ISAPP
International Scientific Association for PROBIOTICS and PREBIOTICS

2025 Annual Report

January 1 - December 31, 2025

Introduction

The International Scientific Association for Probiotics and Prebiotics (ISAPP) is the international non-profit organization that works to advance the science of probiotics, prebiotics, and related substances, such as synbiotics, postbiotics and fermented foods.

Established in 2002, ISAPP's activities focus on fostering scientific discussion and collaboration, identifying and driving forward robust outputs on the most important scientific issues, and cultivating accurate knowledge of biotic substances amongst health care professionals, consumers, scientists, regulators, and other stakeholders. ISAPP thrives on the contributions of a multidisciplinary community of scientists, clinicians, and other professionals from diverse settings, including academic, industry, healthcare, and government backgrounds.

In 2025, ISAPP continued our mission through our three pillars of scientific leadership, community building, and growing knowledge. A few highlights from 2025 include:

- The annual scientific meeting in Banff Canada, hosting scientists and clinicians from 23 countries, 51 academic institutions and 34 industrial settings
- Advancing progress of 18 collaborative international scientific projects, with 5 submitted or recently published.
- Provision of 29 travel grants to students and early career researchers to support the next generation of scientists in the field
- Board members presented at over 20 educational events across the globe, sharing the latest biotic science and clinical implementation insights
- Revamping ISAPP's website, with a clean new design, curated topic resources and optimal navigation for ISAPP's large collection of resources
- Producing 28 new podcasts on 8 distinct themes, providing the opportunity to leverage insights from a range of scientists doing cutting-edge work in the biotics and microbiome fields
- Reaching over 70,000 people per month through our communication channels

Organizational update

Board of Directors

ISAPP is governed by a volunteer board of directors composed of expert academic scientists with diverse backgrounds and expertise across the field of biotic science (Appendix A). In 2025, ISAPP welcomed two distinguished scientists and longtime collaborators, Prof. Hannah Holscher, PhD, RD (University of Illinois Urbana-Champaign, USA) and Prof. Jens Walter, PhD (University College Cork, Ireland), to its board of directors this year. Their appointments, announced at the ISAPP annual meeting in Banff, Canada, enhance the board's collective expertise and leadership in probiotics, prebiotics, synbiotics, postbiotics, and fermented foods. Prof. Holscher's work in nutritional microbiology and Prof. Walter's work in gut microbiome ecology help support ISAPP's mission to advance science and education in these fields. This year, Prof. Holscher also had the honour of being named as an inaugural Excellence in Nutrition fellow with the American Society for Nutrition.

This year also brought recognition to several of ISAPP's existing board members. President Prof. Maria Marco PhD was elected to the American Academy of Microbiology, while Prof. Kelly Swanson PhD joined Prof. Holscher as an Excellence in Nutrition Fellow with the American Society for Nutrition.

2025 saw the end of his term of service for Prof. Eamonn Quigley, MD on the ISAPP Board of Directors. Prof. Quigley has been a highly valued member of the board for 13 years, providing clinical insights and research leadership that greatly enhanced the board's activities. The board of directors wishes Prof. Quigley the very best as he retires from ISAPP.

ISAPP Board of Directors in Banff, Canada

Industry Advisory Committee

The ISAPP Industry Advisory Committee (IAC), comprises scientific representatives from industry member companies. Member scientist contributions and engagement are critical for helping identify important topics and translational considerations, collaborating on scientific projects and papers, and fostering real world implementation of biotic science. IAC companies make annual funding contributions to ISAPP through membership dues, from which ISAPP activities are determined and directed by the ISAPP board of directors. As a scientific society, ISAPP ensures its activities are directed by the goal of scientific advancement, rather than category advocacy or promotion.

ISAPP is grateful for the support and engagement of 53 member organizations in 2025, helping the organization to realize its mission of advancing scientific excellence in probiotics, prebiotics, synbiotics, postbiotics and fermented foods. A list of ISAPP members is available in Appendix B.

Each year, two members of the ISAPP Industry Advisory Committee are elected to serve as representatives, attending board meetings and conveying industry perspectives. In July 2025, Dr. Jessica van Harsselaar, PhD (Beneo, Germany) assumed the role of Senior Industry Advisory Committee representative and Dr. Leila Shinn, PhD, RD (PepsiCo, USA) was elected to the Junior representative position.

Dr. Jessica van Harsselaar, PhD and Dr. Leila Shinn, PhD, RD

Students and Fellows Association

The ISAPP Students and Fellows Association (SFA) continued their work throughout 2025 to establish an interactive global network of graduate students and postdoctoral fellows focused on probiotics, prebiotics, and related fields. Annually, 6.25% of ISAPP membership dues go to SFA to promote the development of the next generation of scientists and bring the contributions of leading early career researchers to the ISAPP community. The SFA community grew to 420 SFA members globally in 2025 (based on a 2-year rolling subscription), with 27 participants receiving travel funding to join the 2025 annual meeting program, sharing their work through interactive workshops, poster discussions and selected presentations on the main stage.

