

Developing Food Safety Professionals PDG

Names of Attendees: Dina Scott (Chair), Matthew Moore (Vice Chair), Seun Agbaje, Basel Al Jaber, Abdulaziz Alhajeri, Ali Alkathiri, Mohamed Alshamsi, Justin Anast, Renee Anderson, Charles Bashiru Bakin, Takiyah Ball, Cameron Bardsley, Ata Al Baroudi, Chris Boyles, Stephanie Brown, Daniel Burnett, Jack Burnett, Anne Carr, Komita Carrington, Charita Chapman, Shani Craighead, Kathryn Davis, Lindsey Day, Jamie Dement, Minh Duong, Minh Duong, Kevin Edwards, Bertrand Emond, Khashayar Farokhzad, Hadda Faye, Hadda Faye, Melanie Firestone, Connie Fisk, Savannah Forgey, Monica Galleguillos, Zhujun Gao, Muchigi Githii, Ayanna Glaize, Chase Golden, Gayathri Gunathilaka, Alan Gutierrez, Steve Hails, Susan Hammons, Alex Hanley, Upasana Hariram, Sophia Harrand, Emily Harvey, Paula Herald, Kirsten Hirneisen, Richard Huang, Runze Huang, Sharon Humphries, Annette Kenney, Bob Kramer, Sakshi Lamba, Kristin Lane, Soon Kiat Lau, Judi Lazaro, David Limbaugh, Pushpinder Litt, Briana Lorenzo, Chip Manuel, Claire Marik, Jim Marks, Wendy McMahon, Maia McNair, B. J. Mikeska, Ana Monge Brenes, Naim Montazeri, Katie Murchison, Sarah Murphy, Rosalind Neale, Angela Nguyen, Gina Nicholson Kramer, George-John Nychas, Ismail Odetokun, Adeniyi Odugbemi, Phd, Ikechukwu Oguadinma, Michael Peralta, Eric Puente, Forest Reichel, Catherine Rolfe, Chris Rupert, Sarah Sanderson, Jason Scheffler, Maria Scott, Chuck Seaman, Shruithi Shankar, Laura Strawn, Lang Sun, Todd Taylor, Merlyn Thomas, Anna Townsend, Heidi Tremblay, Kirty Wadhawan, Kasey Ward, Lisa Weddig, Chanelle White, Martin Wiedmann, Edith Wilkin, Kiyonna Williams, Niradha Withana Gamage, Bruno Xavier, and Morgan Young.

Number of Attendees: 104.

Meeting Called to Order: 3:15 p.m., July 21, 2019
by Dina Scott.

Minutes Recording Secretary: Chase Golden.

Old Business: The agenda was reviewed and approved and last year's minutes were voted on and approved by the group.

New Business:

1. Adapting and Utilizing Next Generation Informatics Methods – Martin Wiedmann and Sarah Murphy.

- a. The Wiedmann group focuses on problem-based food safety issues and use data science to tackle the issues.
- b. Future of food safety is in data.
- c. Trad. food safety training has not properly emphasized data science.
- d. Food safety professionals need to embrace data science so that those without the food safety subject matter skills don't take over these jobs.
- e. Take data and convert it to information.
 - i. Information is valuable to make and drive decisions.
 - ii. Need to present the information in ways that people can understand and use in the decision-making process.

- f. Major components of next gen. informatics.
 - i. Data management and building relational databases.
 - ii. Data visualization.
 - iii. Data analysis (Statistics and bioinformatics).
 - iv. Generate predictive models.
- g. Open-source software like R is very important.
 - i. Helps to eliminate manual "cut and paste errors", etc.
- h. Preparing for careers that require data science skills.
 - i. Critically read papers and understand what they are doing.
 1. Look under the hood at their algorithms, parameters, etc.
 - ii. Learn how to code (especially in R).
 - iii. Apply languages to practical problems that you encounter with your job/life.
 1. Helps you to learn languages very quickly.
- i. Forgotten skills.
 - i. Numerical common sense.
 - ii. Basics.
 1. P-value definition.
 2. Math with logs.
 - iii. Biology of systems that you are dealing with.
- j. Take home messages.
 - i. Future of food safety is in data.
 - ii. We need people that understand data science, biology, and industry/practical appliances.

