



***Board of Directors:** Daniel Merenstein MD, President; Maria Marco PhD, Vice-President; Seppo Salminen PhD, Past-President; Gabriel Vinderola PhD, Secretary; Daniel Tancredi PhD, Treasurer; Members at Large: Robert Hutkins PhD, Karen Scott PhD, Eamonn Quigley MD, Colin Hill PhD, Sarah Lebeer PhD, Hania Szajewska MD, Kelly Swanson PhD and Anisha Wijeyesekera PhD. Mary Ellen Sanders PhD, Executive Science Officer.*

Highlights of ISAPP Activities 2021

Despite the challenges wrought by the COVID-19 pandemic, ISAPP as an organization has continued to flourish over the past year. Our industry membership continues to grow, and our communications activities are visible to a larger global community than ever before. Across all channels, ISAPP reaches approximately 54,000 individuals per month—primarily academic and industry scientists, but also clinicians, students and members of the general public. Under the leadership of a dedicated 13-member academic board, and Mary Ellen Sanders as Executive Science Officer, ISAPP remains the premier independent, science-based authority supporting the probiotic and prebiotic fields.

ISAPP board members have always held diverse expertise. But with the publication of consensus papers on synbiotics in 2020 and postbiotics and fermented foods in 2021, ISAPP has seen its public purview expand beyond probiotics and prebiotics to embrace the broader scope of ‘biotics’ in general. For all of these categories, we continue to focus on our core values are **Stewardship, Advancing the Science, and Education**. Our [industry partners](#) support these activities through their insights and financial contributions.

Leadership changes characterized 2021 for the ISAPP board as ISAPP co-founder, Prof. Glenn Gibson, [retired from the board of directors](#), convinced that it was time for the next wave of innovative scientists to take the lead. In his honor, the [Glenn Gibson Early Career Researcher Prize](#) was instituted. ISAPP [welcomed](#) Anisha Wijeyesekera PhD from the University of Reading, UK, while senior board member Prof. Dan Merenstein took over as ISAPP President. Prof. Maria Marco and Prof. Seppo Salminen are serving as Vice President and Past President, respectively. The ISAPP board also brought in a new logo (shown above), signaling the continued evolution of the organization leading up to its 20th anniversary.

ISAPP’s 2021 annual meeting was held virtually. We took this opportunity develop a portion of the program as open registration, while reserving certain sessions for members only. Although we greatly missed the opportunity to gather for our in-person flagship event, the virtual [meeting highlighted](#) important scientific developments, including from students, and enabled networking between industry members, ISAPP board members and others. Indeed, the board members felt the benefits of virtual engagement were sufficient to justify ISAPP expanding its virtual content throughout the year. This led to establishing an ongoing ISAPP [webinar series](#), with webinars of special interest to members scheduled 6-12 times per year. Recordings of members-only webinars and virtual meeting content will be continually [available on the ISAPP website](#)¹. ISAPP also started a members-only newsletter to keep members informed about pertinent activities.

Below is a short summary of how ISAPP promoted its core values over the past year.

¹ Members may email info@isappscience.org for the password to view this content.

Stewardship

- **Response to articles.** Two medical societies weighed in on clinical use of probiotics. ISAPP board members provided important perspective on these published conclusions: [The American College of Gastroenterology recommends against use of probiotics for primary or secondary prevention of *C. difficile*; Can dietary supplements be used safely and reliably in vulnerable populations?](#)
- **Advocating for improved probiotic quality.** Mary Ellen Sanders continues to serve as chair of the Expert Panel on probiotics for the [United States Pharmacopeia](#) (USP), working with industry and government scientists and USP staff to develop quality standards for probiotic supplements. A webinar highlighting some of these efforts [is scheduled for November 16](#).
- **ISAPP consensus definition panels.** Some of the most frequently downloaded papers from *Nature Reviews Gastroenterology & Hepatology* are the ISAPP consensus statements on [probiotics](#) (2014), [prebiotics](#) (2017), and [synbiotics](#) (2020). In 2021, ISAPP extended this purview with publications of consensus statements on [fermented foods](#) and [postbiotics](#). ISAPP hosted a [webinar](#) for members only, which addressed how to implement these ISAPP definitions.
- **Postbiotics:** The publication of the consensus paper on postbiotics was accompanied by a webinar and several blogs ([here](#), [here](#), [here](#)) to clarify and reinforce the implications of the postbiotic definition.

