

# FOOD SAFETY

Specialty Section | Society of Toxicology | Fall 2020

## In this issue

President's Greeting 1

Officer List 1

Awards 2

New Officer Bios 3

Sponsors 5

Call for Officers 5

Financial Report 5

Workshop Report 6

## Current FS<sup>3</sup> Officers

Chester Rodriguez, President

[chester.rodriguez@duke.edu](mailto:chester.rodriguez@duke.edu)

Sachin Bhusari, Vice President

[bhusaris@gmail.com](mailto:bhusaris@gmail.com)

Logeswari Ponnusamy, Vice President-Elect

[drlogs8910@gmail.com](mailto:drlogs8910@gmail.com)

Mansi Krishan, Past President

[mansi.krishan@outlook.com](mailto:mansi.krishan@outlook.com)

Britney Geter, Secretary/Treasurer

[bgeter@coca-cola.com](mailto:bgeter@coca-cola.com)

Ray Matulka, Senior Councilor

[rmatulka@burdockgroup.com](mailto:rmatulka@burdockgroup.com)

Alexandra Lobach, Junior Councilor

[Alexandra.lobach@intertek.com](mailto:Alexandra.lobach@intertek.com)

Daniele Wikoff, Junior Councilor

[dwikoff@toxstrategies.com](mailto:dwikoff@toxstrategies.com)

Jorrell Fredericks, Postdoc Rep

[jorrellf@iastate.edu](mailto:jorrellf@iastate.edu)

Ruth Nabwire Wangia, Senior Graduate Student Rep

[rnw95451@uga.edu](mailto:rnw95451@uga.edu)

## Letter from the President

Greetings SOT FS<sup>3</sup> members,

I hope all of you are doing well and staying safe. 2020 has been a very unusual year to say the least. COVID-19 has disrupted our lives in so many ways including the cancellation of the 2020 SOT annual meeting planned to take place in Anaheim, CA. Although disruptive, COVID-19 has not stopped the FS<sup>3</sup> specialty group activities. We have continued to "push through." As we get ready to say good bye to 2020, I'd like to share some highlights of our activities as a

specialty group which are generally aimed at (1) Advancing the Science by promoting scientific and regulatory aspects of Food Safety Toxicology; (2) Communication by promoting the interaction of Food Safety toxicologists in different sectors including industry, government, and academia; and (3) Education and Training of the next generation of Food Safety Toxicologists.



(1) Advancing the Science FS<sup>3</sup> endorsed in 2020 several sessions which have advanced the understanding of the scientific and regulatory aspects of Food Safety Toxicology. First, our group endorsed a highly relevant Food Safety workshop entitled: "Globally Harmonized Guidance for Dose-Response Analysis and Derivation of Health-Based Guidance Values for Chemicals in Food." Although the platform was virtual, the workshop was well-received for its global perspective and speakers from different geographies. FS<sup>3</sup> also co-hosted a webinar entitled "US FDA's safety evaluation of foods from genetically engineered plants" which highlighted some of the challenges facing regulatory agencies as more food ingredients are derived from genetically engineered plants. FS<sup>3</sup> also co-chaired with the Health and Environmental Sciences Institute (HESI) a multi-day workshop entitled "From Protein Toxins to Applied Toxicological Testing" which addressed the use of *in vitro* and *in silico* approaches for assessing protein safety for food use.

(2) Communication: FS<sup>3</sup> has revamped its communication efforts for reaching a wider audience by launching the SOT Food Safety Specialty Section LinkedIn page. The goal is not only to keep FS<sup>3</sup> members informed of our activities, but also reach a wider audience with interest in Food Safety Toxicology. We plan to also use our LinkedIn page in a dynamic way to highlight our activities including awards, acknowledge our sponsors for their generous contributions to our specialty group activities, and even promote training opportunities within Food Safety toxicology.



## Annual Meeting & ToxExpo

### VIRTUAL EVENT • MARCH 2021

(3) Education & Training: Our efforts for promoting the education and training of the next generation of Food Safety Toxicologists have also continued. We awarded and delivered the “Frank C. Lu Early Career Scientist Award,” “Frank C. Lu Graduate Student Award,” and the “Burdock Student Award” to well-deserved early career toxicologists doing very impactful toxicological research in Food Safety toxicology (please see the list of recipients below).

