



# ISAPP

INTERNATIONAL SCIENTIFIC  
ASSOCIATION FOR PROBIOTICS  
AND PREBIOTICS

[WWW.ISAPPSCIENCE.ORG](http://WWW.ISAPPSCIENCE.ORG)

## STEWARDSHIP



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

## ADVANCING THE SCIENCE

We 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



## 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

# 2017 ANNUAL REPORT





**January 1-December 31, 2017**

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**Chicago, IL, USA – Meeting Site for 2017 ISAPP Conference**

## INTRODUCTION

ISAPP is an international, non-profit collaboration of scientists, which exists to advance scientific excellence in probiotics and prebiotics. ISAPP is the leading scientific organization dedicated specifically to probiotics and prebiotics, bringing together scientists from all pertinent disciplines, including microbiology, immunology, biochemistry, nutrition, molecular biology, food science and medicine.

As a scientific society, ISAPP activities are focused on science, not the promotion of any specific commercial products. Currently under the leadership of ISAPP President, Dr. Karen Scott, the activities of ISAPP are dictated by an academic Board of 10 directors, and facilitated by the ISAPP's Executive Science Officer, Mary Ellen Sanders, PhD. Each year, the Industry Advisory Committee elects a representative to serve in a non-voting, advisory role to the Board of Directors, as a mechanism to ensure industry ideas and concerns are communicated to the Board.

This report features highlights of ISAPP accomplishments from 2016-2017. ISAPP's many accomplishments for 2017 include: our Annual Meeting in Chicago, IL; peer-reviewed publications on key issues for probiotic and prebiotic science; and outreach activities, such as consumer-friendly infographics and monthly blog postings, championed by ISAPP's Science Translation Committee, chaired by Dr. Christopher Cifelli.

For additional details, see [www.isappscience.org](http://www.isappscience.org)



## 2017 LETTER FROM THE ISAPP PRESIDENT – DR. KAREN SCOTT

It has again been a busy year, for ISAPP and for the entire probiotic and prebiotic industry. Peer-reviewed research articles illustrating the health benefits of probiotics and prebiotics continue to be published, even though regulatory bodies remain slow in approving specific health claims. ISAPP has stimulated meticulous scientific research, facilitating the publication of review articles and comments, and supporting eminent scientists attending scientific meetings, or sponsoring sessions within the meetings themselves. We continue to make representations on behalf of the science to regulatory bodies around the world, including EFSA, FDA and FTC. This year we are even moving our annual meeting to Asia, to facilitate interaction with a new community of scientists and stakeholders.

Through the hard work of the Science Translation Committee, ISAPP has continued its work to translate the science of probiotics and prebiotics to the general public. The updated website is now used regularly, with the latest data showing more than 1,600 users per week. The [infographics](#), designed to communicate facts about probiotics, prebiotics and fermented foods to consumers continue to be viewed regularly, while the [monthly blogs feature](#), started in 2016, are a popular mechanism for individual BOD members and other scientists to excite the public on topics of particular interest to them, within the probiotic/prebiotic fields. The most recent initiative of this committee in the past year was the creation of short [informational videos](#) on specific topics, funded by educational grants from specific sponsor companies. To date these videos have had 4000 views!



As ever, I would like to finish by recognising the amazing contributions made by so many to the success of ISAPP. The knowledge and expertise of the current ISAPP Board members guides all ISAPP activities and their hard work is essential for ISAPP's accomplishments. We are also grateful to previous members of the Board who provide ongoing expertise and assistance. Our industry colleagues from the Industry Advisory Committee make important contributions, both in challenging ways ISAPP can extend its influence and enhancing the scientific discussions during the meeting. I would like to extend a special thank you to Sylvie Binda and Roberta Grimaldi who served as senior and junior (respectively) IAC representatives to the Board. Lastly, none of our activities would be possible without the generous sponsorship of the 40 industry members of ISAPP, for which we are immensely grateful.

