

Applied Laboratory Methods PDG

Members Present: Phil Coombs, George Wilson, Christine Aleski, Patrice Arbault, Reginald Bennett, Yvonne Chan, Ting Chen, Debra Cherney, Julian Cox, Erin Dreyling, Hari Dwivedi, Hesham Elgaali, Peyman Fatemi, Ted Gatesy, Yuewei Hu, Lee-Ann Jaykus, Robin Kalinowski, Sun Kim, Keith Lampel, Pancita Manalili, Joseph Meyer, James O'Donnell, Ismail Odetokun, Ravinder Reddy, Brian Sauders, Brooke Schwartz, Christopher Snabes, Thierry Sofia, Sandra Tallent, Robert Tebbs, Harshavardhan Thippareddi, Leslie Thompson, Mary Lou Tortorello, Jean-Phillippe Tourniaire, Erdal Tuncan, Purnendu Vasavada, Wendy Warren, George Wilson and Tamara Wood.

Board/Staff Members Present: Don Schaffner.

New Members: Filiz Yeni, Fritz Buss, Takaaki Yamasaki, Abenga Adewumi, Jennifer Jolly, Karn Erlandson, Shari Spector, Frederick Auvray, Michele Evans, Clarisse Compaore, Wen Zou, Taurai Tasara, Reginald Benitez, Rodney Moxley, Pratik Benerjee, Atef Idriss, Paul Hall, Lihong Wu, Angeline Stoltzfus, Amanda Matczynski, Deana Rolheiser, Yishan Yang, Qianwang Zheng, Brooke Pennybacker, Shiping Cao, Polly Courtney, David Pincus, Roznizam Ismail, Arun Shastry and Deon Mahoney.

Visitors/Guests: Philip Bronstein, Emily Barrey, Barbara Cote, Ray Collins, Clyde Manuel, Zhou Yang, Abdul Ghani Abu Samah, Saeed Hayek and Nancy Moss.

Meeting Called to Order: 10:00 a.m., Sunday, July 28, 2013.

Recording Secretary of Minutes: Hari Dwivedi.

Old Business: Don Schaffner: Informed about increase in attendees this year for the IAFP, new app for the IAFP program and new editor for the *FPT* journal. Three new PDGs started this year. Option was given to move the meeting to Saturday for future PDG meetings. He encouraged more free webinars for the members of PDGs. There was discussion to establish a new position of Secretary within the PDG looking at good size of participants within PDG and some time inability of PDG office bearers to attend the businesses due to some inevitable appointments. The Secretary will be an unofficial position for two years to help Vice-Chair and chair to take all the meeting minutes while Vice-Chair and chair are engaged in other businesses such as symposium, webinar and white paper development. The Secretary will become Vice-Chair and Chair after 2 consecutive years in each position. The proposed structure will be similar to IAFP Executive Board.

- The proposal was open for approval to PDG members by Phil. PDG members passed the proposal by all but one.
- Two candidates George Wilson and Hari Dwivedi were nominated for the Vice-Chair position. Phil proposed name of Hari Dwivedi for the Secretary position and George for the Vice-Chair position. The proposal was passed by all but one.
- PDG recognized George Wilson as the new Vice Chair and Hari Dwivedi as

Secretary for next two years.

New Business: The submissions for symposium and round table proposals were announced. Phil suggested checking with other PDGs to not submit the overlapping ideas. Conference call during September 2013 will be conducted to discuss the proposals in detail. Phil asked for the submission of more white papers. Wendy Warren will lead the submission of a white paper on “Laboratory Accreditations.”

