

Microbial Modelling and Risk Analysis PDG

Members Present: Alejandro Amézquita, Yuhuan Chen, Elizabeth N. Williams, Cynthia B. Austin, Wafa Birbari, Robert L. Buchanan, Sarah M. Cahill, Roger L. Cook, Scott K. Crerar, Ganyu Gu, Myriam E. Gutierrez, Arie H. Havelaar, Cheng-An Hwang, Ramin Khaksar, Kathy K. Kordana, Elisabetta Lambertini, Fritz W. Lembke, Min Li, Deon Mahoney, Bradley P. Marks, Nenge L. Njongmeta, James J. O'Donnell III, Ismail A. Odetokun, Fernando Perez-Rodriguez, Abani K. Pradhan, Anderson S. Sant'Ana, Sofia M. Santillana Farakos, Jenny Scott, Panagiotis Skandamis, Jeyamkondan Subbiah, Joe Shebuski, Erdal U. Tuncan, Richard C. Whiting, May L. Yeow and Marcel H. Zwietering.

Board/Staff Member Present: Donald W. Schaffner.

New Members: Sharon Wagener, Michael Batz, Victoria Adetunti, Yue Cui, Carrie Giannettino, Aaron Asmus, Miao Guo, Hao Pang, Fred Breidt, Dyah Kusumastuti, Andreas Kiermeier, Michael Kuhlman, Danièle Sohier, Noerie Desriac, Chi-Ching Lee, Yifan Zhang, Polly Courtney, Marc Scantlin, Ron Wasik, Ramin Khaksar, Brian Hawkins, Saurabh Kumar, Yuwei Hu, Filiz Yeni, Jennifer Holtzman, Diana Spitznagel, Yemi Ogunrinola and Ting Chen.

Visitors/Guests: Meghan Griffin, Gary Kramer and Andrea Hendrickson.

Meeting Called to Order: 9:02 a.m., Sunday, July 28, 2013.

Recording Secretary of Minutes: Yuhuan Chen and Alejandro Amézquita.

Chair welcomed attendees, followed by self-introductions for all PDG members and visitors. Alejandro invited Board Liaison Don Schaffner to give remarks.

Greetings/Comments from Executive Board: Don Schaffner thanked members for their involvement and contribution to the PDG. He reported that IAFP had another year of record attendance (ca. 2700 registered attendees). He polled attendees for use of annual meeting App and encouraged feedback. He encouraged the MMRA PDG to continue to do webinars and teleconferences (both supported by the Association and free resources for the PDG). Don indicated that IAFP is in the process of re-invigorating *Food Protection Trends*, which always looks for new articles. He encouraged members to submit practical-oriented papers. He also noted that there are about 20 PDGs (3 new proposed PDGs this year) and there are concerns about too many overlapping meetings. PDGs may hold their meeting on Saturday to address scheduling conflict, if needed. He encouraged MMRA PDG to consider co-sponsoring proposals with other PDGs. He also encouraged those who are interested in learning the inner working of the Association to attend the Business Meeting.

Alejandro reviewed the meeting agenda and asked if there were any additional items; there were none suggested.

Old Business: Minutes from the 2012 meeting were tabled for comments or edits. There were no edits. Motion to adopt the minutes by Alejandro, seconded by Roger Cook. Minutes adopted.

Webinars. Alejandro gave a brief re-cap on the four webinars held in the last two years. He thanked all four speakers for contributing to the PDG. He also invited webinar speakers in attendance, Don Schaffner and Marcel Zwietering, to give feedback and share their experience using the webinar format. The speakers mentioned that it was a bit unfamiliar to do a lecture without an audience (no reaction from a live audience), but they got used to it after a few minutes. Overall the webinar technology worked well. Marcel also commented that an hour-long webinar was tiresome but at the same time was very rewarding, and encouraged members to volunteer to do webinars. Roger Cook noted the time zone issue for audience from Australia and New Zealand. Not easy to solve. Roger also indicated that at the Affiliate Council meeting, an issue was brought up about language barrier for overseas audiences. Suggested solutions include using subtitles or translating the recorded webinars.

It was generally agreed that webinars are a good way to show benefit of being a member and it is in fact a way to recruit new IAFP members. On the other hand, Don noted that the Board might decide to put the webinars behind the firewall as a member-only benefit. Pros and cons were discussed and the PDG will make a recommendation on this issue.

New Business:

Ideas for Webinars Topics 2013–2014:

- Don suggested a webinar on the connecting Risk Assessment and HACCP with Bob Buchanan as speaker. Possibly reach out to the HACCP PDG to co-sponsor. Later in the meeting, Bob suggested linking strategically symposia with webinars; therefore, an idea to do a webinar that summarizes the Symposium S30 from IAFP 2013 arose. For people in the PDG who could not attend the annual meeting, this will be a great opportunity.
- Marcel suggested a topic on linking 'omics' and risk assessment (an idea discussed at 2012 meeting). Roger Cook seconded the idea and mentioned that OECD is hosting a genomics workshop and provided contacts. Danièle Sohier noted that there is a session at the ICPMF8 meeting on 'omics' and predictive modeling and she could identify potential speakers there. Danièle also mentioned some recent work conducted at ADRIA on modeling the physiological state of cells which could be part of this topic. Dr. Stanley Brul (Univ. of Amsterdam) was also suggested as a potential speaker. He recently published a paper on the topic as output of ILSI Europe work. Alejandro agreed to approach Stanley to see if he can deliver a webinar.
- Alejandro suggested an idea from last year: operationalizing the FSO

concept, this would be based on PhD work by Elissavet Gkogka at Wageningen University. Could include 2 speakers, i.e., Elissavet and a speaker from industry (e.g., Leon Gorris).

