International Scientific Association for Probiotics and Prebiotics www.isappscience.org



Board of Directors: Karen Scott PhD, President; Seppo Salminen PhD; Vice President; Colin Hill PhD, Past- President; Robert Hutkins PhD, Secretary; Daniel Merenstein MD, Treasurer; Members at Large: Gregor Reid PhD; Eamonn Quigley MD; Glenn Gibson PhD; Michael Cabana MD; Sarah Lebeer PhD. Mary Ellen Sanders PhD, Executive Science Officer.

Highlights of ISAPP Activities 2016

The mission of ISAPP is to advance scientific excellence in probiotics and prebiotics. ISAPP is an independent, science-based voice for the probiotic and prebiotic fields. During a long term planning meeting held after the 2016 annual meeting, the ISAPP board of directors reiterated the need to focus on ISAPP's core values:

Stewardship. Individually and collectively, we endorse the proper use of the terms 'Probiotics' and 'Prebiotics'.

Advancing the science. We strive to encourage research by facilitating interactions among scientists in the field, helping regulators understand the science, and publishing evidence-based summaries that highlight research gaps and promote needed research. We encourage funding of independent researchers by industry, foundations and government in order to advance the science of probiotics and prebiotics.

Education. We endeavor to disseminate scientifically accurate information on probiotic, prebiotic and microbiota science to enhance understanding of the science among researchers, students, and regulators. We promote communication of evidence-based recommendations on the use of probiotics and prebiotics by consumers and healthcare providers. This document is organized around these core values.

Stewardship

- In response to a published paper that used outdated methodology, ISAPP board members responded with a published <u>Commentary: Probiotic nomenclature matters</u>.
- The FDA <u>published an approach</u> to requirements for Investigational New Drugs for human research on foods that ISAPP considered inadequate. ISAPP responded with a comment published <u>here</u>.
- An organization, <u>Labdoor</u>, evaluates dietary supplements, including probiotics. ISAPP has been in discussions with them urging them to adopt evaluation criteria based on the FAO/WHO 2002 guidelines.
- ISAPP supports the concept of third-party verification of probiotic and prebiotic product quality. Toward this end, ISAPP has met with both Underwriters Laboratories and USP to discuss progress in their probiotic verification programs.
- ISAPP supports use of probiotics and prebiotics in healthcare when research substantiates efficacy and safety for the use. Unfortunately, the probiotics carried by hospital pharmacies often are not products with the best substantiated efficacy. ISAPP met with the American Society of Hospital Pharmacists by phone to discuss the process of how probiotics are chosen for formularies and to encourage pharmacists to develop evidence-based approaches to probiotic selection.
- On behalf of ISAPP, Dan Merenstein submitted a proposal to the <u>United States Preventive Services</u>
 <u>Task Force</u> asking them to consider making a recommendation on probiotics for antibiotic associated diarrhea.

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Advancing the Science

- In March 2016, ISAPP participated in an ILSI-North America Microbiome Committee meeting to discuss paths forward for linking microbiota changes to health in humans.
- ISAPP convened its 14th annual meeting June 7-9, 2016 in Turku, Finland. Meeting report. A post-meeting survey showed that 95% felt the meeting met their expectations.
- In December 2016, ISAPP will convene a consensus panel of academic experts at a Heathrow Airport hotel to discuss the current concept of prebiotics. The goal of the panel will be a peer-reviewed consensus paper that discusses definition, selectivity, specificity, functionality, health effects in the intestine and beyond, microbiota-independent effects and more.
- What is the best dietary source of live microbes? To help answer this question, ISAPP has coordinated a review paper to be authored by board member Robert Hutkins (University of Nebraska) on 'Live Microbes in Fermented Foods'. The objective is to compile what is known about levels of live microbes in fermented foods. Submission goal is June of 2017.
- ISAPP is sponsoring a systematic review on probiotics and antibiotic use. Some published studies have suggested that probiotics might decrease antibiotic prescriptions and use. This project will systematically review all the evidence to determine if such a relationship exists. Such a finding could be important to public health efforts on antibiotic stewardship.
- The individual patient data meta-analysis on the impact of Lactobacillus reuteri on colic in infants will be submitted for publication by the end of 2016. This ISAPP-sponsored collaboration of nine academic experts will provide the best assessment of current evidence on this topic.

Education

- ISAPP's Science Translation Committee developed materials targeting communication of the science of probiotics and prebiotics to the lay public. Toward this end, three infographics have been published: Probiotics. Premented Foods. Furthermore, blogs authored by board members and invited guest authors are now a monthly feature on the ISAPP website. See the newest posts: Got Gas? Blame it on your Bacteria and Consumers? Three new infographics are proposed for the fourth quarter of 2016 on emerging terms, microbiome and digestive symptoms. This committee also oversaw a huge overhaul of the ISAPP website, now at www.ISAPPScience.org.
- Collaborating with IPA, ISAPP board members and industry members worked with IPA's executive director to write a paper titled, 'Probiotic Use in At-Risk Populations'. This paper is in press with the J Amer Pharmacy Assoc, targeted to be published late in 2016. This paper is a response to the death, which may have resulted from a contaminated probiotic supplement, of a premature infant.
- ISAPP provided a stipend to facilitate the 2016 update of the World Gastroenterology Organisation Global Guidelines on Probiotics and Prebiotics. The <u>previous update was in 2011</u>. The goal is to have the updated guidelines posted by the end of 2016.
- At the 2016 conference, we had significantly elevated engagement with our future scientists through the <u>Students and Fellows Association</u>, including a dedicated poster session, a presentation during the workshop summary session and two talks. SFA poster abstracts and conference summary is <u>available</u>.
- Recognizing the value of industry-sponsored research, the industry members of ISAPP were invited to submit research topics to be presented in two dedicated speaking slots at our 2016 annual meeting.
- The <u>2014 ISAPP consensus paper</u> published in Nature Reviews in Gastroenterology and Hepatology paper continues as a highly sought perspective paper on proper use of the term 'Probiotic'. This

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paper has been downloaded over 27,000 times and achieved Highly Cited Paper on Web of Science Core Collection status. It also had an Altmetric score of 143 which showed it was Picked up by 5 news outlets; Blogged by 4; Referenced in 2 Wikipedia pages; and Mentioned in 1 Google+ posts.

2016 Published Papers from ISAPP Activities

- Sanders ME, Merenstein DJ, Ouwehand AC, Reid G, Salminen S, Cabana MD, Paraskevakos G, Leyer
 G. Probiotic Use in At-Risk Populations. In Press, J Amer Pharmacy Assoc.
- Reid G, Kumar H, Khan AI, Rautava S, Tobin J, Salminen S. <u>The case in favour of probiotics before</u>, during and after pregnancy: insights from the first 1500 days. Benef Microbes. 2016. 7(3):353-62.
- Hill C, Scott K, Klaenhammer TR, Quigley E, Sanders ME. 2016. <u>Commentary: Probiotic nomenclature matters</u>. Gut Microbes. Feb 3:1-10.

Looking Ahead for ISAPP

- The 2017 meeting will be held in Chicago, June 27-29.
- The 2018 meeting is planned for Singapore. This is ISAPP's first annual meeting to be convened in Asia. We look forward to engaging Asian scientists from academics and industry to better achieve a global outreach.

Helpful Links

Full list of ISAPP Publications

14 years of annual meeting reports
Industry involvement in ISAPP