

Annual Report International Scientific Association for Probiotics and Prebiotics January 1 – December 31, 2009

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Introduction

ISAPP is an international non-profit collaboration of scientists dedicated to advancing the science of probiotics and prebiotics. The mission statement of ISAPP is: To engender and disseminate information on high quality, multidisciplinary, scientific investigation in the fields of probiotics and prebiotics, and to advance the development of scientifically substantiated, health-promoting probiotic and prebiotic products worldwide. 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.

For additional details, see website www.isapp.net

Message from the President, Dr. Glenn Gibson



It is a privilege and a pleasure to take over from Gregor as President. His unstinting dedication and boundless energy has propelled ISAPP forward. Without Gregor and Mary Ellen, we wouldn't even have a society! It is fair to say that in the early days of us planning ISAPP the real momentum picked up when Gregor became involved. He is an internationally recognised figure in the area and will be a very hard act to follow. As he said when asking me to take over "you must do it, you'll make me look really good". How could I refuse an offer like that? He has made many telling contributions not least of which is being behind ISAPP's rapid responses to current probiotic and prebiotic issues. However, I think that Gregor has made at least 2 critical inputs to the society – the instigation of our successful late breaking news sessions and the students + fellows association (SFA – how selfless of him to use the same initials as Sunderland Football Association: thanks!). We look forward to working with Delphine and the other SFA representatives. They already asked for a budget, so are clearly pretty street wise about this

job! Thanks to the kindness of IAC this is possible. Gregor is remaining as a key member of the Board and we look forward to his invaluable input, but not so much the bad Scottish jokes, occasional song and world record attempt at inviting scientists to the meetings who don't show.



There have been other changes to the Board. We are delighted that Jim Versalovic has been promoted to a Head of Department role at Texas. This is a great accolade for him and much deserved. However, the Children's Hospital gain is our loss. Sadly, Jim feels that his time commitment is such that he cannot continue as Secretary. He has been the ultimate professional in this and all he has contributed to ISAPP. The Secretary role is crucial and Jim has been outstanding. We wish him well in his future role and look forward to many more successful interactions with ISAPP.

This meant that Todd "don't ask me to write anything" Klaenhammer became secretary. This tenureship last approximately 50 minutes when during our latest Board meeting, he took on the Vice President's role instead. Seriously, Todd is a world leading scientist and it is tremendous to have him as VP. It is good for ISAPP to have recognised people at the helm so it is just as well that Todd has such a great reputation – it will hopefully dilute the obscurity of the new President! This meant that we had a vacancy as Secretary. After arm twisting, head locking and electric shock treatment Michael Cabana finally gave in and stepped up to the plate. Thank you Michael and we know you'll do a great job (actually he very kindly volunteered). In case Michael is not busy enough, he is thinking of host an ISAPP meeting in the not too distant future as well.

All members of the Board do so voluntarily and give a great deal of time up as result. They are a terrific group of people as well as scientists. Karen keeps the budget under control and makes sure we can actually put on a meeting each year and contribute to other events all over the world, Mary Ellen has more energy than a Scottish footballer trying to find the bar, is more attentive to detail than a chess grandmaster and has more dedication than a marathon runner. She is the driving force behind ISAPP, keeping us all on track and long may that continue!

The 7th ISAPP meeting in November brought the usual good fun, excellent science and great interactions. Newport Beach/Irvine was a superb venue and we were very lucky (thanks to Todd and Jeff Gordon) to be able to host with the hugely respected NAS Sackler Symposium. This can only help ISAPP ever increasing profile. The beach walk was a social highlight and to see dolphins in the wild was a treat (my daughter is still green with jealousy). Coming from a background where the beaches are dominated by coal, toilet paper and dog turds (think a <u>downmarket</u> Billy Elliot.....) this was a particularly unforgettable experience for me. We are all looking forward to Sitges 2010 with Francisco hosting. We missed our good friend and Board member Nathalie who was sadly ill. Has anyone ever seen her in a bad mood? She is an inspirational person and we are delighted to hear about her speedy recovery.

