals. Listed by PlosBiology as a "world top scientists". Area of food microbiology was and is the main research area, including three main subjects: the use of beneficial bacteria for supporting the human health, molecular ecology of bacteria inhabiting the human gut and the safety assessment of non pathogenic bacteria present or intentionally added to the food chain.

Mary O'Connell Motherway, APC Microbiome Ireland, UCC, Expert for Discussion Group 3

Mary is a Senior Scientist and Faculty Member of APC Microbiome Ireland at University College Cork, and SFI Researcher in Residence at the Food Safety Authority of Ireland. She obtained a BSc (Hons) in Microbiology and following a brief period working for Chr. Hansen in the UK returned to UCC to undertake a PhD on the topic of environmental sensing by lactic acid bacteria. During her PhD Mary gained extensive additional experience through collaborative research at INRA, Jouy en Josas, France, as well as NIZO, the Netherlands, and the Molegen group at the University of Groningen, The Netherlands. Her research currently focuses on functional genomics of gut anaerobes including bifidobacteria. Mary has developed molecular tools and methods that now allow a greater understanding of the probiotic attributes of gut commensals in relation to carbohydrate metabolism and microbe-host interactions in the gut. With the Food Safety Authority of Ireland Mary is assessing the safety of probiotic foods on sale in Ireland targeted at vulnerable groups.

Arthur Ouwehand, Danisco Sweeteners, Speaker

Dr. Arthur Ouwehand is a Technical Fellow at Global Health & Nutrition Sciences, International Flavors and Fragrances, Kantvik, Finland. Arthur received his M.Sc. degree (1992) from Wageningen University (Netherlands) and his Ph.D. degree (1996) in microbiology from University of Gothenburg (Sweden). Since 1999 he is functioning as Adjunct Professor at the University of Turku (Finland). Since 2004 he has been working for IFF (or its predecessor companies, Danisco and DuPont). Arthur is chairman of the ILSI Europe, Probiotic Task Force and chairman of the IPA Scientific Committee, and he is an active member of ISAPP and IDF. Further, Arthur is the author of more than 300 journal articles and book chapters on probiotics and prebiotics; and he is the editor of four books on lactic acid bacteria and the intestinal microbiota.

Bruno Pot, Yakult Europe BV, Expert for Discussion Group 2

Bruno Pot made a PhD in microbiology at the University of Gent, Belgium. In subsequent postdocs he performed research on lactic acid bacteria. In 1997 he joined the science department of the company Yakult as science manager Benelux. He worked as Research Director at the Institut Pasteur in Lille, France, from 2001 till 2016. During that time he was also Director of Business Development at the bioinformatics company Applied Maths NV and Guest Professor at the Vrije Universiteit Brussel. His major research topics have always been bioinformatics, lactic acid bacteria, probiotics, bacteria-host interaction and health claim substantiation. Since November 2016 Bruno is back with Yakult as Science Director for Europe. Bruno Pot is member of the Taxonomic Subcommittee for Lactobacillus, Bifidobacterium and related taxa, President of the Pharmabiotic Research Institute (PRI), Narbonne, France and Board member of ILSI-EU and LABIP. He authored or co-authored more than 250 articles or book chapters.

Geoff Preidis, Texas Children's Hospital & Baylor College of Medicine, Speaker

Dr. Preidis received his undergraduate degree in Physics from Harvard University, then he completed his medical degree, residency in Pediatrics, fellowship in Pediatric Gastroenterology, Hepatology & Nutrition, and his Ph.D. in Translational Biology and Molecular Medicine from Baylor College of Medicine. Now an Assistant Professor at Baylor College of Medicine and Texas Children's Hospital, Dr. Preidis leads the Nutritional Physiology Research Laboratory and serves as an attending physician on both the Neonatal Gastroenterology, Hepatology & Nutrition Consultation Service and the Transplant Hepatology Inpatient Service. Dr. Preidis's laboratory seeks to define mechanisms through which early life malnutrition impairs intestinal and liver function, leading to both short-term and long-term medical problems. Current studies focus on how malnutrition slows gastrointestinal motility, alters the gut microbiome, and inhibits the liver's ability to synthesize important substances including bile acids – all of which adversely impact neonatal and child growth. This research aims to help children suffering from nutritional deficiencies caused by a wide range of medical and socioeconomic factors, including preterm and underweight newborns in the neonatal intensive care unit, adolescents with anorexia nervosa, and children devastated by severe acute malnutrition in the developing world.

