ISES2017 PROGRAM

Integrating Exposure Science Across Diverse Communities

Research Triangle Park, NC, USA

October 15-19, 2017

Print Date: 10.5.17

INTERNATIONAL SOCIETY OF EXPOSURE SCIENCE

		Sunday October 15	Monday October 16	Tuesday October 17	Wednesday October 18	Thursday October 19
6:30	7:00			DIVERSITY & S/NR BREAKFAST	S/NR MENTORSHIP BREAKFAST	
7:00	7:30					
7:30	8:00					
8:00	8:30	OPTIONAL COURSES (add'l fee)	PLENARY (2) (Imperial Ballroom IV - VII)	PLENARY (3) (Imperial Ballroom IV - VII)	PLENARY (4) (Imperial Ballroom IV - VII)	
8:30	9:00					90 m ORAL
9:00	9:30		90 m ORAL		90 m ORAL	
9:30	10:00			60 m ORAL		
10:00	10:30	ISES BOARD MEETING (closed)				BREAK
10:30	11:00		POSTER VIEWING & BREAK	POSTER VIEWING & BREAK	POSTER VIEWING & BREAK	90 m ORAL
11:00	11:30		60 m ORAL	60 m ORAL	60 m ORAL	
11:30	12:00					
12:00	12:30		LUNCH (Imperial Ballroom III)	LUNCH (Imperial Ballroom III) GENERAL MEMBERSHIP MEETING	LUNCH (Imperial Ballroom III)	
12:30	13:00					
13:00	13:30	OPTIONAL COURSES (add'l fee)				
13:30	14:00		90 m ORAL	90 m ORAL	90 m ORAL	
14:00	14:30					
14:30	15:00					
15:00	15:30		POSTER VIEWING & BREAK	POSTER VIEWING & BREAK	POSTER VIEWING & BREAK	
15:30	16:00		90 m ORAL	90 m ORAL	90 m ORAL	
16:00	16:30					
16:30	17:00					
17:00	17:30					
17:30	18:00	WELCOME & OPENING PLENARY (Imperial Ballroom IV - VII)		COMMITTEE, EXHIBIT, SENSOR AND TECHNOLOGY FAIR (Empire Ballroom)	S/NR MIXER (Imperial Foyer)	
18:00	18:30		DINNER (Motorco) (ticketed event)			WOMEN'S NETWORKING (Mez Restaurant) (ticketed event)
18:30	19:00					
19:00	19:30	WELCOME RECEPTION & STUDENT COMPETITION (Empire Ballroom)		FOOD TRUCK RODEO (Sheraton parking area)		
19:30	20:00					
20:00	20:30					
20:30	21:00					
21:00	21:30					

Table of Contents

ISES2017

Research Triangle Park, NC
October 15-19, 2017

Integrating Exposure Science Across Diverse Communities

3 - Welcome Messages
4 - ISES Organization
8 - Meeting-at-a-Glance
- **8** - Sunday, October 15
- **9** - Monday, October 16
- **10** - Tuesday, October 17
- **11** - Wednesday, October 18
- **12** - Thursday, October 19

13 - General Information
17 - Presenter & Session Chair Instructions
19 - Students & New Researchers Program
21 - Pre-Conference Courses
25 - Special Events
26 - ISES Awards
- **26** - Jerome J. Wesolowski Award
- **27** - Constance L. Mehlman Award
- **28** - Joan M. Daisey Outstanding Young Scientist Award
- **29** - IPA/DGUV Award for Young Exposure Scientists
- **29** - New Society Awards: Inaugural Winners

30 - Plenary Sessions
- **30** - Plenary, Sunday, October 15
- **31** - Plenary, Monday, October 16
- **32** - Plenary, Tuesday, October 17
- **33** - Plenary, Wednesday, October 18

34 - Program
- **34** - Sunday, October 15
- **39** - Monday, October 16
- **55** - Tuesday, October 17
- **70** - Wednesday, October 18
- **86** - Thursday, October 19

93 - Future Meeting
94 - Maps
95 - Supporters
96 - Exhibitors
96 - Sensor Fair Participants

Welcome Message

From the Organizing Committee Co-Chairs

Jennifer Lantz
Research Triangle Park, NC USA

Jane Hoppin
Raleigh, NC USA

David Balshaw
Research Triangle Park, NC USA

Dear colleagues:

Welcome! On behalf of the conference organizers, it is our great pleasure to welcome you to the 27th Annual Meeting of the International Society of Exposure Science at the Sheraton Imperial Convention Center in Durham, North Carolina. The 2017 meeting is entitled Integrating Exposure Science Across Diverse Communities. The Research Triangle Park area is one of the world's first, and largest, research parks, and is strengthened and diversified by building on the concentration of and close connections among industry, academia, and government, as well as local community partnerships. The three chairs from different sectors (government, academia and industry) reflect this collaboration and we encouraged the theme to be reflected throughout the conference. We expect the meeting to be a great opportunity for you to learn about the latest advances in a wide array of exposure topics, while networking and re-connecting with colleagues from around the world.

Seven pre-conference courses are offered on Sunday, October 15th at The Sheraton Imperial Convention Center. The scientific program from Monday through Thursday noon is packed and includes approximately 600 abstracts in 102 sessions consisting of 64 Symposium, 34 general sessions and 3 day-long poster sessions on a wide array of exposure topics. There is something for everyone. Plenary speakers at the Opening Program and Monday to Wednesday morning will speak on diverse and thought provoking exposure science topics.

And of course, we encourage you to have fun, meeting new people and networking at our many social events. We especially encourage interaction with our students and new researchers, the future of our society. Events include the Sunday Opening Reception and Student Poster Contest, the Monday evening Meeting dinner at a local venue followed by a band, the Tuesday evening "Big Fair" (this year to include our exhibitors, sensor demonstrations and ISES committees), and the Women's Networking event and Student reception.

ISES is committed to protecting the natural environment through responsible resource utilization at our annual meetings. The 2017 meeting will be the fourth annual meeting to utilize an electronic application instead of a paper program. This year we are going to try something new: a conference bag exchange. Rather than providing bags this year we want to recycle all those old bags you have lying around. Participants are encouraged to bring bags from previous meetings or even other conferences. Bags will be placed on a table in registration and participants can simply leave their bag(s) and/or take a bag someone else has left. Any bags left on the table at the end of the meeting will be donated to a local charity.

Finally, we would like to recognize that some of our colleagues were not able to attend the meeting this year because of state travel bans due to the controversy surrounding the passage of House Bill 2 (HB2) that requires that people use public restrooms based upon their gender at birth. We deeply regret that the issue has not been resolved but hope to emphasize and demonstrate during the meeting the strong commitment to diversity and inclusion and total non-tolerance of discrimination in our Society, in our work lives and in our communities in the RTP area.

We look forward to seeing you at the meeting and hope you enjoy your experience.

Sincerely,
Co-Chairs, Technical Organizing Committee, ISES 2017

Welcome Message

From the ISES President

Judy LaKind
Catonsville, MD USA

The location of the 27th annual meeting of ISES takes place in Research Triangle Park, NC, truly a hub for "consequential science" – doing science that matters and using our tools for the greater good. I want to thank our three co-chairs – Jennifer Lantz, David Balshaw and Jane Hoppin – for their leadership and creativity. Through their efforts, we will be able to enjoy an excellent program – both scientific and social - under the theme of Integrating Exposure Science Across Diverse Communities. It is hard to imagine a more relevant theme for our time. But I know that our co-chairs did not work alone. So thanks go out to the Technical Organizing Committee, Committee Chairs, and Infinity Conference Group for their hard work. And of course many, many thanks to our meeting sponsors. Finally, thanks to our meeting participants – your commitment to exposure science and to ISES is what has made it possible for us to reach the milestone of 27 meetings.

Please be sure to take absorb not only great barbeque but also lots of science and camaraderie. And if you are looking for ways to get involved - or more involved - with the Society, please don't hesitate to reach out to ISES leadership.

Judy LaKind
President, ISES

ISES Organization

2017 ISES Board of Directors

Executive Officers

POSITION	NAME	TERM END
President	Judy Lakind	2018
Treasurer	Anne Riederer	2017
Secretary	Lisa Baxter	2018
Past President	Tim Buckley	2017

Councilors

POSITION	NAME	TERM END
Councilor – Academic	Chris Simpson	2017
Councilor – Academic	Lesliam Quiros-Alcala	2018
Councilor – Academic	Erin Hayne	2019
Councilor – Government	Dan Vallero	2017
Councilor – Government	Brian Curwin	2018
Councilor – Government	Pertti (Bert) Hakkinen	2019
Councilor – Private Sector	Miranda Loh	2017
Councilor – Private Sector	Sonja Sax	2018
Councilor – Private Sector	Robin Dodson	2019
Councilor – Student	Crystal Romeo	2017
Councilor – Student	Cecilia Sara Alcala	2018

ISES Organization

About ISES

The International Society of Exposure Science - ISES: To better our world, its ecosystems, and inhabitants, by creating an international community that advances and integrates exposure science into research and action.