Sincerely,  
Dr. Karen Scott  
ISAPP President

## HOW ISAPP LIVED UP TO ITS CORE VALUES OF STEWARDSHIP, ADVANCING THE SCIENCE, AND EDUCATION

### Stewardship

- **Don't shortchange the evidence.** ISAPP responded to a 2017 paper by [Rondanelli et al](#), correcting its conclusions about endpoints for which clinical substantiation of probiotic effects was available. See [Paper incompletely describes evidence-based usage of probiotics](#).
- **Consumers deserve to know what's in the bottle.** On behalf of ISAPP, Mary Ellen Sanders agreed to chair the [United States Pharmacopeia's](#) expert panel on probiotics. The expert panel advises USP on third party assessment of probiotics. She also presented at a USP/IPA's conference (October 26, 2017) on this activity, and chaired a panel at Global Engage (November 2) on third party verification of probiotics.
- **Hey FDA! Labels should say CFU, not mg, for probiotic supplements.** [ISAPP commented](#) on the IPA citizen petition requesting FDA change labeling regulations for probiotics, from mg/dose to CFU. ISAPP agreed with the IPA position, except encouraged the FDA to consider alternative methods for reporting CFU, once they are **validated**.
- **ISAPP now on Twitter and Facebook.** ISAPP is expanding its reach through new presence on social media platforms: follow ISAPP on Twitter @ISAPPPscience and [Facebook](#).
- **ISAPP meets with CBER/CFSAN.** On May 16, 2017, Dan Merenstein MD, Andi Shane MD, MPH, Carlton Lee PharmD, Greg Leyer PhD (by phone) and Mary Ellen Sanders PhD met with CBER and CFSA representatives to discuss appropriate clinical use of probiotics. CBER suggested it would convene a workshop among stakeholders to discuss this further.

### Advancing the Science

- **ISAPP Annual Meeting.** ISAPP convened its 15<sup>th</sup> annual meeting June 25-27, 2017 in Chicago, IL, USA. [Meeting report](#). A post-meeting survey showed that 95% felt the meeting met their expectations.
- **Gibson lead author on prebiotic consensus panel paper.** The paper describing the conclusions of the ISAPP consensus panel on prebiotics was published in Nature Reviews Gastroenterology and Hepatology: [Expert consensus document: The International Scientific Association for Probiotics and Prebiotics \(ISAPP\) consensus statement on the definition and scope of prebiotics](#). The article is ranked 1<sup>st</sup> among the 48 tracked articles of a similar age in NRGH.
- **ISAPP supports speaker in India.** ISAPP is sponsoring Dan Merenstein to speak at the [Probiotics Association of India](#) meeting in New Delhi, India on Feb 16-17, with the goal of improving ISAPP's influence in expanded geographical regions.
- **What is the best dietary source of live microbes?** To help answer this question, ISAPP coordinated a review paper to be authored by board member Robert Hutkins (University of Nebraska). His paper, "A survey of live microorganisms in fermented foods" is submitted to Frontiers in Microbiology.



- **Can probiotics reduce antibiotic use?** Several probiotics have been shown to reduce incidence or duration of common infectious diseases. ISAPP commissioned a systematic review to determine if probiotics had an impact on antibiotic use. The paper “Does probiotic consumption reduce antibiotic utilization for common acute infections?” was submitted to European J Pub Health.
- **The evidence for *L. reuteri* and colic.** The individual patient data meta-analysis on the impact of *Lactobacillus reuteri* on colic in infants will be published in Pediatrics. This ISAPP-sponsored collaboration of nine academic experts will provide the best assessment of current evidence on this topic.

### Education

- **Consumers should look to ISAPP for science-based information.** Check out new consumer-friendly, science based content, spearheaded by ISAPP’s Science Translation Committee:
  - Just released! Four 3-minute videos explaining probiotics: [Probiotic videos](#). ISAPP is seeking industry collaboration for a video on prebiotics.
  - [ISAPP infographics](#) – Check out the newest one: [Probiotics for Healthy People](#)
  - [ISAPP blogs](#). Check them out. Topics such as microbiome analysis, gut/brain axis, safety of fermented foods, and more -perspectives by board members and guest writers.
- **New newsletter!** In September, ISAPP launched a [monthly newsletter](#). Sign up [here](#).
- **Getting family physicians up to speed on evidence-based probiotic use.** As an output from the discussion group he led in Chicago, Dr. Dan Merenstein, Professor and family physician, is championing several efforts targeting clinicians about evidence for probiotics. Through the American Academy of Family Physicians, he is exploring the possibility for guidelines for AAD and to develop a CME. Also, he is working with the Science Translation Committee to investigate how recommendations for probiotics and AAD might be promoted through UK national guidelines.

### **Recent Papers from ISAPP Activities**

- Merenstein DJ, Sanders ME, Tancredi DJ. Evidence-Based Probiotic Use in Family Medicine. Manuscript in preparation. To be submitted to Journal of Family Practice.
- Rezac S, Heermann M, Kok CR, Hutkins R. A survey of live microorganisms in fermented foods. To be submitted, Frontiers in Microbiology.
- King S, Tancredi D, Lenoir-Wijnkoop I, Sanders ME, Gould K, Vann H, Connors G, Linder J, Shane A, Merenstein DJ. Does probiotic consumption reduce antibiotic utilization for common acute infections? A systematic review. Submitted, European J Public Health.
- Sung V, D’Amico F, Cabana MD, Chau K, Koren G, Savino F, Szajewska H, Deshpande G, Dupont C, Indrio F, Mentula S, Partty A, Tancredi D. *Lactobacillus reuteri* DSM17938 to treat infant colic: a meta-analysis. Pediatrics. 2018 Jan;141(1). pii: e20171811. doi: 10.1542/peds.2017-1811.