As you can see, we have pushed through in spite of the disruptions by Covid-19. I would like to thank the current FS3 executive committee for their commitment, enthusiasm, and contributions under challenging circumstances. Although the 2021 Annual Meeting will be virtual, SOT is working hard on making it impactful and I would like to encourage all of you to attend.

Please stay safe.

Sincerely,

Chester Rodriguez, PhD, DABT, ERT

## *Awards*

**Burdock Student Travel Award:** Ruth Wangia, University of Georgia, SOT 2020 abstract titled: “Surveillance of Aflatoxin Contamination Levels in Household Maize for Human Consumption in Kenya, East Africa.”

**Frank C. Lu Graduate Student Award:** Robert A. Freeborn, Michigan State University, SOT 2020 abstract titled “Development of a T cell-specific Nrf2-null mouse model to determine the role of Nrf2 in impaired T cell response to influenza by tBHQ”

**Frank C. Lu Early Career Scientist Award:** Dr. Mimi (Madelyn) Huang, Division of Toxicology, National Toxicology Program, National Institute of Environmental Health Science, SOT 2020 abstract titled “Elucidating relationships between internal dose, thyroid hormones, and hepatic gene expression altered by perfluoroalkyl substances in rats following 28-day oral exposure.” influenza by tBHQ”

*“I am very honored to be the recipient of this year’s Food Safety Specialty Section Early Career Scientist award. It means a lot to be recognized by leaders in this field as I start my career and I greatly appreciate the support and kind words I have received from this specialty section. I hope that I can continue to contribute to this valuable and important work in food safety!”*  
- Mimi Huang



## New Officer Bios

### Sachin Bhusari

[DVM, MS, PhD, DABT, ERT; Manager, Food Additives Safety, The Coca-Cola Company]

Dr. Bhusari is currently working as a Manager of Food Additives Safety at the Coca-Cola Company, where his role is to provide project and subject matter expertise related to human health risk assessments and global regulatory approvals of various food ingredients (e.g., sweeteners, colors, flavors etc.). Prior to his current role, he worked at the National Toxicology Program, RTP, NC as a Research Fellow in the Cellular & Molecular Pathology group to identify and extrapolate the relevance of tumors response seen in NTP rodent bioassays to human health hazard evaluations. At NTP, Dr. Bhusari was awarded the 2012 NIH Merit Award for significant impact on the investigation of molecular mechanisms of carcinogenesis in the National Toxicology Program bioassay. He has been a member of the SOT since 2005 and has served the SOT in the multiple capacities such as Secretary/Treasurer of Southeastern chapter of SOT, 2017-19, Councilor & Chair of newsletter committee of the Association of Scientists of Indian Origin, SOT, 2012-14, Postdoctoral representative on Continuing Education committee, SOT, 2012-14.



### Logeswari Ponnusamy, VP-Elect

[DVM, MVSc, PhD Principal Scientist- Human Food Safety Toxicology, Safety Sciences, Metabolism and Safety Division, Veterinary Medicine Research and Development, Zoetis, MI]

Dr. Ponnusamy is a Principal Scientist (Human Food Safety Toxicology) within Veterinary medicine R&D at Zoetis Animal Health. As a subject matter expert, she develops regulatory toxicology strategy for veterinary drug discovery and development and support risk assessments for active pharmaceutical ingredients, excipients, impurity qualification for drug substances/ products and cleaning validation for manufacturing etc. She is also an industry representative for VICH Human Food Safety Working Group. Dr. Ponnusamy has diverse research background which included DVM, MS (Pharmacology & Toxicology) and PhD (Toxicology). Her previous research experiences included epigenetics of acquired chemoresistance and pediatric oncology summer traineeship focused on epigenetics of Wilms' tumor. She has authored/ co-authored 11 publications/ book chapter and contribute to toxicology community as a peer reviewer for several scientific journals including Food and Chemical Toxicology, Reproductive Toxicology etc. Dr. Ponnusamy has been an active member of the SOT since 2013 and served on various leadership roles within SOT including Councilor for FS3 handling Frank Lu Student award and Fundraising/sponsorship. She has received various research grants, fellowships, and multiple awards including SOT SS awards and outstanding leadership award from GSLC. Besides SOT, Dr. Ponnusamy is an active member in American College of Toxicology (ACT) and AAAS and serving on ACT-Outreach Committee and Social Media Working Group. In addition to holding positions of increasing responsibilities within the industry, Dr. Ponnusamy has been actively promoting toxicological sciences from K-12 to undergraduate level and STEM mentoring through different organizations.