- Wendy Warren started the “Timely Topics” presentations. She presented her talk on Laboratory Accreditations. She discussed that there is need for more information dissemination on “what is equivalent and who decide what is equivalent?” She presented the new document released by USDA on “Establishment Guidance for the Selection of a Commercial or Private Microbiological Testing Laboratory” and also about her upcoming chapter on the same topic.
- Ross asked about the spectrum of accreditation. What labs have to do and what criteria should be followed for the accreditations. Wendy agreed with Ross and pointed out that there are so many different food items and some matrices are similar other are different so it will be good to know what the full set of validation will require?
- Tammy Wood supported the significance of the accreditation process. It was pointed out that some labs are struggling on the same issue. So, it’ll be helpful to work more on this topic. It was suggested that ISO 17025 provide minimum information so more information is needed. Wendy agreed that more information could be also great education tool for the auditors.
- Patrice Arbault: Pointed out with FSMA, it is important to focus on both 17020 and 17025.
- Julian Cox pointed out the significance of knowledge around the systems in lab and expertise in technical areas relevant to laboratory accreditation.
- Paul Hall pointed out that various agencies such as National Registry of Certified Microbiologist as a great way for gaining training and earn credentials.
- George Wilson pointed out that Caroline in international PDG is looking for volunteers to write an article on FSMS for *FPT* publication. Wendy accepted to volunteer for the same.
- It was suggested to send the USDA-FSIS document on accreditation along with IAFP report to general membership.
- Lee-Ann Jaykus (NC State University) presented about the activities of USDA-NIFA grant on Norovirus. She pointed out that the group is named NoroCore and its Web site (<http://norocore.ncsu.edu/>) could be searched online for the updated activities. She pointed out the various activities of the grant reacted to research, extension and training. She told that the overall aim of the grant is to engage stake holders to reduce the burden of foodborne viruses in regard to food and environmental samples. The grant has 6 core group with 4 research objectives. The grant is multidisciplinary with multi-institutional collaboration. She pointed out that the biggest challenge is in the cultivation of noroviruses. There are surrogates to study

noroviruses for food safety research but are not necessarily similar to noroviruses physicochemical properties. She pointed out efforts to develop cell culture for the norovirus cultivation which didn't work as expected. She highlighted the activities of the detection core of the grant working on novel diagnostics methods (such as microarrays, biosensors, RTqPCR) for norovirus detection and the potential of RTqPCR in discrimination of infectious and non-infectious particles. She pointed out the challenge associated with the development, result interpretation, validation and commercialization of the diagnostic method. She pointed out the booth of Norocore group in the exhibition hall.

- Patrice Arbault asked Lee-Ann about how international is the program and about the ISO validation of detection method. Lee-Ann replied that her funding is restricted to research within the USA but pointed out there are companies outside the US working in collaboration with her group.
- Phil asked that given the obstacles how optimistic she is to find a routine test. Lee-Ann replied that in terms of food and environmental samples, we are far away to find a routine test.
- Rod Moxley (University of Nebraska Lincoln) presented the activities of USDA STEC grant (<http://www.stecbeefsafety.org/>). He told about brochures for more information on the program. The STEC grant was started in 2012 with 5 major objectives including improvement and development of diagnostic methods, prevalence and ecology, intervention, quantitative risk assessment and education and outreach. Grant integrates 2/3rd research and 1/3rd education and outreach activities among around 50 collaborators. The grant is targeting total 8 serogroups including "Top Six," O157:H7 and O104:H4. KSU is the collaborator to develop the diagnostic methods (rapid, sensitive, high throughput). KSU has developed 11 plex PCR in this regards. He also discussed about pre-harvest surveillance activities in feedlot studies using fecal samples. Further he discussed about interventions activities such as treatment for packing plants and QMRA activities. He also talked about the education and outreach activities of the grant such as food safety education activities to celebrity chefs at UC Davis and food safety in new curricular of High School.
- Wendy Warren commented to point out the significance of STECs vs. generic *E. coli* isolates and capitalizing on isolates that can serve as basis for development of commercial assays. Rod replied with pointing out that PCR positive fecal isolates are not necessarily toxin positive, so much need to be done in this regard.
- Patrice Arbault asked about the confirmation strategies and about studying O104 in sprout. Rod replied that they confirm the isolates with PCR. He further replied that grant is restricted to beef. He also pointed out that next year they are going to organize a symposium.
- George Wilson asked about the intervention approach such as vaccine. Rod replied that there is no plan to redo work that is going somewhere else in this regards such as Canadian vaccine.
- Hari Dwivedi asked to Rod and Lee-Ann to announce if there are any summer intern opportunities to graduate students in their Cap grants. Rod and Lee-Ann discussed

about the various training opportunities for the graduate students in their grants.