The ever expanding IAC keep us afloat and we are extremely grateful for their support. Importantly, the IAC also interact on the science and other ISAPP activities. This is much appreciated and needed. Elaine Vaughan did a sterling job as the representative to Board and we thank her enormously for her tireless input. The baton has now passed to Duane Charbonneau and we look forward to the continued successful and productive interaction.

There are many other highlights this year, but it is time for me to stop and let Mary Ellen do the report. We hope you agree that ISAPP goes from strength to strength. This is due to all the people mentioned above but many others, too. I am delighted to have the opportunity to work with you all as President.

All I can think is.....don't screw it up.... no pressure! In a way, it is a real pity that ISAPP is so successful!

Glenn



2010 Objectives

- Launch a CME course targeted toward healthcare professionals on probiotics and prebiotics in collaboration with the American Gastroenterological Association (AGA) and ILSI North America.
- Continue to build working relationships with AGA, ILSI Europe, ILSI North America, World Gastroenterology Organisation, International Dairy Federation and other potential partner organizations interested in advancing the science and communication for probiotics and prebiotics.
- Continue working with United States Pharmacopeia (USP) on developing a monograph for a probiotic as a model for USP certification for probiotics.
- Continue to respond to scientific inaccuracies as they relate to probiotics and prebiotics in the scientific as well as popular media outlets.
- Work with students and fellows to craft the ISAPP SFA as a go-to resource for young scientists interested in probiotics and prebiotics
- Conduct a successful 8th meeting of ISAPP in 2010 in Barcelona, Spain.

Highlights of 2009 ISAPP Activities

- ISAPP becoming recognized as go-to place for science-based info on pro/prebiotics. See <u>http://www.nbclosangeles.com/health/diet_fitness/Probiotics-and-Prebiotics-for-Indigestion.html</u> and note <u>www.isapp.net</u> along with NIH and IFIC sites as references.
- ISAPP worked to plan and execute in 2010 a continuing medical education course on probiotics and prebiotics with AGA and ILSI North America
- ISAPP issued guidelines documents on probiotics and prebiotics (Press Release on Feb 2, 2009 on Newswise wire service <u>http://www.newswise.com/articles/view/548686/?sc=rssn</u>)
- ISAPP provided financial support of Australia meeting (with Harsharn Gill)
- ISAPP Executive Director, Mary Ellen Sanders, attended several meetings on ISAPP's behalf:
 - Met with USP and Food Chemical Codex regarding development of a probiotic monograph to be used as a basis for voluntary standards on probiotics for the US
 - Met with ILSI Europe to address the topic of claims substantiation on foods
- ISAPP held its 7th Annual meeting, in conjunction with the National Academy of Sciences, in Irvine CA.
- ISAPP responded to a request by Health Canada for input into their guidance for industry on safety, efficacy and production of probiotic natural health products.
- Responded to scientific issues in the media:
 - Obesity and probiotics [Reid and Delzenne, Nat Rev Microbiol. 2009, Dec;7(12):901]
 "No causal link between obesity and probiotics"
 - o March 4, ABC GMA news segment by dietician Ashley Koff (see below)

Submitted electronically, March 4, 2009

The International Scientific Association for Probiotics and Prebiotics (ISAPP) embraces accurate, science-based communication on probiotics. We have developed consumerfriendly guidelines (found at www.isapp.net <<u>http://www.isapp.net/></u>) to help consumers understand probiotic product choices in the market. As such we would like to comment on the Feb 20 report on probiotics ("Probiotic Power") featuring dietitian, Ashley Koff, which makes several inaccurate assertions.

First, probiotics are microbes (not just bacteria – yeast are also used as probiotics) that have been shown to impart a health benefit to the host. They are not the same as our native, natural, potentially beneficial bacteria (the "80%" that Ashley refers to). Second,