Volunteers from the SFA membership comprise the Executive Committee, which is appointed each year to govern the SFA organization. In the second half of 2025, Dr. Patricia Sanz Morales PhD assumed the position of SFA President, succeeding Dr. David Hourigan PhD, who took on the recently created role of Past President to assist with continuity and transition in leadership. Dr. Rounak Chourasia PhD stepped into the role of Vice President while Dr. Ellen Murray PhD continued as Director of Communications and Development. Dr Cathy Lordan PhD stayed on the committee as Treasurer, Josiane Kenfack MSc was newly appointed as Director of Outreach and Community Engagement, and Dr David Alvarado PhD was also welcomed onto the committee as Secretary. Dr. Anisha Wijeyesekera PhD continued her role as liaison to the SFA from the ISAPP board of directors.

Throughout the year, SFA members shared their research and perspectives through SFA-driven communication efforts and social media updates. On a monthly basis, SFA publishes a blog written by one of its members, with 12 blogs on a variety of topics published in 2025.

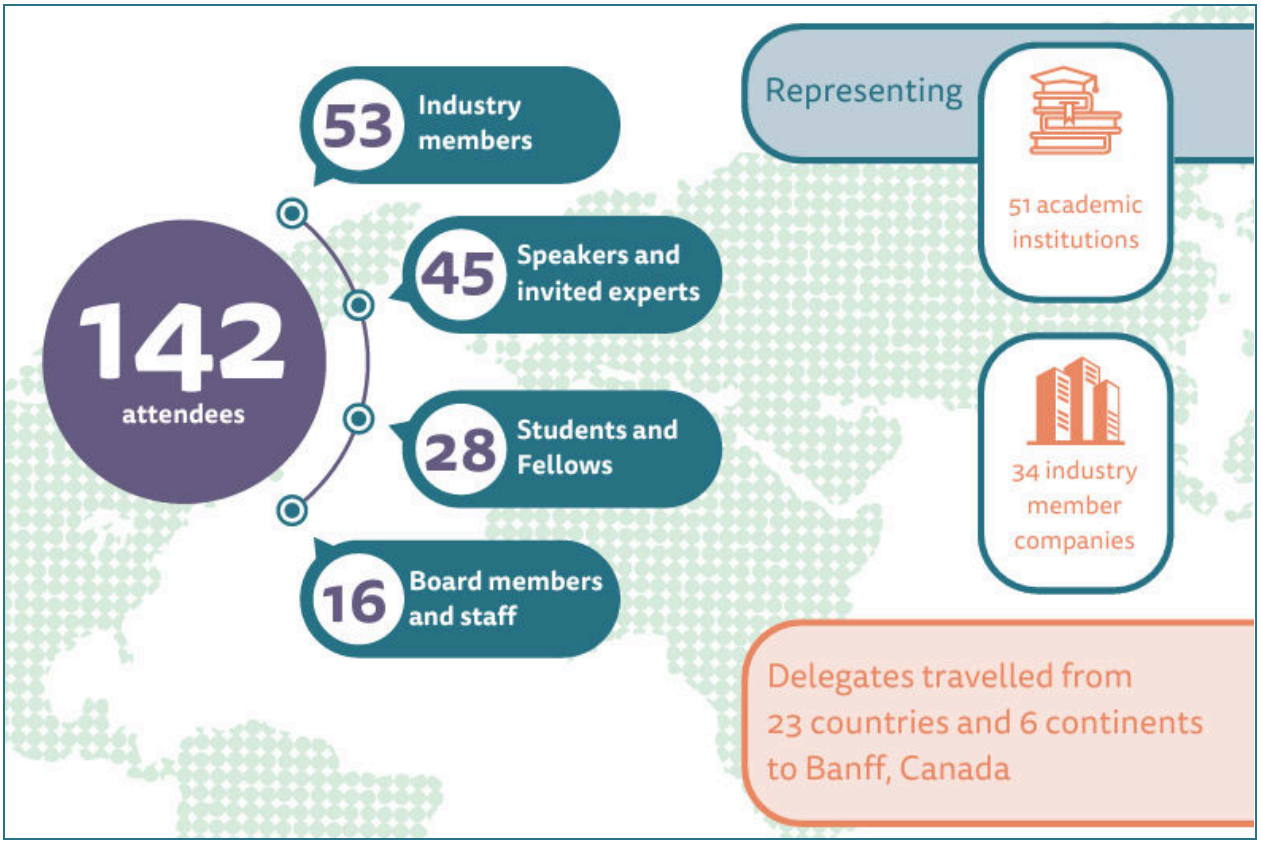
ISAPP 2025 Students and Fellows Association travel grant recipients in Banff, Canada

Annual scientific meeting

The 2025 ISAPP annual scientific meeting provided the setting for 142 scientists and clinicians from 23 countries to connect together in the beautiful Canadian Rocky Mountains, for 2.5 days of engaging exchange on the science of biotics. Attendees shared high calibre research in presentations, short talks, discussion groups, and poster sessions, with robust discussions and engagement from the community.