- There was a lot of interest on the topic of tools for modeling and risk assessment and their use by industry. This topic was proposed in last year's meeting (Regis Pouillot). It was discussed both as an idea for a webinar, but also as a potential workshop for IAFP 2014 (see comments later under ideas for symposia 2014). If a webinar is conducted, then it must be linked to any symposium or workshop proposals submitted. Alejandro proposed that a webinar could be easily assembled to cascade the output of the joint BfR/FDA workshop on tools for food safety that will take place in Berlin in Sept 2013.

Guest Speaker: Dr. Yuhuan Chen gave a talk on recent risk assessment activities at FDA. She gave an overview of the basics of risk assessment at FDA CFSAN, highlighted a few examples of recent activities and tools. The examples she gave to illustrate the range of tools being developed to inform decision-making included: *Salmonella* in tree nuts risk assessment (Federal Register Notice engaging stakeholders, seeking comments, scientific data and information; FDA sponsored webinar for stakeholders); FDA-iRISK tool (collaborations in developing tool, application of the tool for a rapid risk assessment on EHEC/Lettuce to support irrigation water provision in proposed produce rule under FSMA); a qualitative risk assessment to determine low-risk activity/food combinations on farm (support proposed preventive controls rule under FSMA); and *L. monocytogenes* in soft-ripened cheese risk assessment by FDA/HC (in-depth modeling 2D simulation). She concluded by sharing thoughts on some of the challenges and points to ponder, and provided a link to FDA's risk and safety assessment Web site:

<http://www.fda.gov/Food/FoodScienceResearch/RiskSafetyAssessment/default.htm>.

IAFP 2013 Program – Symposia/Roundtables of Note: Alejandro reviewed a number of MMRA related symposia and sessions at this year's IAFP annual meeting. He also reviewed upcoming meeting and events of interest (see Appendix 1 for Meeting Agenda).

Symposia/Workshops/Roundtables – Ideas for 2014: Bradley Marks, who was on the 2013 Program Committee, provided insights about the program selection process. He informed that there were a lot of good proposals but not enough slots. It's desirable not to repeat topics from the previous year and also to aim for good balance of speakers from industry/gov't/academia, across PDGs, international is a plus.

- Advances in Microbial Modeling Under Dynamic Conditions. Proposed by Kirk Dolan (Michigan State University) & Vasilis Valdramidis (University of Malta).
- Yuhuan conveyed that Regis Pouillot from FDA suggested an idea on tools for modeling and risk assessment and application in industry, possible roundtable/interactive Q&A format. There were several suggestions about doing a workshop on this topic. Sarah Cahill suggested that the FAO tool on *Campylobacter* in poultry risk assessment would be a good addition. Arie Havelaar suggested that

EFSA is developing risk ranking tools that can also be good options. Yuhuan noted that a workshop on the FDA-iRISK tool has been accepted for the SRA 2013 meeting; the tool can also be included in the proposal.

- Abani Pradhan suggested a proposal on *Salmonella* in pet foods. Yuhuan suggested broadening the scope to low-moisture foods and to reach out to the new Low Water Activity Foods PDG for co-sponsoring. Bob suggested several potential speakers and also reached out to an ILSI committee for a speaker from industry.
- Marcel suggested a topic on quantitative aspects of detection. To focus on the quality of detection, statistical aspects of detection, e.g. probability of false positives vs. probability of false negatives, and the implications this could have on the operating characteristic curve and sampling. Roger Cook was supportive of this idea.

Since suggested webinars and symposia topics overlap, the issue was discussed. Bob Buchanan suggested that webinars and symposia need to complement each other: symposium and then a summary webinar, or use webinar as an introduction, they need to be connected. For people who cannot travel to annual meeting, the PDG can provide webinar as a highlight of the symposium. It was also suggested that at the annual meeting a symposium needs to appeal to broader audience, while a webinar can dig deeper on modeling and risk assessment aspects for PDG members.

Other Business: Alejandro, on behalf of Clare Narrod, made an announcement on a new course being offered by JIFSAN (“Advanced Quantitative Risk Analysis”). Bob provided handout. Andy Hwang on behalf of Lihan Huang provided CDs for the new Integrated IPMP2013 tool. Sarah mentioned that FAO has recently launched a new tool for histamine sampling. She also mentioned that FAO has established an MOU with IAFP to increase opportunities for training. Arie noted that the ECDC has a project on developing a tool kit to evaluate epidemiological data and provided a link: http://www.ecdc.europa.eu/en/healthtopics/burden_of_communicable_diseases/project/Pages/project.aspx.

Recommendations to the Executive Board:

1. Keep webinar recordings freely available, as it is now, on IAFP Web site without log-in requirement. These recordings are great educational tools and MMRA PDG members have already used them for that purpose.
2. Find ways to provide subtitles for webinars and translate recordings into other languages, possibly engaging Affiliate Council and the Student PDG.

Next Meeting Date: August 3–6, 2014, Indianapolis, Indiana.

Meeting Adjourned: 10:43 a.m.

Chairperson: Alejandro Amézquita.