ISES works to meet humanity's needs for public health and environmental protection through a global community of exposure science professionals. ISES encourages the open exchange of information, provides opportunities for career development, acknowledges and promotes excellence in the practice of exposure assessments and research in the field of exposure science.

The International Society of Exposure Science (ISES) promotes and advances exposure science (methods, measurements, models) as it relates to the complex inter-relationships between human populations, communities, ecosystems, wildlife, and chemical, biological, and physical agents, and non-chemical stressors. ISES members have diverse expertise and training in biological, physical, environmental, and social sciences, as well as various engineering disciplines. According to the National Research Council, "exposure science links human and ecological behavior to environmental processes in such a way that the information generated can be used to mitigate or prevent future adverse exposures." The Society's multidisciplinary expertise and international reach make it the premiere professional society for practitioners associated with all aspects of exposure science (research, teaching, policy, communication, outreach).

The society is the premiere professional society for exposure scientists. It is an international network of governmental, academic, and private sector professionals with an interest (and for many, a passion) in exposure science. Exposure science plays a pivotal role in advancing scientific knowledge and identifying solutions to some of the globe's greatest environmental problems, including human and ecosystem chemical and pathogen exposures and exposures related to climate change.
ISES works to meet humanity's needs for public health and environmental protection through a global community of exposure science professionals. ISES encourages the open exchange of information, provides opportunities for career development, acknowledges and promotes excellence in the practice of exposure assessments and research in the field of exposure science.

ISES Organization

2017 Annual Meeting Co-Chairs

David Balshaw, NIEHS

Jane Hoppin, NC State University

Jennifer Lantz, Bayer

2017 Technical Organizing Committee

John Adgate
Colorado School of Public Health

Lesa Aylward
Summit Toxicology

Zhipeng Bai
IAS-Chinese Research Academy of Environmental Sciences

Nilla Barros
U.S. EPA

Lisa Baxter
U.S. EPA

Paloma Beamer
University of Arizona

Ben Blount
CDC

Liz Boyle
National Academies of Sciences, Engineering, and Medicine

Yuxia Cui
NIEHS

Cynthia Curl
Boise State University

Brian Curwin
CDC

Nicole Deziel
Yale University

Robin Dodson
Silent Spring Institute

Sarah Gilpin
Estee Lauder

Erin Haynes
University of Cincinnati

Megan Horton
Icahn School of Medicine at Mount Sinai

Markey Johnson
Health Canada

Debra Kaden
Ramboll Environ

Vasu Kilaru
U.S. EPA/NERL

Richard Kwok
NIEHS

Laura Kwong
Stanford University

Judy LaKind
LaKind Associates

Miranda Loh
Institute of Occupational Medicine

Yang Liu
Emory University

Konstantinos Makris
Cyprus University of Technology

M. Elizabeth Marder
OEHHA, CalEPA

Pallavi Pant
University of Massachusetts

Jaymie Meliker
Stony Brook University

Lisa Melnyk
U.S. EPA

Marsha Morgan
U.S. EPA

Liam O'Fallon
NIEHS

Cian O'Mahony
Creme Global

Tor Oiamo
Ryerson University

Paul Price
U.S. EPA

Nicole Popovich
NIEHS

Hua Qian
ExxonMobil

Lesliam Quiros Alcola
University of Maryland

Crystal Romeo Upperman
University of Maryland

Ana M. Rule
Johns Hopkins University

Paul Scheepers
Radboud University Nijmegen

Jon Sobus
U.S. EPA

Chris Simpson
University of Washington

Jennifer Thomasen
Bayer

Jonathan Thornburg
RTI International

Nicolle Tulve
U.S. EPA

Dan Vallero
U.S. EPA/NERL

Jun Wu
University of Maryland

Xiangmei (May) Wu
CalEPA/OEHHA

Bruce Young
Bayer

Rosemary Zaleski
ExxonMobil

ISES Organization

The following individuals contributed their time reviewing the **606** oral and poster abstracts received. Their contribution to ensuring the quality of the meeting is gratefully acknowledged!