The plenary program showcased bodies of work from leading scientists on topics spanning prebiotic immune interactions, sensing gut microenvironments, differentiation of probiotic and postbiotic mechanisms, metabolomic responses to fermented foods, and the most promising probiotic research targets for glucose management and obesity. In the interactive discussion groups, academic and industry scientists explored six important research questions in small group settings, sharing the latest data, implementation challenges, and opportunities for the field. Our expert panel session addressed the topic of clinical translation of biotic science, bringing together insights and perspectives from clinical, academic, and industry researchers on how to advance the implementation of science in this field by healthcare professionals. Further opportunities for scientific exchange included a lively poster session, thought-provoking short talks and a late breaking news session, showcasing delegate research and perspectives.

Meanwhile, the industry (IAC) committee and student association (SFA) organised a premeeting program providing an opportunity for industry member scientists and early career researchers to connect with each other and share knowledge, leading to fertile discussions to fuel research, development, and innovation. Amongst these and other scientific portions of the program, attendees enjoyed opportunities for social connection, fun and exploration of the spectacular surroundings of the Banff meeting venue.



ISAPP 2025 Annual scientific meeting: Attendee composition

Expert panels

Expert panel at 2025 ISAPP Annual meeting

Annual meeting, Banff, July 2025

Clinical translation of biotic science - How can we enhance impact for clinical practice?

Aiding the efficient and timely translation of research to practice is a challenge for all health sciences, and the field of biotic science is no exception. Clinical research on probiotics, prebiotics, postbiotics, synbiotics, and fermented foods continues to grow each year, creating a wide range of evidence-backed interventions with significant potential to improve patient health. Clinical practice can be slow to change, and amid growing public and market interest in the concepts of gut health and the microbiome, misconceptions and hype may obscure the scientific data.

An expert panel held at the 2025 ISAPP Annual meeting in Banff brought together clinical, academic, and industry scientists to explore the challenges and paths forward for clinical implementation of biotic science, sharing expert insights on appropriate and clinically relevant research design, conduct and reporting, as well as tailoring communication and outreach efforts to a clinical audience. A manuscript reporting on key learnings for the translation of probiotic science into clinical guidelines was developed for 2026 submission.

Gut health consensus panel outputs

During 2025, ISAPP continued work from the September 2024 expert consensus panel, exploring the physiology, manifestation, application and measurement of the concept of gut health. Through the panel's work, a consensus definition of gut health was proposed, along with a comprehensive framework to incorporate diverse components of gut health into a cohesive and interdependent model. Six domains of physiological function were described, along with clinical features (signs and symptoms), with putative markers explored for each. The relevance and relationship of extra-intestinal symptoms, diagnosed disease, and risk prevention to the concept of gut health were also explored. The resulting manuscript was submitted for publication and underwent peer review and revision during 2025 to prepare for 2026 publication in Nature Reviews Gastroenterology and Hepatology. In parallel, an industry member working group commenced work during 2025 to explore current practice in research and claims on gut health, as well as considerations for implementation of the ISAPP gut health definition and framework.

- Publication: The International Scientific Association for Probiotics and Prebiotics (ISAPP) consensus statement on the definition and scope of gut health

Collaborative papers

Postbiotics: a perspective on their quantification

Precise quantification is essential for measuring the dose of a postbiotic and ensuring consistency across scientific studies. However, a gold standard for quantifying postbiotics does not yet exist. In this important *Frontiers in Nutrition* paper, which originated from a 2024 expert working group held by ISAPP, 15 leading scientists from academia and industry offer globally relevant guidance for postbiotic quantification.

- Publication: Postbiotics: a perspective on their quantification
- Press release: Experts publish first global framework for quantifying postbiotics

Use of biotics in animals: impact on nutrition, health, and food production

This review in the *Journal of Animal Science* highlights the value of biotics in agricultural and companion animals. The publication, which resulted from an ISAPP discussion group of academic and industry scientists, addresses evidence for the efficacy of biotic substances in improving digestion, reducing morbidity, increasing growth rate and/or increasing efficiency in agricultural animals, as well as promoting gastrointestinal health and immune response in companion animals. The article also highlights some future areas for innovation in the field.

- Publication: Use of biotics in animals: impact on nutrition, health, and food production
- Blog: Five points to know about biotics for animals, from an ISAPP-led paper

Is there an effective approach to rational design and validation of prebiotics to target members of the microbiota?

The human gut microbiome harbors multiple genes that are required for the digestion of prebiotics and other fibers, resulting in the production of end products that mediate gastrointestinal and systemic benefits to the host. However, considerable interindividual differences in gut microbial composition have resulted in variable responses toward these interventions. This ISAPP discussion group reviewed strategies to address responder and nonresponder phenotypes in prebiotic and dietary fiber interventions, including targeted approaches to identify predictive features based on knowledge of fiber and prebiotic metabolism, metagenomes, and machine learning tools. A resulting manuscript was finalised during 2025 for early 2026 submission.