Eamonn Quigley, Houston Methodist Hospital and Weill Cornell Medical College, ISAPP Board of Directors, Speaker, Co-chair for Discussion Group 4

Eamonn M M Quigley MD FRCP FACP MACG FRCPI MWGO is David M Underwood Chair of Medicine in Digestive Disorders and Chief of the Division of Gastroenterology and Hepatology at Houston Methodist Hospital. A native of Cork, Ireland, he graduated in medicine from University College Cork. He trained in internal medicine in Glasgow, completed a two-year research fellowship at the Mayo Clinic and training in gastroenterology in Manchester, UK. He joined the University of Nebraska Medical Center in 1986 where he rose to become Chief of Gastroenterology and Hepatology. Returning to Cork in 1998 he served as Dean of the Medical School and a PI at the Alimentary Pharmabiotic Center. He served as president of the American College of Gastroenterology and the WGO and as editor-in-chief of the American Journal of Gastroenterology. Interests include IBS, gastrointestinal motility and the role of gut microbiota in health and disease. He has authored over 1000 publications and has received awards and honorary titles world-wide. Married for over 40 years to Dr Una O'Sullivan they have 4 children and three grandchildren. Interests outside of medicine include literature, music and sport and rugby, in particular; Dr Quigley remains a passionate supporter of Munster and Irish rugby.

Amanda Ramer-Tait, University of Nebraska-Lincoln, Expert for Discussion Group 5

Amanda Ramer-Tait is the Maxcy Professor of Agriculture and Natural Resources and an Associate Professor of Immunology and Microbiology in the Department of Food Science and Technology at the University of Nebraska-Lincoln. She received her B.S. in Biochemistry from Western Kentucky University and her Ph.D. in Immunobiology from Iowa State University. Her research focuses on understanding host-microbiota interactions. In particular, her research program aims to: (1) determine the causative relationships between the gut microbiota and chronic, inflammatory diseases, (2) understand how dietary interventions, including dietary fibers, can be used to improve inflammatory diseases via modulation of the gut microbiota, and (3) develop new approaches to disease prevention and treatment that include microbiome manipulation. Dr. Ramer-Tait is a founding member of the Nebraska Food for Health Center and director of the Nebraska Gnotobiotic Mouse Program. She also teaches graduate-level courses about immunology, microbiology and functional foods and co-directs the University of Nebraska-Lincoln's Complex Biosystems graduate program. Dr. Ramer-Tait has authored over 80 peer-reviewed publications and received research funding from the Crohn's and Colitis Foundation, the National Institutes of Health, and the US Department of Agriculture.

Gregor Reid, Lawson Health Research Institute, Expert for Discussion Group 1

Dr. Gregor Reid BSc Hons, PhD, MBA, ARM CCM, Dr HS, FCAHS, FRSC. Gregor Reid is a Fellow of the Royal Society of Canada and Canadian Academy of Health Sciences, and Distinguished Professor Emeritus at Western University. Born and raised in Scotland, he did his PhD in New Zealand and immigrated to Canada in 1982. His research at Lawson Health Research Institute has focused on the role of beneficial microbes in the health of humans and other life forms. He has produced 32 patents, 581 peer-reviewed publications cited over 47,000 times, has a Google Scholar H index of 115 and has given over 650 talks in 54 countries. In 2001, he chaired the UN/WHO Expert Panel that defined the term probiotic and in 2002 hosted the first ISAPP meeting then was President for a three-year term. In 2004, he helped introduce probiotic yoghurt to East Africa as a means for women to create microenterprises that by 2019 reached 260,000 adults and children. He has received an Honorary Doctorate from Orebro University, Sweden; Distinguished Alumni award from Massey University, New Zealand; the Canadian Society for Microbiologists Career Award; Western University's highest accolade of Distinguished Professor; and in 2021, the Dr Roger's Prize for Complementary and Alternative Medicine. He is Chief Scientific Officer for Seed, a Californian start-up.