Abstract Peer Reviewers

John Adgate
Raghavendhran Avanasi
Lesa Aylward
Zhipeng Bai
David M Balshaw
Nilla Barros
Lisa K Baxter
Paloma I. Beamer
Benjamin Blount
Elizabeth Barksdale Boyle
Yuxia Cui
Cynthia Curl
Brian Curwin
Nicole Deziel
Robin Dodson
John L Durant
Sarah Gilpin
Erin Haynes
Jane Hoppin
Megan K Horton
Markey Johnson
Debra Kaden
Vasu Kilaru
Richard Kwok
Laura Kwong
Jennifer Lantz
Yang Liu
Miranda Loh
Konstantinos Christos Makris
M. Elizabeth Marder
Jaymie Meliker
Lisa Jo Melnyk
Marsha K Morgan
Custodio Valentim Muianga
Cian O' Mahony
Liam O'Fallon
Tor H Oiamo
Pallavi Pant
Paul Price
Hua Qian
Lesliam Quiros Alcola
Crystal Romeo Upperman
Ana M Rule
Paul T. Scheepers
Christopher Simpson
Jon R Sobus
Jennifer Thomasen
Jonathan Thornburg
Nicolle S Tulve
Daniel Alan Vallero
Jun Wu
Xiangmei (May) Wu
Bruce M. Young
Rosemary Zaleski

Meeting-At-A-Glance

Sunday, October 15

Time	Auditorium	Crown A/B	Royal A	Royal B	Sandhills
7:00 am- 5:30 pm	**Registration**				
8:00 am- 12:00 pm		Unraveling the NIH Grants Process	Introduction to APEX: Estimating Population-based Air Pollutant Exposure, Dose, and Health Risk	Assessing Exposure to Chemicals in Consumer Products for Alternatives Assessment, Life Cycle Assessment, and High-throughput Risk Screening – The Product Intake Fraction Framework Theory and Practical Examples	Air Quality Monitors – Get out! Get active! Get data!
1:00 pm- 5:00 pm		Introduction to BenMAP-CE: Estimating the Risks and Benefits of Reducing Air Pollution	Using US EPA's Chemical Safety for Sustainability's Comptox Chemistry Dashboard and Tools for Bioactivity, Chemical and Toxicokinetic Modeling Analyses	Science Communication for Exposure Scientists: From Traditional Media to Social Media	
5:30 pm- 7:00 pm	**Welcome and Opening Plenary (Imperial Ballroom IV - VII)** **Visions of Exposure Science** *Gwen Collman, PhD – PRESENTATION* *Tashni-Ann Dubroy, PhD – PRESENTATION* *Chancellor Randy Woodson, PhD – PRESENTATION*				
7:00 pm- 9:00 pm	**Welcome Reception and Student Poster Competition (Empire Ballroom)**				

Ancillary Meetings:

ISES Board Meeting (closed)	10:00 am – 5:00 pm	Crystal Coast Ballroom

Speaker Ready Room

The Speaker Ready Room is located in **Park Boardroom**. Hours are:

Sunday 7:00 a.m. – 5:00 p.m.

Monday 7:00 a.m. – 5:30 p.m.

Tuesday 7:30 a.m. – 5:30 p.m.

Wednesday 7:30 a.m. – 5:30 p.m.

Thursday 7:45 a.m. – 10:30 a.m.

The room is equipped with two computers, Internet connections and a printer.
This room is to be use to make presentation changes or to review your presentation.
YOU WILL NOT be able to upload your presentation. Please stop by the registration desk to have your presentation uploaded.
If a speaker or chairperson requires assistance, please come to the registration desk and ask for Pam Jensen or Erika Perez.