How can we establish causal mediation in microbiome intervention studies?

Many intervention studies targeting the microbiome associate changes in microbial composition or function to changes in a particular health outcome. However, demonstration of causality often proves challenging. At the 2024 ISAPP annual meeting, ISAPP convened a discussion group to explore recent progress and remaining research gaps for causal mediation studies involving the microbiome, with the goal of understanding how to improve the quality of the evidence for a claimed mechanistic linkage involving the microbiome as a mediator of health effects caused by a biotic intervention. A manuscript was in preparation during 2025.

How does digestion affect prebiotic and probiotic function?

Recent advances have revealed fascinating insights into digestive processes and the mechanisms through which biotics exert their effects. A discussion group held at the 2024 ISAPP annual meeting gathered global experts to explore the impact of digestive processes on the structure and function of biotics and dietary substrates, utilising data from innovative analytical advances such as in situ monitoring. The output of these discussions was curated during 2025 as a manuscript for peer review, exploring the latest science in this area as well as recommendations for future research priorities.

Next-generation probiotics by implementation of genetic engineering and other tools

During the last two decades, the diversity of microbial strains and species that are being explored as probiotics is steadily increasing. At the same time, the genetic tools to precisely genome engineer and improve the functionality of specific microbial strains and whole communities are rapidly advancing. However, such next-generation probiotics and tools may not be promptly followed by the necessary regulatory updates to allow market entry of these novel approaches. A 2024 ISAPP discussion group was convened to explore the potential applications, benefits and pitfalls of next-generation probiotics, as well as design targets for single organism and consortia, with consideration to microbial and ecosystem functionality and safety. The output of these discussions was in preparation during 2025 as a manuscript for peer review.

Role of microbially-derived compounds on fermented food and postbiotic health benefits

Fermented foods and many postbiotics contain a wide range of microbially-derived compounds consisting of thousands of metabolites, enzymes, and cell-wall components not contained in the raw material. Although many of these compounds are known to induce immune, epithelial, and neural responses when provided individually or synthesized by members of the gut microbiome, there is little evidence showing how they contribute to health benefits conferred by fermented foods and postbiotics. However, the potential for those compounds to affect the host is evident. A discussion group convened in July 2025 at the annual meeting in Banff, Canada, explored current knowledge on the metabolites present in fermented food and postbiotic preparations with regard to their physiological relevance and effects on the target host. The resulting manuscript was in preparation during 2025.

Use of biotics in health and disease - towards optimizing the host response

Recent advances in our understanding of the microbiome and its interactions with the host provide a new opportunity for biotic research - guiding the rational development and selection of a biotic suited to the target indication. A 2025 ISAPP discussion group explored various determinants of the host response including, but not limited to, the commensal microbiome and components of the host immune and neuro-endocrine responses as well as impacts on metabolic functions and the brain-gut axis. Targets with the potential to be modulated by biotic interventions were identified, along with the evidence that biotics can actually modify these responses. A manuscript was in preparation for peer review during 2025.

Discussion group members in Banff, Canada 2025: Use of biotics in health and disease.

'Phagebiotics?' Exploring the application of phage and virome interventions in health and disease

This discussion group was convened in July 2025 to explore the potential of bacteriophages to be included in the ‘biotic’ family (along with probiotics, prebiotics, postbiotics and synbiotics). In scope was classical phage therapy for the treatment of infections, as has been used for almost a century, as well as other mechanisms by which phage could be used to improve human and animal health - manipulation of the bacteriome, as agents of horizontal gene transfer, as biomarkers of bacterial community composition or host health, or as agents to deliver DNA to in situ members of communities. A resulting manuscript is in preparation to explore the latest data from clinical and

preclinical intervention studies, as well as insights from biological and ecological studies of the virome and its role in host and microbiome health.

Opportunities for biotics in precision nutrition

Precision nutrition is gaining recognition as a data-driven, individualised approach to nutrition counselling, in which dietary recommendations are tailored to an individual's unique needs. Unlike traditional "one-size-fits-all" dietary guidelines, precision nutrition considers factors such as genetic and phenotypic characteristics, lifestyle and environmental factors, preferences, and health goals. The gut microbiota is an integral component of the human phenotype, and recent advances in analytical technologies have furthered our understanding of host-gut microbiota interactions. Experts from this discussion group worked during 2025 to prepare a manuscript to explore these advances and their implications for the development of biotic substances targeting specific microbes, metabolites and functions.

Scientific advisory

Scientific Report of the 2025 US Dietary Guidelines Advisory Committee

The 2025 Scientific Report of the US Dietary Guidelines Advisory Committee emphasised the key role of diet in the rising burden of chronic disease in the United States. However, this latest iteration of the report, like its predecessors, did not address the importance of the microbiome, dietary microbe, or biotic consumption. In response, ISAPP submitted a comment to the committee highlighting current evidence on the role of dietary microbes and fermented foods in health, with a recommendation to consider these foods as functional components of healthy dietary patterns and to emphasise their consumption in the 2025-2030 Dietary Guidelines for Americans.