- Phil asked if the Cap grants will produce the report of their activities and if there'll be in public domain. Lee-Ann and Rod replied with yes. Lee-Ann also mentioned about the literature database available in the grant Web site.
- Phil announced the Texas Tech molecular workshop in coming month.
- P. C. Vasavada discussed about the activities of Food Safety Preventive Controls Alliance (FSPCA). He told that Applied Method PDG has lots of opportunities to get involved in the activities of the alliance. He discussed about the broader activities of alliance focusing on the control of all four food safety hazards including chemical, physical, radiological and microbiological risks. He discussed about the significance of environmental monitoring. He discussed that the alliance is a public-private partnership. Alliance will help to develop training resources by developing curriculum and supporting material. He discussed that the alliance welcomes the volunteer or subject matter specialist to develop these resources. He pointed out that Hazard assessment and risk based prevention is key for supply chain safety and alliance is focusing on this key issue. He discussed about the participation of more than 35 companies in the alliance. He further discussed the objectives and basic elements of the alliance activities. He focused on that the course are developed in a way usable to small companies. He announced that there is symposium on the alliance activities if anyone wants to attend.
- It was asked if alliance will be involved in the international activities. PC pointed that the alliance first focus is domestic issues, then they can extend to international issues.
- George commented on the significance of global food safety education and lab capacity building. PC replied they are focusing on capacity building and more than it. He pointed out that HACCP and capacity building in regards to everything and anything.
- Phil asked if the information of the report of alliance activities could be shared with the PDG. PC pointed out that they update the activities regularly on their Web site.
 - The "Timely Topics" concluded.
- Mary Lou Tortorello discussed the activities of the Sample Prep working group. She pointed out Lee- Ann did a lot of work for the activities of Sample Prep group at PDG meeting specifically when Pat Rule was PDG chair. She discussed that each food type is exclusive so the upfront unified sample prep is challenging. She discussed about the significance of culture independent and other approaches. She pointed out that in 2007, 20 people joined the activities of the working group including Keith, Lee-Ann and other. They published a white paper followed by a symposium proposal in 2008 meeting. She pointed out that the overall idea was to publish a compendium on the "Sample Prep for the food commodities". She pointed out around 15 people worked on meat sample prep, first in this series.
- Lee-Ann pointed out that a USDA-NIFA proposal of Sample Prep is submitted. She also pointed that bunch of companies call for the work on it. She asked if one symposium proposal could be proposed for the next meeting.
- Phil asked members for any other comment and business.

- George commented that idea of sample prep is great and it is more than just culture based method. He pointed out that there is lack of global capacity in this regard and a follow up symposium on sample prep is a good idea.
- Karn Erlandson commented that she is very interested in lab accreditation.
- Keith discuss about the full symposium proposal with 6 speakers.
- Brooke Schwartz discussed that she is looking for more information than detection method itself but also more on different organizations involved in the accreditations.
- Debra Cherney discussed the different topics for next year proposal including Environmental sampling, Mechanism of pathogen attachment and internalization, challenges in sampling and optimum recovery of injured cells.
- Hari proposed a round table discussion on Culture independent methods – challenges and opportunities as a follow up to mini-symposium this year including panel from academic, government and industries. Leslie pointed out to develop following this year’s mini-symposium. Hari also mentioned a symposium proposal on Method Verification and Validation. Leslie will help to develop this proposal.
- George Wilson proposed a symposium on Global Lab Capacity Food Safety Initiatives. Specific areas of trainings are the standard food analytical and microbiological procedures.
- Phil asked for more ideas on webinars and white papers.

Recommendations to the Executive Board:

1. George Wilson be accepted as Vice Chair.
2. The board officially recognizes the creation of third position of Secretary for PDGs.

Next Meeting Date: On or about September 18, 2013.

Meeting Adjourned: 11:57 a.m.

Chairperson: J. Philip Coombs.