Amy Roe, Procter & Gamble, Expert for Discussion Group 2

Amy L. Roe, PhD, DABT, ATS. Dr. Roe has 22+ years of experience as a practicing toxicologist in government, pharmaceutical and consumer product industries, through positions at both the FDA and The Procter & Gamble Company. Her professional experience is in general, descriptive, and regulatory toxicology as well as specialized expertise in drug/xenobiotic metabolism and pharmacokinetics. Her industry experience is quite broad and includes toxicology support of drugs, medical devices, herbal/dietary supplements, foods, and water filtration devices. As a project leader, she has led multi-disciplinary drug development teams. Dr. Roe is a board-certified toxicologist (DABT) and a Fellow of the Academy of Toxicological Sciences (ATS). She is well-recognized externally in her field as evidenced by her service on a number of professional boards and committees including USP Dietary Supplement Admission Evaluation & Labeling Expert Committees and Probiotic Expert Panel, SOT Regulatory & Safety Evaluation Specialty Section (Past-President), Food Safety Specialty Section (Vice-President Elect) and an NIH/NCCIH Expert Advisory Panel related to natural product-drug interactions. Dr. Roe is currently serving as co-chair of the hepatotoxicity/ADME sub-committee of the HESI Botanical Safety Consortium. She also serves on the Editorial Board of Applied In Vitro Toxicology.

Patricia Ruas-Madiedo, Dairy Research Institute of Asturias (IPLA-CSIC), Expert for Discussion Group 6

Patricia Ruas-Madiedo Ph.D. Biology (1999, University of Oviedo), postdoctoral stages (1999-2003 NIZO food research, The Netherlands; 2005 Functional Food Forum, Finland). Since 2006, staff Scientist at the Dairy Research Institute of Asturias (IPLA-CSIC). Her research activity focuses on the study and application of lactic acid bacteria and bifidobacteria as probiotics for human consumption. She is recognized for her contributions in the field of bifidobacterial exopolysaccharides (EPS) acting as molecular patterns to establish interactions with the host, including the intestinal microbiota, as well as for the technological application of EPS to improve the sensorial properties of dairy products. She has co-directed 8 Doctoral Theses and has published more than 140 articles in SCI journals, 24 book chapters and more than 25 articles in scientific-technical journals. She has participated in numerous projects of different Research Programs, leading 23 of them, and she also has had contracts with companies in the food sector. She has established numerous collaborations with international research groups, both in Europe and Latin America, and she is the Coordinator of the Spanish thematic network "Lactic Bacteria in Food and Health" that brings together more than 45 research groups working on this thematic.

Seppo Salminen, University of Turku, ISAPP Past President, Speaker

Prof Seppo Salminen is professor at the Faculty of Medicine and director of the Functional Foods Forum, University of Turku, Finland. He has been visiting professor at RMIT University, Melbourne, Australia and BOKU University, Vienna Austria. His main research interests are probiotics, prebiotics and intestinal microbiota modulation as well as functional foods and health and regulatory issues in novel foods and health claims. He has been active in the International Life Sciences Institute Europe, the International Dairy Federation, and the International Scientific Association for Probiotics and Prebiotics (ISAPP, past president and current member of board). He received his MS at Washington State University (USA) in 1978, MSc from the University of Helsinki (1979) and PhD from the University of Surrey (United Kingdom)1982. He has around 500 journal articles and several text books and book chapters and he has received several international awards including the ISF-Institute Pasteur Metchnikoff Price, Swiss Price on Modern Nutrition and the Grand Prix du Yoplait.