## Thank you to the outgoing officers!

*Karin (Qingdong) Ke, Past President*

*William Tolleson, Councilor*

*Sascha Nicklish, Councilor*

*Jorrell Fredericks, Postdoctoral Representative;*

*Sumira Phatak, Graduate Student Representative*

## *New Officer Bios, cont.*

### **Britney Geter, Secretary-Treasurer**

[Senior SRA Specialist- Risk Assessment and Toxicology, The Coca-Cola Company, Atlanta, GA]

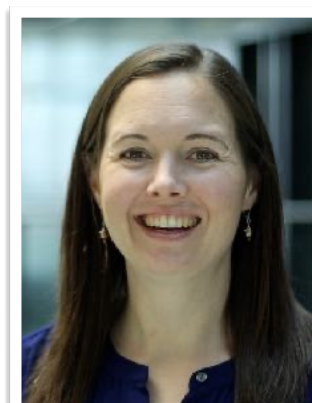
Dr. Geter is currently a Senior SRA Specialist, Risk Assessment and Toxicology at the Coca-Cola Company where she evaluates and approves new ingredients and food contact materials to be used safely in the company's products, as well as researches trending ingredients for new innovations for the North America portfolio. This work lends itself to ensure that the ingredients and materials used in beverages are safe for human consumption. Britney received her Master of Science Degree in Pharmacology and Toxicology from Michigan State University in 2016. Much of her experience and research focused on research and development initiatives in the consumer goods industry, she has 9 years of experience in the Regulatory and Food Safety Field. Britney has been a member of SOT since 2015.



### **Alexandra Lobach, Junior Councilor**

[Sr. Manager, Toxicology, Chemistry & Regulatory Affairs: Intertek]

Dr. Lobach is a senior member of the Food & Nutrition groups at Intertek Scientific & Regulatory Consultancy (formerly Cantox Health Sciences Inc.) where she oversees safety assessments of food ingredients, additives, and dietary supplements and assists companies with navigating global scientific and regulatory requirements to ensure that their products are safe and compliant. She has been with the Intertek Food and Nutrition group for over 6 years and in this capacity has assisted numerous companies in successfully bringing their food ingredient/supplement products to market globally. Alexandra completed her BSc in Chemistry and MSc (App) in Biotechnology at McGill University in Montreal and received her PhD from the University of Toronto, Department of Pharmaceutical Sciences. Her doctoral work in immunotoxicology involved studying the immune mechanisms of idiosyncratic adverse drug reactions. Prior to pursuing her PhD, Alexandra was employed as a scientist at Charles River Laboratories where she managed the immunochemistry arm of GLP toxicology studies, and she also previously worked at a life sciences biotech startup developing product-specific analytical assays for the evaluation of preclinical test samples. She has published several papers in peer-reviewed journals and authored and presented scientific posters on the topics of probiotic safety, low/no calorie sweeteners and the microbiome, immunotoxicology, and drug safety and metabolism. She has been an active member of the SOT since 2011 and previously served as a Councilor for the Lake Ontario Regional Chapter.



## **Thank you to the outgoing officers!**

*Karin (Qingdong) Ke, Past President*

*William Tolleson, Councilor*

*Sascha Nicklish, Councilor*

*Jorrell Fredericks, Postdoctoral Representative;*

*Sumira Phatak, Graduate Student Representative*

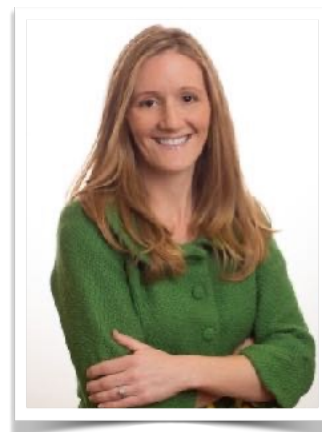


## *New Officer Bios, cont.*

### **Daniele Wikoff, Junior Councilor**

[Health Sciences Practice Director, ToxStrategies, Asheville, NC]