2. Overview of 2 UK Initiatives: Food Safety Professionals Register and Competencies for new graduates – Bertrand Emond.

- a. Food Safety Professionals Register.
 - i. IFST's professional register recognized and supports those working at all levels in food safety roles throughout the sector.
 - ii. People get on to the register through a peer-reviewed application.
 1. Depends on experience and technical qualifications.
 - iii. Employees use it for professional development and employers use it be confident in their employees.
 - iv. Food safety principal – Food safety manager – Food safety practitioner.
 1. Hierarchy.
- b. Competencies for Food Graduate Careers.
 - i. "Oven-ready graduates".
 - ii. Project started in 2015 to help determine what competencies may be desired in a new graduate and how graduate programs can help students obtain these skills.
 - iii. 14 potential food science careers were identified and certain desirable traits for each role were assigned.
 1. Helps to get people into the right careers and have proper competencies.

- iv. Using data from this initiative, they were able to write clear job specifications that were helpful in terms of recruiting and identifying the best candidate for the job.
- v. Questions and answers.
 1. Register: How long is validity for registration?
 - a. Annual registration.

3. Student PDG announcements – Chase Golden.

- a. Student PDG mentor/mentee program is continuing this year.
- b. Various Student PDG-sponsored events occurring at 2019 IAFP.

4. Food Safety Careers in the Seafood Industry – Forest Reichel, Kevin Edwards, and Lisa Weddig.

- a. Many ways to find success within the food industry.
- b. Values that define a good employee – allow employees to thrive as an individual and team member.
 - i. Passion.
 - ii. Integrity.
 - iii. Entrepreneurialism.
 - iv. Innovative spirit.
- c. In the food sector many different types of operations:
 - i. Food laboratory and research.
 - ii. Regulatory compliance and technical support.
 - iii. Audit/Training operations.
 - iv. Sustainability, economy, ethics, environment.
 - v. Management – TQM.
 - vi. Need to find out which of these suits you best as an employee.
- d. On the business side, leadership is looking for people who can move between operations roles and business roles.
- e. Transitions very important as the seafood industry is growing 5–10% per year.

5. DFSP Announcements and New Business – Dina Scott.

- a. Looking for new Vice Chair – seeking nominees.
- b. Webinars no longer need to be sponsored.
- c. IAFP connect.
 - i. Transitioning into using this medium to communicate with PDG members.
- d. Symposia.
 - i. Two for this year:
 1. Artificial Intelligence and Machine Learning.
 2. Precarious Balancing Act: Co-Managing Pre-Harvest. Environments to Maximize Food Safety, Sustainability, and Economic Viability of Farm Operations.
- e. Ideas for future symposia (2020):
 - ii. Potential Webinar: Ways to develop as a food safety professional for those not having a traditional food safety

background/transitioning into the food safety industry from a different industry – Daniel Burnett and Matt Moore.

- iii. Data driven quality management – insider insight from the industry – Sarah Murphy.
 1. How are data used in the industry in different sectors?
 2. How to efficiently use WGS within the industry.
 3. Dina Scott to help.
- iv. Challenges for e-commerce in different types of economies – Sarah Murphy.
 1. Developing and developed economies.
 2. Dina Scott to help.
- v. Within quality realm, there is a high turnover rate. What should students expect when entering this field? – Kiana Williams.
 1. Expectations vs reality in the plant culture.
 2. Sarah Murphy said she would work with her.
- vi. Potential workshop idea: Running through programming examples/lines of code and how this can be useful for food safety professionals – Matt Moore and Sarah Murphy.
- vii. Potential roundtable idea: A day in the life of a food safety professional. Gather different types of food safety professionals (industry, government, academia) and give students an idea of the day to day responsibilities that they have. – Chase Golden.
 1. Will help give students tips of how to transition from being a graduate student into the working world.
- f. Candidates to replace Matt Moore as the PDG Vice Chair.
- viii. Volunteer position.
- ix. Voting to be completed on Survey Monkey.
- x. Naim Montazeri volunteered himself for this position.

Recommendations to the Executive Board:

1. A lower postdoc fee be considered for Membership and/or Annual Meeting registration to help alleviate financial pressures on postdocs.
2. Mentoring program specifically for the DFSP PDG similar to Student PDG to assist new members and new food safety professionals to adapt to the industry.
3. Consider providing scholarships for students or postdocs to go to pre-conference workshops.

Next Meeting Date: August 2–5, 2020, Cleveland, Ohio.

Meeting Adjourned: 5:10 p.m.

Chairperson: Dina Scott.