Mary Ellen Sanders, ISAPP Board of Directors, Co-chair for Discussion Group 2

Mary Ellen Sanders, PhD serves as the Executive Science Officer for the International Scientific Association of Probiotics and Prebiotics (ISAPP), an organization devoted to advancing the science of probiotics, prebiotics and related substances. She is also a consultant in the area of probiotic microbiology. She works internationally with food and supplement companies to develop new probiotic products and offers perspective on paths to scientific substantiation of probiotic product label claims. She is the current chair of the United States Pharmacopeia's Probiotics Expert Panel, was a member of the working group convened by the FAO/WHO that developed guidelines for probiotics, and serves on the World Gastroenterology Organisation Guidelines Committee preparing practice guidelines for the use of probiotics and prebiotics for gastroenterologists.

Marieke Schoemaker, FrieslandCampina, Speaker

Marieke H. Schoemaker, PhD, is a Nutrition Credibility Roadmap Manager integrated in the Expert Nutrition Team. Dr. Schoemaker has a MSc degree in Medical Biology and holds a PhD degree in Medical Sciences from Groningen University in the Netherlands. She is passionate about nutrition & health with over 15 years of experience working in a global R&D environment of human nutrition industry and supplement business. Dr. Schoemaker is author of several scientific publications in international journals and co-inventor on multiple patent applications.

Frank Schuren, TNO, Speaker

Frank Schuren received his PhD at Groningen University in 1987 on the molecular biological analysis of fungal development. After a postdoc on genetic transformation systems in filamentous fungi at the same University and a postdoc at the ETH Zurich in Switzerland he joined TNO in 1996. At TNO he started the implementation of microarray technology in applied research which led to successful implementation in applied microbial research. These include novel diagnostic tools which enable the discrimination between closely related bacterial strains (such as the Legionella chip) and the analysis of complex microbial populations (such as the intestinal and vaginal microbiota). Also tools for analyzing the immediate responses of microbes or microbial populations towards multiple stressors have been developed. Furthermore Frank has extensive experience with different approaches for novel antimicrobial strategies. Currently Frank is senior scientist in the Microbiology team within TNO and actively involved in activities towards better understanding the role of the microbiome in human health and especially in ways to modulate microbiome in order to improve human health.

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2022 ISAPP Meeting Speakers and Experts

Karen Scott, Rowett Institute, University of Aberdeen, ISAPP Board of Directors, Co-chair for Discussion Group 3

Karen Scott is a Senior Research Fellow at the Rowett Institute, University of Aberdeen. She leads a research team investigating the (molecular) mechanisms by which key members of the gut microbiota interact with the diet and host, at different life-stages. The fermentation products of gut bacteria contribute to gut health, and are differentially expressed on different substrates, including prebiotics. In vitro bacterial growth studies utilising our large culture collection of gut anaerobes (in pure culture, mixed culture, fermentor systems, and also with human cells) and bioinformatic analyses illustrate niche-specific processes and bacterial interactions.

Magnus Simrén, University of Gothenburg, Expert for Discussion Group 4

Doctor Simrén is head of the Neurogastroenterology Unit at Sahlgrenska University Hospital. His main research areas are the pathogenesis and pathophysiology of functional GI disorders, as well as the treatment of these. He has published more than 350 original articles and written several book chapters on GI motility diseases and functional GI disorders and is currently supervisor for fifteen PhD students and eight post-docs. Doctor Simrén has been the President of the Scandinavian Association for Gastrointestinal Motility (SAGIM), and Scientific Secretary to the Swedish Society of Gastroenterology, and served as council member for several international organizations. He has been the chair of the United European Gastroenterology (UEG) Scientific Committee 2013-2017, the UEG Secretary General (2018-2021), and a member of the UEG council (2013-2021). Professor Simrén has also been working as Deputy Editor and Associate Editor of Gut, and as the Clinical Editor of Neurogastroenterology and Motility. Currently, Professor Simrén is Associate Editor of Gastroenterology (2022-). He is also on the Rome Foundation Board of Directors since 2011 and the Research Director of the Rome Foundation Research Institute (RFRI) 2017-.