Advancing the Science

- **Adequate intake of live dietary microbes.** ISAPP has extended efforts to explore the role of live dietary microbes and health. Underway is an assessment of NHANES data to determine if there is sufficient evidence linking live dietary microbe intake and health in Americans to support an official dietary recommendation. ISAPP is also collaborating with Institute for the Advancement of Food and Nutrition Sciences (IAFNS) on a Live Dietary Microbes subcommittee of their Gut Microbiome committee. This subcommittee has funded a [scoping review of published research](#) that might inform on this question. Some members of the ISAPP board also co-authored a [paper that calls for investigation of evidence for links between live dietary microbes and health](#).
- **Collaboration with the Institute for the Advancement of Food and Nutrition Sciences.** Mary Ellen Sanders represents ISAPP on the IAFNS [Gut Microbiome Committee](#). She co-chairs, along with Dr. Bruno Pot, the Live Dietary Microbe subcommittee of this group. Comprising industry, government, non-profit organization and academic experts, the Gut Microbiome Committee addresses translation of gut microbiome research into actionable items related to the food industry.
- **Collaboration with GMFH.** As a representative of ISAPP, Mary Ellen Sanders serves on the Board of Experts for the [Gut Microbiota for Health](#) platform.
- **SFA engagement.** ISAPP's [Students and Fellows Association](#) encompasses a global network of early career professionals who will be the leaders in 'biotics' for the future. This year ISAPP worked with the SFA on blog posts and other activities to promote the innovative work carried out by these members.

Education

- **Over 5900 dietitians reached with ISAPP's continuing education course on probiotics, prebiotics and fermented foods for dietitians.** Mary Ellen Sanders and Bob Hutkins collaborated with registered dietitian and University of Illinois Assistant Professor of Nutrition, Hannah Holscher, to create a comprehensive self-study continuing education course worth 2 credits for dietitians. The free course, available [here](#), was published by *Today's Dietitian*. The course has been a huge success - after only 7 months, 5,927 dietitians have taken the course and this number will continue to climb. The course can be downloaded for general education purposes as well. Related [blog](#).
- **Webinars.** ISAPP has developed a [webinar program](#) – some open to members only, others open to any who would like to attend - to address timely topics. This will help members and others to stay up to date

on the latest developments in the field with ongoing learning opportunities throughout the year. It also allows an unlimited number of individuals per member company to participate in ISAPP educational events.

- **Blogs.** ISAPP board members and guests contribute their valuable perspectives in blog posts on our website.
- **ISAPP podcast.** Stay tuned for ISAPP's newest approach to communicating about the science of 'biotics', which will launch in January, 2022.
- **New infographics and expanded translations.** See [here](#) for the full array of ISAPP infographics, including several new ones for 2021. Many infographics have been translated in a variety of languages to expand our global reach.
- **ISAPP definitions disseminated at scientific conferences:** Board members Gabriel Vinderola, Hania Szajewska, Mary Ellen Sanders, Seppo Salminen, Maria Marco and Karen Scott spoke on the 'biotics' definitions in several meetings: Sept 17 the XII WORKSHOP [SEMIPyP](#) - I CONGRESO [SIAMPyP](#); Oct 8 the 7th [International Congress on Probiotics, Prebiotics in Pediatrics](#); Nov 9 [The Fermentation Association](#); Dec 9 [IAFNS/ASN/AND collaborative webinar](#).

Recent Papers from ISAPP Activities (See [full list of ISAPP Publications](#))

- Salminen, et al. 2021. [Expert consensus document: The International Scientific Association for Probiotics and Prebiotics \(ISAPP\) consensus statement on the definition and scope of postbiotics](#). Nature Rev Gastroenterol Hepatol. 18:649–667. And a follow up: [Reply to: Postbiotics — when simplification fails to clarify](#)
- Cunningham M, Vinderola G, Charalampopoulos D, Lebeer S, Sanders ME, Grimaldi R. [Applying probiotics and prebiotics in new delivery formats – is the clinical evidence transferable?](#) Trends Food Sci Technol: 112, June 2021, Pages 495-506.
- Cunningham M, Azcarate-Peril MA, Barnard A, Benoit V, Grimaldi R, Guyonnet D, Holscher HD, Hunter K, Manurung S, Obis D, Petrova MI, Steinert RE, Swanson KS, van Sinderen D, Vulevic J, Gibson GR. [Shaping the Future of Probiotics and Prebiotics](#). Trends Microbiol. 2021 Feb 4:S0966-842X(21)00005-6. doi: 10.1016/j.tim.2021.01.003.
- Marco, M.L., Sanders, M.E., Gänzle, M. *et al.* [The International Scientific Association for Probiotics and Prebiotics \(ISAPP\) consensus statement on fermented foods](#). Nat Rev Gastroenterol Hepatol (2021). doi.org/10.1038/s41575-020-00390-5.