



ISAPP Holds Successful Open Forum June 2007

College of Physicians in Regent's Park London proves to be excellent venue

At the request of industry partners and people expressing an interest in the activities of ISAPP, an open forum was held in London, UK on June 27th and 28th, 2007. This is the first open forum since the London, Canada meeting in 2002, and was free to all registrants thanks to ISAPP's ongoing support from key companies involved in R&D in probiotics and prebiotics. Over 120 delegates from 13 countries enjoyed the two-day event, and swelled the number of people who have attended ISAPP conferences and special events to over 1000. The full program can be found at the end of this report.

The photo below shows 11 members of the ISAPP Industry Advisory Committee following their meeting with the ISAPP Board of Directors, held the day before the conference.



From Left to right back row: Todd Klaenhammer, Glenn Gibson, Ian Rowland, Thomas Boileau (General Mills), Elaine Vaughan (Unilever), Jim Versalovic, Douwina Bosscher (Orafti), Harsharn Gill, Karen Scott, David Pridmore (Nestle), Artem Khlebnikov (Danone), Benedicte Flambard (Chr. Hansen), Gregor Reid, Bob Rastall; Front row: Bruno Pot, Barb Kochanowski (P&G), Jia Zhao (Yakult Europe), Eamonn Connolly (BioGaia), Christina Khoo (Hill's Pet Nutrition), and Linda Thomas (Yakult UK).



(Inset, Mary Ellen Sanders – who took the top photo!)

Two Firsts

The meeting was the **first time** that animal pro- and prebiotics have been the focus of an international conference. This is an emerging area of science, but there are a number of products already being used for companion and production animals. Presentations covered a wide variety of topics, including the tough regulatory requirements for production animals. Difficulties in retaining shelf-life of probiotic products in suitable delivery vehicles were noted. The problems associated with antibiotic use for livestock growth promotion were again highlighted (side effects, *Salmonella* colonization in chickens, risk of increased drug resistance in human microbiota). Although there is evidence that consumers will pay more for meat and animal products they perceive as higher quality (omega 3 eggs, free range chickens), there is still insufficient data substantiating that pro- and prebiotic supplementation of animal feed can improve feed efficiency. Some evidence on products which reduce pathogen colonization and dissemination within food animals was presented and is an important area of ongoing research.

Another **first for ISAPP** and a highlight of the first day was six presentations made by young students in labs in Poland, UK, USA and Canada. This was a most enjoyable session illustrating the tremendous talent that is now working actively in pro- and prebiotic research. All six winners received US\$1000 towards their travel to the conference. Maryam Yeganegi from Toronto is shown below making her presentation.



Developing-world focus

The second day was another 'first' for an international conference focusing on the potential to apply probiotic and prebiotic products to developing countries and Eastern Europe. The outstanding work of Danone in Bangladesh with the Grameen Bank setting up mini-factories, and the efforts of Dr. Kingsley Anukam in Nigeria led into a round table discussion with panelists from P&G, Orafti and Rosell Lallemand. Clearly progress is being made to understand local issues important to taking products to the developing world, and scientific and societal research relevant to such efforts is underway.

The experience of using micronutrients for HIV/AIDS, applying avirulent *E. coli* to premature babies to prevent death, and the expansive knowledge accumulated in Russia on probiotics were highlights for the audience. The final lecture from Ian Tucker, a Professor of Pharmacy from New Zealand, emphasized the need for multiple disciplines to work collectively to advance our understanding of how probiotics and prebiotics function, how they can be delivered to target sites, and what types of benefits they might accrue.

The event ended with a **Rapid Fire** session, which is always fun and a test of the presenters' ability to condense exciting findings into three slides. Every talk proved stimulating.

Fun time

The location of the meeting, in London's west end, provided ample opportunity to get out and see some of London's sights. The photo below shows Todd Klaenhammer taking in Covent Garden Market.



Thanks to Yakult UK, one of Britain's best comedians, Jimmy Bright, was enticed to come down from Manchester to entertain the delegates at the evening get together. The crowd proved to be a real challenge being from such a diverse

background, just as Jimmy's accent and a few local cracks went over some heads. Nevertheless, numerous people were seen in extreme fits of laughter, and the evening was a great time to socialize and retain the spirit (no pun intended) that is such an important part of an ISAPP meeting.

A special thanks to the local organizers, Bob Rastall, Pam Webb and Glenn Gibson and the Royal College staff for helping make this a great three days.

Next up

ISAPP will continue to selectively support events which promote the science of probiotics and prebiotics, building on those held this year in Argentina, Poland and Russia. These conferences spread the word on the scientific and clinical excellence of probiotic and prebiotic research and development. The next formal ISAPP meeting is going to be extremely exciting. It will be organized by Todd Klaenhammer and held at the National Academy of Sciences in Washington, DC in early November, 2008. Watch www.isapp.net for more details.



ISAPP Open Forum, London UK, June 26-28, 2007

Royal College of Physicians

Entry for registrants **ONLY**.

Target audience: dietitians, nutrition scientists and basic scientists in EU, global companies, students, media, ISAPP 'members' and others.