she indicates that supplements are better for getting a "therapeutic dose" of probiotics. The important point is that probiotic content (strain and presence of a therapeutic amount of probiotic) is generally more important than which format - yogurt, capsule, nutrition bar, juice - is consumed. Third, she indicates that sugar contained in some probiotic foods counteracts the beneficial effects of the probiotic. Although it may be advisable for some individuals to restrict their sugar intake, numerous controlled studies have documented health benefits of probiotic foods containing sugar. People should simply choose a product format that works for them. In addition, her recommendation of sauerkraut and other "cultured" vegetables as preferred sources of probiotics misses the mark. Although these foods may be great choices as part of a healthy diet, the massproduced versions are commonly heat-treated or otherwise processed so that they contain few live bacteria. Furthermore, these traditional foods in many cases have not been studied for the specific health benefits associated with the live microbes involved in their manufacture. Until a particular live microbe has been studied and shown to confer a health benefit, it cannot be considered to be a probiotic. Two final points: it would be great to know the source of Ashley's assertion that probiotics help your skin glow – we know of no published studies documenting such an effect. And what source did Ashley use to assert that 80% of the bacteria we harbor are good and 20% are bad? There is no scientific evidence to support this as far as we can tell.

I would encourage Good Morning America to seek true experts before featuring them on a national report – it can only benefit your audience, the consumer.

Gregor Reid, Ph.D., President, International Scientific Association for Probiotics and Prebiotics



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ISAPP publications

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Appendix A. 7th Annual Meeting of ISAPP

The 7th annual meeting of ISAPP was convened in Irvine/Newport Beach, California November 3-5, 2009. Held in conjunction with the National Academy of Sciences Sackler Symposium, the ISAPP meeting was attended by a record 110 participants from 19 countries. The Sackler Symposium, titled "Microbes and Health" – chaired by Drs. Todd Klaenhammer and Jeff Gordon – featured 2 days of excellent lectures by the top scientists in the field. Lectures included Nancy Moran, University of Arizona, who spoke on "Evolution of biological complexity and symbiosis," Joel Dore, INRA, who spoke on "Metagenomic studies of the human gut," David Relman, Stanford University, who spoke on "Antibiotics: a tool to probe ecosystem robustness and diversity," and Forest Rohwer, San Diego State University, who reminded us that viruses play an important role in the microbial diversity in the human intestinal tract, with his talk on "Viral diversity in human and non-human habitats." ISAPP board members Gregor Reid (Past President) and Karen Scott (Treasurer) also presented talks at the Sackler.

These, and others, provided mind-broadening food for thought that set the stage for the following 2 days of discussion convened by ISAPP on probiotics and prebiotics. One key activity of the ISAPP meeting was the session comprised of 6 discussion groups:

- 1. Group 1. Parameters for designing, publishing and communicating human studies on probiotics (Chairs: Michael Cabana and Stéphane Vidry)
- 2. Group 2. The role of gut microbiota, probiotics and prebiotics in obesity and undernutrition (Chairs: Glenn Gibson and Ruth Ley)
- 3. Group 3. Changing human microbiota with prebiotics and probiotics (Chairs Karen Scott and Joel Doré)
- 4. Group 4. How can probiotics and prebiotics impact mucosal immunity (Chairs Jim Versalovic and Bruno Pot)
- 5. Group 5. How can probiotics and prebiotics impact human pathogens (Chairs: Todd Klaenhammer and Colin Hill)
- 6. Group 6. Identifying responders and non-responders for clinical trials with probiotics and prebiotics (Chairs Gregor Reid and Francisco Guarner)

Reports from several of these groups will be submitted for publication in the new journal, Gut Microbes.



In addition to the discussion groups, fruitful meetings were held among the board of directors, the industry advisory committee members and the newly formed student/fellow association of ISAPP. One important topic of discussion was the difficult climate regarding regulatory approaches to claim substantiation. The situation is especially critical in Europe, where numerous probiotic claims were recently not allowed. Health claims substantiation was a specific focus of the IAC/BOD meeting held on the last day of the meeting. The Late Breaking News session featured short talks (maximum of 3 slides each) on developing research stories or issues for the field, in an informal "pub" environment. As is typical of ISAPP meetings, opportunities abounded for networking among the assembled academic and industry scientists.

The meeting program, and some photo highlights follow:



ISAPP Vice President, Todd Klaenhammer, and Past President and proud Scotsman, Gregor Reid, share a collegial moment at the ISAPP Opening Reception, Newport Beach Marriot, Nov. 3, 2009.