Andi Shane, Emory University and Children's Healthcare of Atlanta, Expert for Discussion Group 2

Dr. Shane is a pediatric infectious disease physician who has a passion for the prevention of infectious disease in children both locally and internationally. Originally from South Africa, she has spent the last 15 years of her academic career at Emory University School of Medicine and Children's Healthcare of Atlanta. She completed her undergraduate degree in the Biological Basis of Behavior at the University of Pennsylvania followed by completion of her MPH at the Mailman School of Public Health at Columbia University in New York City. Her medical education was completed at the Louisiana State University School of Medicine in New Orleans and her pediatric residency and chief residency at the Albert Einstein College of Medicine/ Montefiore in the Bronx, New York. Dr. Shane was an Epidemic Service Intelligence Officer at the Centers for Disease Control and Prevention from 2001-3, a fascinating time to be in engaged in public health. She completed her pediatric infectious disease fellowship at the University of California, San Francisco. She was a KL2 recipient and completed her Master of Science in Clinical Research degree at Emory in 2009. Dr. Shane became interested in the applications of probiotics in the prevention of antimicrobial-associated diarrhea during her fellowship. This led to explorations of applications of probiotics in augmenting vaccine response, especially that of the rotavirus vaccine, and in the prevention of necrotizing enterocolitis in neonates. She is also interested in how unique trial designs can be incorporated into probiotic investigations in children. She currently divides her time among serving as the Division Chief of the Division of Pediatric Infectious Disease, her responsibilities as the Marcus Professor of Hospital Epidemiology and Infection Prevention for the Children's Healthcare of Atlanta system, caring for patients, performing clinical research, teaching, mentoring, and assisting with COVID-19 pandemic response.

Irina Spacova, University of Antwerp, Speaker

Irina Spacova is a postdoctoral researcher at the University of Antwerp, Belgium. Irina received her Bachelor's degree in Biology from Moldova State University (Moldova) and her Master's degree in Bioscience Engineering from KU Leuven (Belgium). Her subsequent PhD dissertation at KU Leuven and the University of Antwerp unraveled the mechanisms through which immunomodulatory lactobacilli prevent asthmatic inflammation. As a postdoctoral researcher at the Laboratory of Applied Microbiology and Biotechnology, Irina broadly investigates how beneficial bacteria within the airway microbial communities modulate respiratory diseases, both experimentally and in clinical trials. She is especially interested in direct interactions of beneficial microbiota members with viral and bacterial pathogens, as well as microbial immunomodulation at mucosal surfaces. Irina is the former president of the ISAPP Students and Fellows Association 2019 and received the ISAPP Early Career Researcher prize in 2021.

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Sean Spencer, Stanford University, Expert for Discussion Group 4

Sean Spencer, MD, PhD is a Gastroenterologist and Physician Scientist at Stanford University working with Justin Sonennburg, PhD to uncover the role of dietary intake on the gut microbiome and mucosal immune system. Sean obtained his medical degree University of Pennsylvania, earning his PhD studying nutritional immunology with Yasmine Belkaid, PhD at the National Institutes of Health (NIH), after which he moved to Boston for residency training at Massachusetts General Hospital and completed his Gastroenterology training at Stanford University. Sean's career goal is to study mechanisms by which dietary intake influences our microbiome and immune system to better understand and treat gastrointestinal disease.

Heidi Staudacher, Food & Mood Centre, Deakin University, Expert for Discussion Group 1

Heidi is an accredited practising dietitian and Alfred Deakin Postdoctoral Research Fellow at Deakin University. Her PhD at King's College London and subsequent postdoctoral work has focused on investigating the dietary management of disorders of gut-brain interaction (DGBI), including with mental illness comorbidity, and the nature and relevance of diet-induced microbiome shifts in these disorders, with the ultimate aim of developing better treatments. She has published many highly influential papers on the dietary management of irritable bowel syndrome and her research underpins clinical guidelines globally. She has also led papers that seek to enhance the rigor of clinical trial design, including on the design of control diets and of diet-microbiome trials. She serves on the Rome V Design of Treatment Trials Chapter Committee and has been the recipient of several research awards including a highly commended Early Career Research Australia Award in 2021.