Institute for the Advancement of Food and Nutrition Sciences

During 2025, ISAPP Executive Director Marla Cunningham continued to represent ISAPP on the US-based IAFNS Nutrition for Gut Health Committee. Comprising industry, government, non-profit organization and academic experts, the Nutrition for Gut Health committee identifies priorities for the development and translation of nutrition and gut health research for actionable insights in the food industry. Through discussions in 2025, ISAPP and IAFNS identified shared priorities for advancing gut health research and aligned on complementary work programs to eliminate duplication of effort.

HealthFerm

In 2025 ISAPP continued engagement with the European HealthFerm project. This research initiative, funded by the EU and Switzerland, focuses on better understanding of the interactions between food fermentation microbiomes, fermented plant-based foods, the human gut microbiome and human health. Executive Director Marla Cunningham represented ISAPP on the stakeholder board and webinar series, with ISAPP board members Prof. Maria Marco PhD participating in scientific advisory and Prof. Kristin Verbeke PhD as a project lead, respectively.

- Blog post: Food of the future: Fermented and sustainable
- Webinar: Novel Food and Health Claim Regulations in Relation to Fermented Foods

World Microbiome Partnership

The World Microbiome Partnership is an international forum established in 2023, bringing together interested parties across the microbiome field in academia, industry, foundations and government to promote strategic partnerships and to harmonize development of microbiome-based biomarkers, products, and interventions in the service of human, plant, animal, and planetary health. ISAPP representatives Dr. Anisha Wijeyesekera PhD and Prof. Karen Scott PhD attended the launch summit in June 2025 and subsequently joined working groups along with Executive Director Marla Cunningham, addressing topics across microbiome technologies, product development, regulatory science, and public health.

NCCIH Coalition for Whole Person Health

During 2025, ISAPP continued its membership in the US National Center for Complementary and Integrative Health (NCCIH) Coalition for Whole Person Health, under the National Institutes of Health (NIH) umbrella. This collaboration between nonprofit organizations is designed to advance strategies for how research can inform integrative, interprofessional, patient-centered, and whole person care.

UK GIBA Research Network

The UK Gut-Immune-Brain Axis (GIBA) Network launched in 2025, with the aim to build a UK-based interdisciplinary research community advancing the mechanistic understanding of GIBA and its modulation by lifestyle and other factors. ISAPP provided endorsement for the launch of the network and scientific advisory board participation from ISAPP board member Dr. Anisha Wijeyesekera PhD.

Canadian Fermented Foods Initiative

In November 2025, invited scientists in fermented foods research gathered in Toronto, Canada in the launch of the new Canadian Fermented Foods Initiative, which aims to advance fermented food science and regulation by leveraging international expertise. Among the 40 invited participants were several ISAPP former and present board members with expertise in fermented foods: Prof. Bob Hutkins PhD, Prof. Gregor Reid PhD, Dr. Mary Ellen Sanders PhD, Prof. Hannah Holscher PhD RD and Dr. Gabriel Vinderola PhD. Together the participants identified scientific questions and research opportunities for driving this field forward.

Awards

ISAPP continued its award program in 2025, acknowledging scientific excellence in biotic research. Two early career researcher awards were given, including one for achievements within low and middle-income countries, as well as an award recognising significant career contributions and impact within the biotics field.

2025 winners

- Sanders Award for Advancing Biotic Science: Prof. Remco Kort PhD
    - Blog: Dutch Microbiologist Passionate About Biotics Applications & Public Outreach Receives ISAPP's 2025 Sanders Award for Advancing Biotic Science
    - Video: Science, Microbes & Health Video Series: Prof. Remco Kort PhD
- Glenn Gibson Early Career Researcher Award: Dr. Peijun Tian PhD
- Gregor Reid Award for Outstanding Scholars in Developing Nations: Josiane Kenfack MSc

Translational outreach and education

Throughout 2025, ISAPP board members shared the latest in biotic science and its translation into clinical and industrial applications at meetings across the globe. Amongst many others, these included:

- Executive Director Marla Cunningham presenting on 'Clinical evidence for probiotics in common indications', at the Foro Microbiota, La Sociedad Mexicana de Microbiota, Guadalajara, Mexico
- Prof. Maria Marco PhD updating on 'Fermented foods and digestive health' at Gut Microbiota For Health, in Washington DC, USA
- Dr. Gabriel Vinderola PhD presenting on 'The emerging concept of postbiotics' at the University of Costa Rica, Costa Rica
- Prof. Sarah Lebeer PhD sharing updates on 'The Isala sisterhood' at the Microbes in Women's Health Congress, Amsterdam
- Prof. Maria Marco PhD, presenting in a joint ISAPP/IAFNS session: 'What is 'Gut Health'? From Research Concepts to Implementation', at Nutrition 2025 in Orlando, USA.
- Prof. Kristin Verbeke PhD, speaking on 'Identifying key markers to evaluate microbiota impact on health', at the International Scientific Conference on Probiotics, Prebiotics, Gut Microbiota and Health, Athens, Greece
- Prof. Kelly Swanson PhD, presenting on 'Prebiotics: Classical Definition and New Applications', at SupplySide Global 2025
- Prof. Karen Scott PhD, presenting in a joint ESNM/ISAPP symposium: 'Is Gut Health a Meaningful Concept in Neurogastroenterology', in London, UK