Newly formed Student/Fellow Association members, Alicia Murcia, Ruben Hummelen, Chays Manichanh, Jean Macklaim. (L to R)





Inaugural Student/Fellow Association members: Back row (L-R): Collin Ellis; Sarah O'Flaherty; Jean Macklaim; Ruben Hummelen; Front row (L-R): Delphine Saulnier; Tyler Cullender; Maria Alejandra Diaz; Alicia Murcia Muñoz



2009 ISAPP Annual Meeting Program

Sunday, November 1-Tuesday November 3: NAS Sackler Symposium	Beckman Center
Sunday, November 1	
3:00 – 5:00 PM BOD meeting	Del Mar room, Marriott
Sunday, November 1 – Tuesday, November 3	
Sackler Symposium "Microbes and Health"	Beckman Center
Tuesday, November 3	
6:00-7:30 PM Meeting Registration	Atrium, Marriott
7 PM – 9:00 PM ISAPP Welcome Reception (Appetizers provided)	Atrium, Marriott
7:30 PM Welcome by Gregor Reid (outgoing president) and Glenn Gibson	
(incoming president)	
Wednesday, November 4	
7:15 AM Bus to Beckman Center from Marriott Hotel	Depart from front of Marriott
7:45 AM Bus to Beckman Center from Marriott Hotel	
7:30 – 8:30 AM Breakfast	Beckman Center, Dining Room
7:30 – 8:30 AM Meeting Registration	Beckman Center Lobby
8:30 AM – 3:00 PM Discussion groups	Beckman Center
Group 1. Parameters for designing, publishing and communicating human	Newport Room (18)
studies on probiotics (Chairs: Michael Cabana and Stéphane Vidry)	
Group 2. The role of gut microbiota, probiotics and prebiotics in obesity and	Balboa Room (22)
under-nutrition (Chairs: Glenn Gibson and Ruth Ley)	
Group 3. Changing human microbiota with prebiotics and probiotics (Chairs	Executive Dining Room (19)
Karen Scott and Joel Doré)	0 ()
Group 4. How can probiotics and prebiotics impact mucosal immunity	Boardroom (22)
(Chairs Jim Versalovic and Bruno Pot)	
Group 5. How can probiotics and prebiotics impact human pathogens	Emerald Bay Room (14)
(Chairs: Todd Klaenhammer and Colin Hill)	
Group 6. Identifying responders and non-responders for clinical trials with	Laguna Room (14)
probiotics and prebiotics (Chairs Gregor Reid and Francisco Guarner)	
Noon Lunch	Beckman Center, Dining Room
3:00 – 4:00 PM Late Breaking News (Gregor Reid, Chair)	Beckman Center, Dining Room
4:15 PM Buses to Huntington Beach, walk on pier, unhosted refreshments	Depart from Beckman Center
at Ruby's Diner	
6:00 PM Cocktails	Spark Woodfire Grill, Huntington
7:00 PM Dinner	Beach
9:00 PM Buses back to Marriott	Depart from Spark Woodfire Grill
Thursday, November 5	
7:15 AM Bus to Beckman Center from Marriott Hotel	Depart from front of Marriott
7:45 AM Bus to Beckman Center from Marriott Hotel	
7:30 – 8:30 AM Breakfast	Beckman Center, Dining Room
8:30 – noon Wrap up: summaries from 6 discussion groups (Mary Ellen	Beckman Center, Auditorium
Sanders, Chair)	
Coffee/tea available all day	Beckman Center, Atrium
Noon – 1:00 PM Lunch	Beckman Center, Dining Room
1:00 PM Bus from Beckman Center to Marriott	Depart from Beckman Center
1:00 – 2:00 PM IAC-only meeting	Beckman Center, Auditorium
Noon – 2:00 PM BOD meeting during lunch (Glenn Gibson, Chair)	Beckman Center, Boardroom
2:00 – 4:30 PM BOD/IAC meeting. Topic: health claims substantiation	Beckman Center, Auditorium
(Glenn Gibson, Chair)	Deckinan Center, Auditonum
4:45 PM Bus from Beckman Center to Marriott	Depart from Backman Contor
	Depart from Beckman Center
6:30 PM Cocktails/appetizers BOD/IAC meeting participants	Sam & Harry's Restaurant,
7:30 PM Dinner BOD/IAC meeting participants	Marriott

