



Annual Report

International Scientific Association for Probiotics and Prebiotics

January 1 – December 31, 2014

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INTRODUCTION

ISAPP is an international, non-profit collaboration of scientists, which exists to advance scientific excellence in probiotics and prebiotics. ISAPP is the only scientific organization dedicated specifically to probiotics and prebiotics, bringing together scientists from all pertinent disciplines, including food science, microbiology, immunology, biochemistry, nutrition, molecular biology and medicine. As a scientific society, ISAPP strives to have all activities focused on science, not the promotion of any specific commercial products. The activities of ISAPP are determined by an academic board of directors, and facilitated by the organizations Chief Science Executive.

For additional details, see website www.isapp.net

MESSAGE FROM THE PRESIDENT, DR. COLIN HILL

It has been a very busy year, and many of our efforts are detailed later in this document. It has been a challenging time for the public reputation and perception of prebiotics and probiotics, despite the increasing numbers of high quality scientific papers on the topic. We have tried to represent the science of prebiotics and probiotics to researchers, regulators and consumers. Partly this has involved publishing ISAPP-authored and -sponsored papers on a variety of topics, including a Consensus paper on the scope and appropriate use of the term probiotic, which has been downloaded over 13,000 times since its publication in June 2014. We have also made representations on behalf of the science to regulatory bodies (e.g. EFSA, FDA, CBER and FTC) and funded various educational events (sponsoring speakers to meetings, creating short videos together with WGO and collaborating on an updated version of Microwarriors).



As I reflect over the past year, it is apparent to me that the success of ISAPP relies greatly on the volunteer hours dedicated by so many. Most important is the leadership from the ISAPP Board, all scientists who have achieved pre-eminence in their fields. Their insights and hard work shape ISAPP. We are 'guided' in everything we do by our Executive Science Officer, Dr Mary Ellen Sanders, who has an extraordinary feel for the science, the regulatory and the commercial aspects of prebiotics and probiotics. I thank our industry colleagues from the IAC, who contribute so much to the science and the workshops and also persuade their parent companies to support ISAPP and keep us relevant in a changing world. We greatly appreciate the support. And finally, thank you to Chris Cifelli, who has represented the IAC on the Board, and has led an initiative to improve ISAPP's ability to translate science to different audiences.

HIGHLIGHTS OF 2014 ISAPP ACTIVITIES

- Convened 2014 annual meeting in Aberdeen, Scotland. [Meeting report](#). Publications from the annual meeting are planned for 4 of the 5 discussion groups.
- Drs. Chris Cifelli, National Dairy Council and Saskia van Hemert were elected as Sr. and Jr. (respectively) IAC representatives to the ISAPP board.
- Provided travel support for Prof. Bruno Pot to speak at the NIH National Institute of Allergy and Infectious Diseases meeting, *Gastrointestinal Microbiota in Allergy and Advances in Probiotics Workshop*. Dr. Pot provided important insights on probiotic strain selection strategies for allergy endpoints. ISAPP board members, Mary Ellen Sanders and Michael Cabana, also delivered lectures at this meeting.
- Collaborated with the World Gastroenterology Organisation on [World Digestive Health Day 2014](#), themed "[Gut Microbes. Importance in Health and Disease](#)", with the following outputs:
 - Updated ISAPP's Consumer Guidelines ([Choosing a Probiotic Product](#); [Choosing a Prebiotic Product](#))
 - Informational short videos
 - [Prebiotics: What they are, what they do and how we find out](#). [Glenn Gibson, Ph.D.](#), Food Microbial Sciences Unit, School of Food Biosciences, The University of Reading Whiteknights, UK
 - [Useful information about probiotics for clinicians](#) - a 5 minute video by [Mary Ellen Sanders, Ph.D.](#) Executive Science Officer, ISAPP
 - [Re-programming humans: can microbiome and probiotic research achieve it?](#) [Gregor Reid, Ph.D.](#), Lawson Health Research Institute, University of Western Ontario, London, Canada
 - [WGO Handbook on Gut Microbes](#). Several ISAPP board members prepared chapters for this handbook, edited by Francisco Guarner, MD, PhD.
- Filed comments with the European Food Safety Authority regarding its [intent to revise the guidance on scientific requirements for health claims on foods](#) related to gut and immune function. [ISAPP Comment](#).



- Filed comments with the FDA regarding impact of [Proposed Rule](#) on labeling prebiotics on foods. [ISAPP Comment](#).
- Published [consensus statement on the scope and appropriate use of the term probiotic](#) in Nature Reviews in Gastroenterology and Hepatology.
- Met with FDA's Center for Biologics Evaluation and Research on May 22, 2014, to discuss CBER oversight of probiotic research as investigational new drugs. [Report](#).
- Filed comments on FDA [guidance](#), which requires that human research to evaluate functional effects of foods be conducted under an investigational new drug (IND) application. [ISAPP Comment](#).
- Joined the American Society of Nutrition, Institute of Food Technologists, ILSI-North America and North American Society for Pediatric Gastroenterology, Hepatology and Nutrition in a meeting March 5, 2014, with FDA's Center for Food Safety and Applied Nutrition to share concerns with a guidance that stipulates human research conducted on functional endpoints for foods requires an investigational new drug (IND) application. [Report](#). [ASN survey results on impact of IND process on food research](#).
- Met with Mr. Richard Cleland, Assistant Director, Division of Advertising Practices with the Federal Trade Commission to gain a better understanding of FTCs perspective on conducting research intended to substantiate structure/function or health claims for foods in the United States. [Report](#).
- The ISAPP [Student and Fellows Association](#) is growing and will organize a SFA meeting in conjunction with the ISAPP meeting in Washington DC.
- Through collaboration with Health Point Productions, free copies of "MicroWarriors" Special Edition are available to ISAPP members. Request your copy from David Knight of Health Point Productions at microwarriorsmovie@sbcglobal.net.)