Jonathan Swann, University of Southampton, Expert for Discussion Group 6

Jonathan Swann is a Professor of Biomolecular Medicine in the Faculty of Medicine at the University of Southampton and Visiting Professor in the Department of Metabolism, Digestion, and Reproduction at Imperial College London and the Department of Neuroscience at the Karolinska Institute. Prof Swann obtained a PhD in Biomolecular Medicine from Imperial College in 2008 and became a lecturer at the University of Reading in 2010. In 2015, Swann became Associate Professor in Microbiomics and Human Development at Imperial College before moving to the University of Southampton in 2020. He leads a metabolomic-based research programme to understand the influence of gene-environment interactions on the mammalian metabolic system and their implications for development, health, and disease. His primary interests involve developing analytical techniques and models to study the metabolic interactions between the gut microbiome and the mammalian host and he has a specific interest in the microbiota-gut-brain axis, and the impact of childhood malnutrition and enteric infections on such interactions.

Kelly Swanson, University of Illinois, ISAPP Board of Directors, Co-chair for Discussion Group 6

Kelly Swanson is the Kraft Heinz Company Endowed Professor in Human Nutrition at the University of Illinois at Urbana-Champaign. His laboratory studies the effects of nutritional intervention on health outcomes, identifying how nutrients impact host physiology and gut microbiota, with primary emphasis on gastrointestinal health and obesity in dogs, cats, humans, and rodent models. Much of his lab's work has focused on dietary fibers, prebiotics, probiotics, synbiotics, and postbiotics. Over the past 15 years, he has established an internationally recognized research program, highlighted by over $20 million in research support, 145 invited lectures at scientific and professional meetings, 210 peer-reviewed journal articles, and 15 research and teaching awards. He has trained over 35 graduate students and post-doctoral fellows (and has 17 in his lab now), hosted 15 international visiting scholars, and mentored over 35 undergraduate research projects. In addition to research, Kelly teaches 3-4 classes each year to undergraduate and graduate students and has been named to the university's 'List of Teachers Ranked as Excellent by Their Students' 27 times. He also serves on advisory boards for many companies in the human and pet food industries as well as non-profit organizations, including the Institute for the Advancement of Food and Nutrition Sciences (IAFNS) and ISAPP.

Hania Szajewska, The Medical University of Warsaw, Department of Paediatrics, ISAPP Board of Directors, Speaker

Hania Szajewska, MD, is Professor and Chair of the Department of Paediatrics at the Medical University of Warsaw. Among her various functions, she served as the Editor-in-Chief of the Journal of Pediatric Gastroenterology and Nutrition; a member of the Council and then as the General Secretary of the European Society for Paediatric Gastroenterology, Hepatology and Nutrition (ESPGHAN); the Secretary of the ESPGHAN Committee on Nutrition. Most recently, she joined the Board of Directors of the International Scientific Association for Probiotics and Prebiotics (ISAPP). Prof. Szajewska has broad interests in paediatric nutrition but her research focuses on the effects of early nutritional interventions on later outcome (especially food allergy); and the gut microbiota modifications such as with various biotics (probiotics, prebiotics, synbiotics, postbiotics). She is or has been actively involved in several European Union-funded research projects. She is an enthusiastic advocate for the practice of evidence-based medicine. She has co-authored more than 350 publications. In 2020 and 2021, Prof. Szajewska has been ranked as one of the world's top 2% most-cited researchers.

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Daniel Tancredi, University of California, Davis, ISAPP Treasurer

Daniel J. Tancredi, PhD, is Professor in Residence of Pediatrics in the University of California, Davis School of Medicine. He has over 25 years of experience and over 300 peer-reviewed publications as a statistician collaborating on a variety of health-related research. A frequent collaborator on probiotic and prebiotic research, he has attended all but one ISAPP annual meeting since 2009 as an invited expert. In 2020, he joined the ISAPP Board of Directors. On research teams, he develops and helps implement effective study designs and statistical analysis plans, especially in settings with clusters of longitudinal or otherwise correlated measurements, including cluster-randomized trials, surveys that use complex probability sampling techniques, and epidemiological research. He teaches statistics and critical appraisal of evidence to resident physicians; graduate students in biostatistics, epidemiology, and nursing; and professional scientists. Dan grew up in the American Midwest, in Kansas City, Missouri, and holds a bachelor's degree in behavioral science from the University of Chicago and masters and doctoral degrees in mathematics from the University of Illinois at Chicago. He lives in the small Northern California city of Davis, with his wife Laurel Beckett (UC Davis Distinguished Professor Emerita), their Samoyed dog Simka, and near their two grandkids.