- Sanders ME, Younes J. [Paper incompletely describes evidence-based usage of probiotics](http://dx.doi.org/10.1080/19490976.2017.1393143). Published Online 20 Oct 2017. <http://dx.doi.org/10.1080/19490976.2017.1393143>
- Gibson GR, Hutkins R, Sanders ME, Prescott SL, Reimer RA, Salminen SJ, Scott K, Stanton C, Swanson KS, Cani PD, Verbeke K, Reid G. [Expert consensus document: The International Scientific Association for Probiotics and Prebiotics \(ISAPP\) consensus statement on the definition and scope of prebiotics](#). Nat Rev Gastroenterol Hepatol. 2017, 14(8):491-502.
- Reid G, Abrahamsson T, Bailey M, Bindels LB, Bubnov R, Ganguli K, Martoni C, O'Neill C, Savignac H, Stanton C, Ship N, Surette M, Tuohy K, van Hemert S. [How do probiotics and prebiotics function at distant sites?](#) Beneficial Microbes 2017; 8(4):521-533.

### Helpful Links

[Full list of ISAPP Publications](#)

[16 years of annual meeting reports](#)

[Industry involvement in ISAPP](#)

## BOARD OF DIRECTORS OCTOBER 1, 2016 – SEPTEMBER 30, 2017

Karen Scott, PhD  
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University of Aberdeen, Scotland

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## 2017 INDUSTRY ADVISORY COMMITTEE MEMBER COMPANIES

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Bayer	Metagenics
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BioGaia AB	National Dairy Council
Bio-K+ International	Novozyme
CDRF	Pepsico
Chr. Hansens	Pfizer Consumer Healthcare
Church & Dwight	Pharmavite, LLC
Clasado Limited	Prenexus Health
Clorox	Probi
Danisco Sweeteners Oy Dupont	Probiotics International Ltd (Protexin)
Danone Dairy	Procter & Gamble
Danone Nutricia Research	Sensus-Royal Cosun
DSM/i-Health	Suedzucker AG Mannheim/Beneo
Friesland Campina Innovation Center	Tate & Lyle
Ganeden	UAS Laboratories, LLC
General Mills, Inc.	uBiome
Hills Pet Nutrition	Valio
Ingredion	Winclove BV
Kellogg	Yakult Honsha Co.
Kimberly-Clark	Zespri
Lallemand Health Solutions, Inc.	

## Quotes from Industry Advisory Committee Members

*“ISAPP membership expands and strengthens our scientific and regulatory network on prebiotics, which can help us in future collaborations.”*

*“At the Annual Meeting the combination of plenary presentations with the detailed discussion groups offered a unique opportunity to observe the "macro trends" of the field of probiotics and prebiotics, while also having the opportunity to deep dive into specific topics.”*



## APPENDIX. SUMMARY OF 15th MEETING OF ISAPP – CHICAGO, IL

[Link to full 2017 meeting report.](#)

Dr. Chris Cifelli of the National Dairy Council hosted the 15<sup>th</sup> annual ISAPP meeting in Chicago. The meeting participants comprised 121 professionals (44 industry scientists and 77 invited experts and board members) from 16 countries (Argentina, Australia, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Japan, Netherlands, New Zealand, Spain, Sweden, UK, and the United States).



*ISAPP Annual Meeting Participants: red – Board of Directors, blue – Invited Experts, Yellow – Industry Advisory Committee*

The meeting featured the latest probiotic, prebiotic, and microbiome science presented in various formats including plenary lectures, an industry-led learning forum, breakout discussion groups with group summaries, poster session, a Students & Fellows Association parallel program, and the rapid-fire Late Breaking News Session.

Based on the success of the 2016 meeting, the plenary lectures included two non-promotional research presentations by industry members. In addition, new this year, five industry members were invited to present their research during the poster session on Tuesday evening. Slides and abstracts for the meeting can be found on the ISAPP website under the “Annual Meetings” tab, available to meeting participants only.

The details of the 3-day program are found in the [full meeting report](#). The Student and Fellow Association conducted a concomitant meeting.

This meeting would not be possible without the generous support of the many IAC companies and the hard work of the ISAPP’s prestigious Board of Directors.