2014 ISAPP PUBLICATIONS

This list includes summaries of some group discussions at annual meetings as well as other ISAPP-related activities. [Full list of ISAPP publications](#).

- Duar R, Walters J, et al. The microbiome and health: promising endpoints for interventions. Manuscript in Preparation.
- Sung V, Cabana MD, D'Amico F, Deshpande G, Dupont C, Indrio F, Mentula S, Partty A, Savino F, Szajewska H, Tancredi D. 2014. [Lactobacillus reuteri DSM 17938 for managing infant colic: protocol for an individual participant data meta-analysis](#). BMJ Open 2014;4:e006475. doi:10.1136/bmjopen-2014-006475.
- Kumar H, Verhagen H, Rowland I, Heimbach JT, Salminen S, Banares S, Young T, Nomoto K, Lalone M. 2015. Novel probiotics and prebiotics: road to the market. Current Opinion in Biotechnology, 32:99–103.
- Reid G, Brigidi P, Burton JP, Contractor N, Duncan S, Fargier E, Hill C, Lebeer S, Martín R, McBain AJ, Mor G, O'Neill C, Rodríguez JM, Swann J, van Hemert S, Ansell J. [Microbes](#)



[Central to Human Reproduction](#). Am J Reprod Immunol. 2014 Sep 24. doi: 10.1111/aji.12319. [Open Access](#).

- Hill C, Guarner F, Reid G, Gibson GR, Merenstein DJ, Pot B, Morelli L, Canani RB, Flint HJ, Salminen S, Calder PC, Sanders ME. 2014. The International Scientific Association for Probiotics and Prebiotics consensus statement on the scope and appropriate use of the term probiotic. Nature Rev Gastroenterol Hepatol. 11, 506–514. [Open Access](#).
- Sanders ME, Lenoir-Wijnkoop I, Salminen S, Merenstein D, Pot B, Petschow BW, Nieuwdorp M, Tancredi D, Cifelli D, Jacques P, Gibson G. 2014. [Probiotics and Prebiotics: Prospects for Public Health and Nutritional Recommendations](#). Annals NY Acad Sci 1309:19-29.
- Sanders ME, Klaenhammer TR, Ouwehand AC, Pot B, Johansen E, Heimbach JT, Marco ML, Tennilä J, Ross RP, Franz C, Pagé N, Pridmore RD, Leyer G, Salminen S, Charbonneau D, Call E, Lenoir-Wijnkoop I. 2014. [Effects of genetic, processing, or product formulation changes on efficacy and safety of probiotics](#). Annals of the New York Academy of Sciences 1309:1-18.



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Merck
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Mondelez
National Dairy Council
Nestle
NIZO
Nutricia
Probi AB
Procter & Gamble
Protexin
UAS Laboratories
Valio
Winclove Bio Industries
Yakult



APPENDIX. 12TH ANNUAL MEETING OF ISAPP – ABERDEEN SCOTLAND

[Link to full 2014 meeting report](#)

The 2014 ISAPP meeting was held in Aberdeen, Scotland. The meeting was held in conjunction with the Rowett Institute of Nutrition and Health and INRA meeting, *Gut Microbiology: from Sequence to Function*, which was an open registration meeting held June 16-19. ISAPP's specific role was organization of the lectures for the last day of this meeting, June 19, followed by an ISAPP-only, by-invitation event on June 20, comprising the traditional discussion group and wrap up sessions. The lectures featured presentations on emerging topics involving probiotics and prebiotics in diet and the microbiota, animal nutrition and clinical developments. Additionally, small discussion groups explored new developments beyond the gut, the strength of evidence for probiotics and treatment of colic, mechanisms of probiotic and prebiotic function, path to market for novel probiotics and prebiotics and promising endpoints for health at the level of the microbiome. The IAC Learning Forum was held Wednesday, June 18 on the topic of Nutrametabonomics, taught by Jonathan Swann, PhD from the University of Reading. The ISAPP-only meeting was attended by 99 delegates representing 20 countries (Australia, Belgium, Canada, Switzerland, Denmark, Germany, Spain, Finland, France, Ireland, India, Italy, Japan, The Netherlands, New Zealand, Poland, Sweden, Turkey, United Kingdom and United States). Fifty-seven of the meeting participants were invited experts, nine were ISAPP Board members and 33 were industry members of the ISAPP IAC. The Student and Fellow Association conducted a concomitant meeting. Their program included 25 attendees presenting posters, three SFA members shared their technical expertise in new emerging techniques relevant to probiotics/microbiome research with other SFA members, and two ISAPP members - one from academia and one from industry - gave talks about starting a research career in academia and alternative career paths in research.