Prof. Karen Scott PhD presenting at ESNM/ISAPP symposium

Webinars

New Frontiers in Female Reproductive Tract Microbiota and Biotic Interventions

ISAPP held a webinar mini-symposium on the female reproductive tract microbiota and biotic interventions on April 2, 2025. Moderated by Prof. Sarah Lebeer PhD, the webinar featured five international speakers covering the state of knowledge about the vaginal, cervical and endometrial microbiota as well as insights for the development of probiotics and microbiome-targeted interventions. The event was translated into both English and Mandarin.

- English webinar replay here
- Mandarin webinar replay here

Everyone Wants It, But What Is It? Understanding how 'Gut Health' is Defined and Implications for Nutrition Professionals

Although 'gut health' is currently used as a catch-all phrase, there has been no agreed-upon definition and associated metrics, which have been a barrier to research and practice. During 2025, ISAPP and Institute for the Advancement of Food and Nutrition Sciences (IAFNS) collaborated on a webinar to share the outtakes from their respective gut health projects. Speakers clarified how 'gut health' is currently understood and measured in the literature, and the degree of

validity for these measures in both the research and clinical spheres. Further exploring the application of the gut health concept in clinical dietetic practice, speakers reviewed the determinants of gut health, with a focus on diet, and described a definition of 'gut health' that could be leveraged across stakeholders including nutrition practitioners.

- Webinar recording: ISAPP/IAFNS Gut health webinar

Measuring the gut barrier in health and disease

The use of reliable and validated metrics of gut physiology and function is of key importance for biotic researchers. During December, ISAPP held a webinar for its industry member scientists on the topic of gut barrier measurement. This virtual event explored the importance of the gut barrier in health and the validity of metrics availability to measure it. Moderated by Prof. Maria Marco PhD, guest speakers Prof. Stephan Bischoff MD (University of Hohenheim) and Prof. Jerry Wells PhD MBA (Wageningen University) covered both clinical and fundamental research perspectives on the topic, with considerations and best practices for gut barrier measurement. A replay of the webinar is available within the industry member web portal.

Media exposure

The viewpoints of ISAPP experts are frequently featured in the media. Some notable examples this year were:

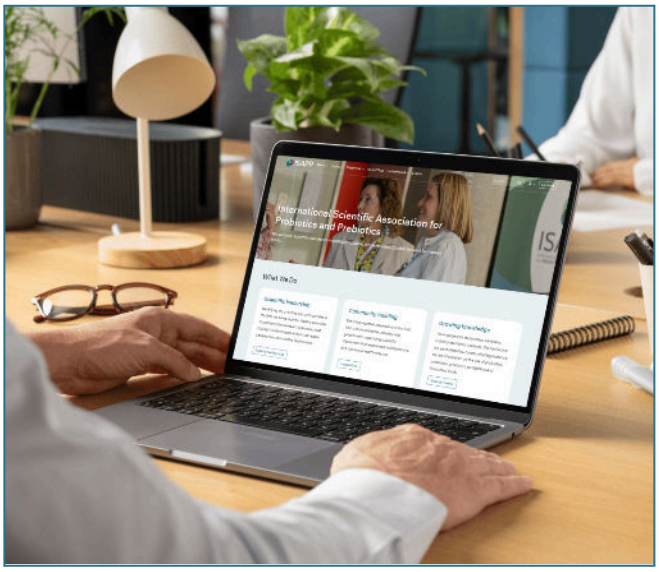
- Today: Prebiotic sodas are everywhere. Are they good for gut health? (Prof. Kelly Swanson PhD)
- Vox: Are probiotics in yogurt a gimmick? (Prof. Maria Marco PhD, Prof. Hannah Holscher, PhD, RD)
- NPR: There's a secret superfood in white rice and pasta: Here's how to unlock it (Prof. Maria Marco PhD)
- New York Times: Is kombucha good for you? (Prof. Dan Merenstein MD)
- BBC Audio: Fermented foods: A beginner's guide (Dr. Gabriel Vinderola PhD)

Prof. Maria Marco PhD interviewed by Vox

Website

During 2025, ISAPP undertook a major redesign and update of the ISAPP website, which launched in September. Along with a modern visual design, the site features a more intuitive layout, curated opportunities to explore biotic-related topics, a member portal sharing projects and content, and better tools for finding content among ISAPP's 1000+ resources and posts. The new website lays a foundation for ISAPP to further expand its content for many years to come.