Dr. Wikoff specializes in the implementation of evidence-based methods in support of hazard and risk assessment applications for food ingredients and contaminants, industrial chemicals, and consumer products. She has experience evaluating toxicological and risk issues related to a wide range of agents, evidence streams, data types, and outcomes. She received her PhD in Toxicology from UNC-Chapel Hill in 2005 after completing her research at the USEPA. Dr. Wikoff actively participates in the scientific community by serving as an Associate Editor at Toxicological Sciences as well as Regulatory Toxicology and Pharmacology. She has authored over 35 peer-reviewed scientific papers, 11 protocols, and numerous book chapters focused on toxicology, risk assessment, and systematic review. Dr. Wikoff is involved in a number of global collaborations to advance the practice of evidence-based toxicology, highlighted by her membership on the Board of Trustees and role as the Vice-Chair of the Science Advisory Council for the Evidence-Based Toxicology Collaboration (EBTC). Dr. Wikoff also currently serves as the Vice President-Elect of the SOT Risk Assessment Specialty Section.



## **Call for Specialty Section Officer Elections!**

**FS<sub>3</sub> Officer Positions: Vice President-Elect, Junior Councilors, Postdoctoral Representative, Graduate Student Representatives**

In order to have new officers in place by May 1, 2021, please submit all candidate biosketches to SOT Headquarters by December 31, 2020. Early submissions are welcome!

Timeline for elections:

December 31, 2020 – Biosketches to SOT Headquarters

January 2021 – Ballots sent from SOT Headquarters to Specialty Section Members

February 2021 – Ballot results sent to Specialty Section Presidents

## We still have an opening for a Junior Graduate Student Representative!

Read about the roles and responsibilities [here](#).

Click [here](#) for more information on how to apply for the following student awards:

[Burdock Group Travel Award](#)

[Frank C. Lu Student Award](#)

Applications due January 15, 2021!

*Award winners will be announced in the spring!*

[Early Career Scientist Award](#) -

Established by the FS3 to honor a meritorious early career scientist trainee

**THANK YOU to our Sponsors for 2020-2021!**



### *Financial Report*

**June 2019 balance**  
**\$22,496**

**June 2020 balance**  
**\$32,398**

## Workshop Report



### ***“From Protein Toxins to Applied Toxicological Testing” Virtual Workshop, Oct. 21-23, 2020***

<https://hesiglobal.org/event/patb-committee-protein-toxins-workshop/>

Organized by the **HESI Proteins, Allergens, Toxins, and Bioinformatics (PATB) committee**  
and the **Food Safety Specialty Section (FSSS) of the Society of Toxicology (SOT)**.



Health and Environmental Sciences Institute (HESI)

The [Society of Toxicology \(SOT\) Food Safety Specialty Section \(FSSS\)](#) co-hosted a virtual workshop with HESI [Protein Allergens, Toxins, and Bioinformatics \(PATB\) Committee](#), from 21-23 October 2020 titled “From Protein Toxins to Applied Toxicological Testing” in the context of safety assessment of novel foods and feeds.

This event brought together international experts from the academic, regulatory, and industry sectors. FSSS officers- Drs. Mansi Krishan, Chester Rodriguez, and Ray Matulka, represented FSSS and served as co-chairs during this 3-day workshop. Dr. Matulka and seven other speakers presented recent advances in protein toxins biology, the use of computational biology for protein toxins identification and characterization within *silico* approaches and discussed the applicability of existing tools and resources for safety assessment of novel food biotechnology products. With an impressive outreach and audience engagement (200 participants from four continents and 20 countries registered), the event ended with a consensus on concrete, tangible next steps, which will be described in a publication reporting on the event. For a full description of the event, please visit the [event webpage](#), or contact Dr. Lucilia Mouriès ([lmouries@hesiglobal.org](mailto:lmouries@hesiglobal.org)). Speakers' slides will be added soon in the event page.