Kristin Verbeke, KU Leuven, Speaker

Kristin Verbeke graduated from the KU Leuven, Belgium as a pharmacist in 1991. She obtained a PhD in Pharmaceutical Sciences at the Laboratory of Radiopharmaceutical Chemistry in 1995 and subsequently spend a postdoctoral period in developing radioactively labelled compounds. In 2002, she was appointed at the department of gastroenterology of the Medical Faculty of the Leuven University where she got involved in the use of stable isotope labelled compounds to evaluate gastrointestinal functions. Within the University Hospitals Leuven, she is responsible for the clinical application of diagnostic 13C- and H2-breath tests. Her current research interest specifically addresses the microbial bacterial metabolism in the human colon. Her team has developed several analytical techniques based on mass spectrometry and stable isotope or radioisotope technologies to evaluate several aspects of intestinal metabolism and function in humans (transit time, intestinal permeability, carbohydrate fermentation, protein fermentation, metabolome analysis). Collaborative research has allowed showing an aberrant bacterial metabolism in patient groups with end stage renal failure, inflammatory bowel diseases, irritable bowel disorders and alcohol abuse. These collaborations all have resulted in high quality peer-reviewed papers. In addition, she showed the impact of dietary interventions (modulation of macronutrient composition, pre- or probiotic interventions) on the microbial metabolism and its impact on health. As a PI, she acquired grant support from the university and different funding bodies and successfully completed these projects. Similarly, she supervised several PhD projects that all resulted in the achievement of a PhD degree. Her research resulted in over 200 full research papers. Together with colleague Prof. J. Delcour, she was beneficiary of the W.K. Kellogg Chair in Cereal Sciences and Nutrition (2010-2020). She is the president of the Belgian Nutrition Society, the vice-chair of the Leuven Food Science and Nutrition Center and the co-chair of the Prebiotic task force at ILSI Europe. Furthermore, Kristin Verbeke is the editor of the journal Gut Microbiome and member of the editorial board of Gastrointestinal Disorders.

Gabriel Vinderola, Dairy Products Institute, Faculty of Chemical Engineering (UNL), ISAPP Secretary, Co-chair for Discussion Group 6

Gabriel Vinderola graduated at the Faculty of Chemical Engineering from the National University of Litoral (Santa Fe, Argentina) in 1997 and obtained his Ph.D. in Chemistry in 2002 at the same University. He is presently Principal Researcher at the Dairy Products Institute (CONICET-UNL) and Adjoint Professsor at the Biotechnology and Food Technology Department of the Faculty of Chemical Engineering (National University of Litoral). He participated in the development of the first commercial cheese carrying probiotic bacteria from Latin America, released in the market in 1999. In 2011, he was awarded the prize in Food Technology for young scientists, by the National Academy of Natural, Physic and Exact Sciences from Argentina. His interests are technological and microbiological aspects of lactic acid bacteria, bifidobacteria, fermented foods and probiotics. He has joined several research groups in Brazil, Canada, Spain, Italy, France, Germany and Finland. He has co-edited the fifth edition (2019) of the book Lactic Acid Bacteria: Microbiological and Functional Aspects. He is engaged in communication of science to the general audience.

Alan Walker, University of Aberdeen, Expert for Discussion Group 5

Alan Walker is a microbiologist with specific interests in the bacteria that inhabit the gastrointestinal tract of mammalian hosts. After receiving an undergraduate degree in Microbiology from the University of Aberdeen, he studied for his PhD at the Rowett Institute and at the University of Dundee, specialising in gut microbiology and the role that intestinal bacteria play in the breakdown of dietary fibre. He then spent eight and a half years at the Wellcome Sanger Institute in Cambridge, where they used state of the art DNA sequencing facilities to better characterise host-associated microbial communities and shed light on the roles these microbes play both in health and in diseases such Cystic Fibrosis, inflammatory bowel disease and infection with pathogens such as Salmonella and C. difficile. He is now a Senior Lecturer/Principal Investigator at the Rowett Institute within the University of Aberdeen. In the lab, they combine anaerobic microbiology with DNA sequencing technologies in order to mechanistically examine interactions between the host and their intestinal microbiota, and how these factors may contribute to host health.