Day one – Tuesday 26th June, ISAPP Board Meeting and IAC

1pm to 3pm ISAPP Board Meeting – invitation only

3.30pm – 6pm IAC Meeting followed by dinner – invitation only

Day two – Prebiotics and Probiotics for Animals

8.00am Registrants get badges

8.30am Opening welcome

Session Chair Dr. Bob Rastall

8.45-9.30am Plenary Speaker Opportunities and challenges for probiotics and prebiotics in animal nutrition – Randy Buddington, Mississippi

9.30-10.00am Prebiotics in companion animals – David Hernot, Illinois

10.00-10.30am break

Session Chair Dr. Karen Scott

10.30 – 11.00 Probiotic and prebiotic applications in chickens – Stan Bailey, USDA

11.00 – 11.30 Probiotics and associated health benefits in dogs and cats – Zoe Marshall-Jones, Waltham Centre for Pet Nutrition, UK

11.30-1.30 VIEW POSTERS (Lunch 12.00-1.30pm)

Session Chair: Dr. Anne McCartney

1.30- 2.00pm Development of probiotics, prebiotics and synbiotics for pathogen control in pigs – Martin Woodward, VLA, Weybridge

2.00-2.30pm *In vitro* determination of the inhibitory spectrum of prebiotics against *Salmonella* Typhimurium in pigs, Dr. Adele Costabile, University of Reading, UK.

2.30-3.00pm Probiotic applications in aquaculture – Seppo Salminen, Turku, Finland.

3.00-3.30pm Break

Session Chair: Dr. Jim Versalovic

3.30-4.00pm Development of probiotic strains for equine application – Alex Rodriguez-Placious, Guelph, Canada

4.00-5.00pm Rapid fire – Student Prize Winners.

4.00 Amarender Donthidi, Glasgow Caledonian University, UK

“Improved synbiotic formulation and its evaluation of stability during storage and simulated gastric pH”

4.10 Tomasz Gosiewski, Jagiellon University Medical College, Cracow, Poland

“Bifidobacteria numbers in colon of children with inflammatory bowel disease (IBD)”

4.20 Jie Jia, University of Reading, UK

“Investigation of the faecal microbiota of IBD in cats on different dry foods”.

4.30 Kristi J. Whitehead, Michigan State University, USA

“Genomic and genetic analysis of the bile stress regulon in probiotic *Lactobacillus reuteri*”.

4.40 Fang Yan, Vanderbilt University, Nashville, USA

“Soluble proteins produced by *Lactobacillus rhamnosus* GG (LGG) activate EGR receptor to regulate the anti-apoptotic response in intestinal epithelial cells”.

4.50 Maryam Yeganegi, University of Toronto, Canada

“Lactobacilli supernatant inhibits TNF- α production and COX₂ expression in LPS-activated placental trophoblasts”.

5.00-8.00pm Free Reception and Entertainment – one of Britain’s top comedians – Jimmy Bright

Day three – Taking probiotics and prebiotics to Eastern Europe and the Developing World: what are the key issues?

Chair: Dr. Gregor Reid

9.00-9.30am Manufacturing, distribution and marketing challenges for probiotic and prebiotic products for Eastern Europe and Developing World – Dr. Irene Lenoir Wijnkoop, Danone

9.30-10.00am The Need for, and Experimental Status of Probiotics to Treat AIDS Complications and for Recombinant Strains to Prevent HIV infection – Dr. Kingsley Anukam, Benin, Nigeria.

10.00-10.30am Open discussion with Panel of Dr. Lenoir, Dr. Anukam, Dr. Patrice Mallard, Rosell Lallemand, Dr. Jan van Loo, Orafti, and Dr. Barbara Kochanowski, P&G.

10.30-11.00am Break

Chair: Dr. Glenn Gibson

11.00-11.30am Micronutrients – which ones, how much, how often, for whom? A lesson from HIV/AIDS. Dr. Jon Kaiser, University of California at San Francisco Medical School, USA.

11.30-12.00am South East Asia: local probiotic and prebiotic foods, and local issues. Dr. Ingrid Surono, SEAMEO TROPMED UI, Jakarta, Indonesia.

12.00-1.30pm Lunch

Chair: Dr. Mary Ellen Sanders

1.30-2.15pm Immediate and long term effects of oral application of nonpathogenic *E. coli* into newborns. Dr. Helena Tlaskalova, Institute of Microbiology ASCR, Prague, Czech Republic.

2.15-2.45pm Challenges and scientific progress in probiotic research in Russia – Dr. Boris Shenderov, St. Petersburg, Russia.

2.45-3.15pm Break

Chair: Dr. Gregor Reid

3.15-3.45pm Use of nanotechnology to optimize delivery of probiotics and prebiotics to target sites. Dr. Ian Tucker, Otago University, New Zealand.

3.45-4.30pm Rapid Fire – What’s hot in my lab or field of work in three slides or less?

- Geoffrey A. Preidis, Baylor College of Medicine, Houston, Texas. *Lactobacillus reuteri* modulates murine rotavirus diarrhea
- Eamonn Connelly, BioGaia, Sweden. *L. reuteri* – don’t cry for me with your colic!
- Moti Harel, Advanced BioNutrition Corp., Columbia, Maryland, USA. Encapsulation of probiotic bacteria in a super-glass micro-matrix; effect on drying, shelf-life and gastric stabilities.
- Jutta Scholven, Freie Universität Berlin. The longest title of them all - Gene expression in probiotic trial with piglets: differential expression of Tumor necrosis factor alpha (TNF α) and Toll-like receptors after weaning (d31: TNF and TLR9) and at late stages of maturation (d56: TNF).
- Jan van Loo, Orafiti, Belgium. There’s something fishy going on with prebiotics.
- Mary Ellen Sanders, Colorado, USA. What’s FDA up to with probiotics?

4.30pm Final closing comments – Dr. Bob Rastall and Dr. Gregor Reid.

5.00pm Adjourn