- Website: International Scientific Association for Probiotics and Prebiotics (ISAPP)



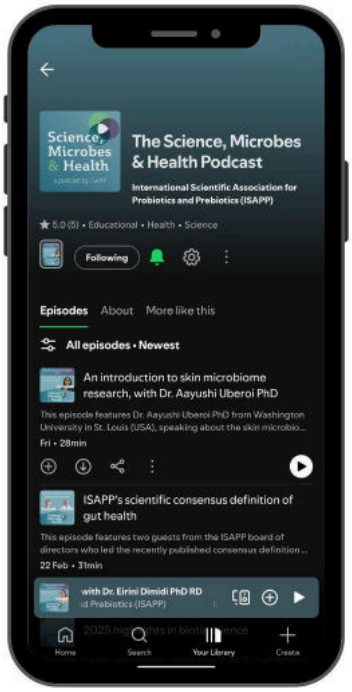
Blogs

The ISAPP editorial team is committed to sharing credible, science-based information. Our blog features contributions from leading experts in the field, with the following blogs posted this year:

- 2024 in Review: Important Advances in Biotic and Microbiome Science, by the ISAPP editorial team
- The Promise of Personalized Medicine, by Prof. Dan Merenstein MD
- How to respond to the question "Should I take a probiotic?", by Dr. Mary Ellen Sanders PhD with Prof. Dan Merenstein MD
- Exploring resources to inform probiotic recommendations: New UK Probiotic Guide Released, by the ISAPP editorial team
- New paper summarizes current findings from global research on the vaginal microbiota, by the ISAPP editorial team
- Five points to know about biotics for animals, from an ISAPP-led paper
- Microbiome endpoints in clinical trials for biotics – where do we stand and what have we learnt? By Marla Cunningham
- Insights into healthy aging: A story as told by gut microbiome (and other) metabolites, by Dr. Anisha Wijeyesekera PhD
- Emerging clinical insights into *C. difficile* infection from gut microbiota research, by Prof. Eamonn Quigley MD
- Modeling the nutrient niche to boost biotic consistency and efficacy, by Dr. Geoffrey Preidis MD PhD
- What happens when you eat fiber, and why you should eat more, by Prof. Karen Scott PhD

Podcasts

The ISAPP team produced 28 episodes of the Science, Microbes & Health podcast so far this year – more than in any previous year. This year the podcast episodes were grouped into series that focused on a specific area of scientific interest.

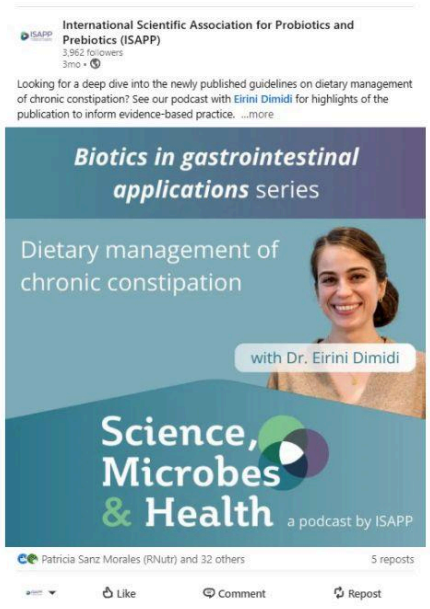


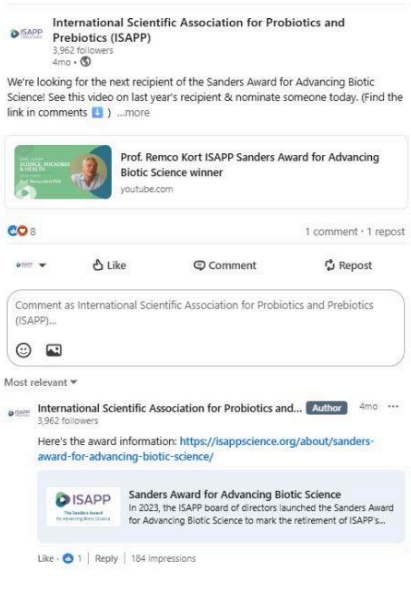
- **2024 wrap-up:**
  - 2024 highlights in biotic science, with ISAPP's current and past Presidents
- ***Microbiota-gut-brain axis* series (continued from 2024):**
  - Gut microbes and other drivers of inflammation in Parkinson's disease, with Prof. Malú Tansey PhD and Dr. Andrea Merchak PhD
- ***Fermented foods* series:**
  - How fermented foods can support health and sustainability, with Prof. Christophe Courtin PhD
  - Fermented foods and their health benefits, with Dr. Paul Cotter PhD
  - An overview of precision fermentation, with Prof. William Chen PhD
  - Precision fermentation for animal-free milk, with Dr. Abigail Thiel PhD
- ***Diet and gut microbiota* series:**
  - The interplay between gut microbiota, diet, and circadian rhythms, with Dr. Vanessa Leone PhD
  - Interactions of polyphenols in the gut, with Prof. Yves Desjardins PhD
  - How a non-industrialized diet affects gut microbes and health, with Dr. Anissa Armet PhD RD
- ***Defining a "healthy microbiome"* series:**
  - Advancing gut microbiome testing for use in clinical practice, with Dr. Gianluca Ianiro MD PhD
  - Identifying features of a healthy microbiome, with Raphaela Joos
  - Regulatory science and the development of microbiome biomarkers, with Dr. Céline Druart PhD
  - The HACK index for measuring a health-associated gut microbiome, with Dr. Tarini Ghosh PhD
  - Progress in understanding the gut microbiome's role in health and disease states, with Prof. Emad El-Omar MD FRCP
- ***Metabolic health and the gut microbiome* series:**
  - Diet and gut microbiome contributions to host energy balance, with Dr. Karen Corbin PhD RD
  - Examining fermented foods for potential cardiometabolic health benefits, with Prof. Ben Willing PhD
  - Interactions between immunity, gut microbiota, and metabolism, with Prof. Dirk Haller PhD
  - Investigating the microbial mechanisms contributing to host metabolism, with Dr. Amir Zarrinpar, MD PhD
  - Unraveling the functions of GLP-1 in the gut, with Dr. Thomas Greiner PhD
- ***Annual meeting* episodes:**
  - Highlighted Talks from the 2025 ISAPP Annual Meeting
  - Highlighted Posters from the 2025 ISAPP Annual Meeting