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2022 ISAPP Meeting Speakers and Experts

Jens Walter, University College Cork, Speaker, Co-chair for Discussion Group 5

Jens Walter serves as the Professor of Ecology, Food, and the Microbiome at University College Cork and the APC Microbiome Ireland. His research focuses on the evolutionary and ecological processes that have shaped host-microbiome symbiosis and the translation of basic microbiome science into therapeutic and nutritional strategies. Prof. Walter and his collaborators have pioneered the application of ecological theory to elucidate ecological and nutritional factors that shape gut microbiomes and have achieved targeted modulations of microbiomes via dietary strategies and live microbes. Prof. Walter's research has been featured on six occasions in the research highlights of Nature and Nature Reviews journals, and he has participated in several invitation-only workshops and think-tanks of the NIH, CIFAR (Canadian-based global organization that convenes extraordinary minds to address the most important questions facing science and humanity) and ILSI to discuss imminent issues of the microbiome field. He has led several provocative science commentaries with other opinion leaders that inter alia challenged current paradigms in the microbiome field that required critical assessment, such as the exaggeration of causal claims (Cell, 2020, 180:221-232), the definition of prebiotics (Nat Rev Gastroenterol Hepatol. 2015, 12:303-10), use of 'human microbiota-associated mice' (Cell Host and Microbe 2016, 19:575-578), and the 'prenatal in utero microbiome' (Microbiome 2017, 5(1):48).

Kevin Whelan, King's College London, Expert for Discussion Group 1

Kevin Whelan is the Professor of Dietetics and Head of Department of Nutritional Sciences at King's College London. His research investigates the interaction between diet and the gut microbiome in health and in gastrointestinal disorders such as inflammatory bowel disease and irritable bowel syndrome. He has published over 180 journal articles on fibre, probiotics, prebiotics, the low FODMAP diet and emulsifiers. Kevin advises the UK government as member of the Scientific Advisory Committee on Nutrition. In addition, he is a Founding Trustee of the Academy of Nutrition Sciences, and a Fellow of the British Dietetic Association.

Anisha Wijeyesekera, University of Reading, ISAPP Board of Directors, Speaker

Anisha Wijeyesekera, PhD is a Lecturer in the Department of Food & Nutritional Sciences at the University of Reading, UK. Her research interfaces analytical chemistry with microbiology and nutrition, by using metabolic profiling approaches for functional assessment of the gut microbiota in health and disease, identifying potential targets for therapeutic modulation through dietary intervention, and capturing the impact of dietary interventions (in particular, prebiotics and probiotics) on gut and system health. Dr Wijeyesekera's research portfolio includes projects funded by research councils, charities/societies and the food industry. Dr Wijeyesekera joined the ISAPP Board of Directors in 2021. She is also a member of the Academic Board for the Royal Society of Chemistry's Community of Analytical Measurement Sciences, and the London Metabolomics Network Committee.

Niv Zmora, Elinav Lab, Immunology Department, Weizmann Institute of Science, Speaker

Niv Zmora, MD, PhD is an internal medicine specialist and a gastroenterologist at the Tel-Aviv Sourasky Medical Center and a researcher at the Elinav Lab, the Immunology Department, Weizmann Institute of Science in Israel. During his PhD he explored host-microbiome interactions in health and disease and harnessed Next Generation Sequencing and big data analysis in parallel with in vivo and in vitro experiments. His research on probiotics was published in two Cell papers in 2018 and a Nature Microbiology paper in 2021. Niv was awarded an international grant by Gilead Sciences and the Rappaport Prize for excellence in biomedical science for doctoral students. He was elected as one of the world's most influential researchers of the past decade by Clarivate Web of Science Group.