- ***Leveraging microbial ecology for health* series:**
  - Eco-evolutionary processes and antimicrobial resistance in the urobiome, with Dr. Marjon de Vos PhD
  - Insights from evolutionary ecology on microbiome assembly and modulation, with Prof. Jens Walter PhD
  - Applying the tools of ecology to manage microbiomes in people with cancer, with Dr. Joao Xavier PhD
  - How ecological dynamics affect pathogens in the gut, with Prof. Kevin Foster PhD
- **Biotics in gastrointestinal applications series:**
  - Dietary management of chronic constipation, with Dr. Eirini Dimidi PhD RD
  - Trials on probiotics and prebiotics in infant formula, with Prof. Yvan Vandenplas MD PhD
- **2025 wrap up:**
  - 2025 highlights in biotic science

Social media

ISAPP shares the latest content and engages with members of the community on multiple social media channels: X, Instagram, Facebook, LinkedIn, and Bluesky. We encourage members to continue sharing and commenting on our posts!





ISAPP sincerely thanks the ISAPP community for their support and engagement with the organization's activities in 2025, and looks forward to a rewarding year together advancing biotic science in 2026.

Appendix A: ISAPP Board of Directors 2025

Prof. Maria Marco PhD, President
Department of Food Science and Technology
University of California, Davis, USA

Prof. Sarah Lebeer PhD, Vice President
Professor in Microbiology and Molecular Biology
Department of Bioscience Engineering
University of Antwerp, Belgium

Prof. Daniel Merenstein MD, Past-President
Director of Research of Family Medicine
Professor of Family Medicine
Georgetown University Medical Center,
Washington DC, USA

Dr. Anisha Wijeyesekera PhD, Secretary
Associate Professor in Human Microbiome and Metabolome Studies, Department of Food & Nutritional Sciences
University of Reading, UK

Prof. Kelly Swanson PhD, Treasurer
Department of Animal Sciences and Division of Nutritional Sciences
Professor, Department of Veterinary Clinical Medicine
University of Illinois at Urbana-Champaign, USA

Prof. Karen Scott PhD, Member-at-Large
Professor, Rowett Institute
University of Aberdeen, Scotland, UK

Prof. Seppo Salminen PhD, Member-at-Large
Professor, Director, Functional Foods Forum
University of Turku, Finland

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Appendix B: ISAPP Member Organisations 2025

ISAPP thanks all members for their support of ISAPP in 2025.

- AB-Biotics (Kaneka)
- Abbott Nutrition
- Amway
- Beneo
- Biocodex
- BioGaia AB
- BioZyme Inc.
- Cargill
- Clasado Inc.
- Comet Bio
- Danone Nutricia
- Danone EDP
- Danone North America
- DSM (i-Health Inc.)
- dsm-Firmenich
- Eurofins Microbiology Laboratories, Inc.
- Fonterra
- Friesland Campina Innovation Center
- General Mills (Yoplait)
- Haleon
- IFF (Danisco)
- Ingredion Incorporated
- Kerry
- Kraft Foods Global, Inc.
- Kyowa Hakko
- Lesaffre International
- Life-space Group Pty Ltd
- Mars, Incorporated
- Mead Johnson Nutrition Institute (Reckitt)
- MeriCal
- Metagenics
- Mondelez
- Morinaga Milk Industry Co., Ltd.
- National Dairy Council
- Nestlé Research Product Technology & Development
- Novonesis

- Pepsico
- Pharmavite LLC
- Probi
- Procter & Gamble
- ADM Protexin
- Puratos
- Roquette
- Opella (Sanofi)
- Sensus BV
- Shenzhen Wedge Microbiology Research Co.Ltd
- Sirio Pharma Co., Ltd.
- Symrise
- Synbiotic Health, Inc
- Verb Biotics LLC
- Winclove Probiotics B.V.
- WK Kellogg Co
- Yakult Honsha Co.