Meeting-At-A-Glance

Monday, October 16

Time	Bull Durham A/B	Crown A/B	Royal A/B	Crystal Ballroom	Imperial 1	Imperial 2	Auditorium
7:00 am-5:30 pm	**Registration**						
8:00 am-9:00 am	**Plenary 2: (Imperial Ballroom IV - VII)** *Karletta Chief, PhD* **(Desecration of Tó Baką'e and Diné way of life: How the Navajo Sacred Male River of the San Juan became the Yellow River)**						
9:00 am-10:30 am	MO-PL-A1 Population Biomonitoring	MO-SY-B1 Diverse Applications of Exposure Science for Big Impact in Global Health – Domestic hazards	MO-PL-C1 Risk Assessment Models	MO-SY-D1 US EPA STAR Program: Novel Research for 21st Century Exposure Science - Part 1	MO-PL-E1 Indoor Air Quality & Particulates	MO-SY-F1 Pathways and mechanisms linking exposure to the natural environment with health and well-being benefits	MO-SY-G1 The Influence of Aviation Emissions on Exposures at Local, Regional and National Scales
10:30 am-11:00 am	**Coffee Break and Poster Viewing (Empire Ballroom)**						
11:00 am-12:00 pm	MO-PL-A2 Wrist Bands As Sensors	MO-PL-B2 Biomass Burning & Health	MO-SY-C2 Tribal Sovereign Rights, Knowledge and Data Protections and Protocols in the Environmental Health Sciences	MO-SY-D2 US EPA STAR Program: Novel Research for 21st Century Exposure Science - Part 2	MO-PL-E2 Food Packaging	MO-SY-F2 Pathways and mechanisms linking exposure to the natural environment with health and well-being benefits - Part 2	MO-SY-G2 Road Work Ahead: Progress in Assessing and Mitigating Exposure to Traffic-Related Air Pollution
12:00 pm-1:30 pm	**Lunch (Imperial Ballroom III) set in informal rounds**						
1:30 pm-3:00 pm	MO-PL-A3 Spatial Temporal Modeling of Air Pollution	MO-SY-B3 Toxic chemical water contaminants in low and middle income countries Part I: A global grand challenge for the WASH development sector	MO-SY-C3 ATSDR Methods for Assessing Exposure to Air Pollutants in Diverse Communities	MO-SY-D3 Consumer Exposure Assessment: Tools and Information to Support a Fit-for-Purpose Approach to Exposure and Risk Assessment	MO-SY-E3 Childhood Multimedia Lead Exposures: Innovative Modeling and Data Collection Efforts by the Federal Family to Guide Public Health Decision-Making	MO-SY-F3 Quantitative High-Throughput Exposure Methods for Chemical Alternatives and Comparative Risk Assessment	MO-SY-G3 Exposure, cumulative risk, and epidemiology in communities near upstream energy development Part 1
3:00 pm-3:30 pm	**Coffee Break and Poster Viewing (Empire Ballroom)**						
3:30 pm-5:00 pm	MO-PL-A4 Novel Methods for Spatial Analysis	MO-SY-B4 Toxic chemical water contaminants in low and middle income countries Part II: Analytics, risk analysis, and mitigation strategies	MO-SY-C4 ATSDR Exposure Assessments: Science, Collaboration, and Communication to Inform Public Health Decisions in diverse communities	MO-SY-D4 Characterizing Consumer Habits & Practices to Refine Consumer Product Exposure Assessment	MO-SY-E4 Pediatric Manganese Exposure and Neurodevelopment across Diverse Populations	MO-SY-F4 A Collaborative Trial for Integrating Exposome, High-Throughput Screening, and Non-Targeted Analysis Research	MO-SY-G4 Exposure, cumulative risk, and epidemiology in communities near upstream energy development Part 2
6:00 pm-9:00 pm	**Conference Dinner (Motorco)**						

Ancillary Meetings:

NIEHS Resource Room	12:00 pm – 1:30 pm	Sandhills
ISES Committee Chairs	12:00 pm – 1:30 pm	Piedmont

Meeting-At-A-Glance

Tuesday, October 17

Time	Bull Durham A/B	Crown A/B	Royal A/B	Crystal Ballroom	Imperial 1	Imperial 2	Auditorium
7:30 am-5:30 pm	**Registration**						
8:00 am-9:30 am	**Plenary 3: (Imperial Ballroom IV-VII)** *Mary Wolff, PhD* ***"Consequential" exposure science. Lessons from environmental disparities*** *Patrick Breysse, PhD, MHS* **(2017 Weslowski Award Recipient)**						
9:30 am-10:30 am	TU-PL-A1 Air Pollution Measurement Error	TU-SY-B1 Disentangling disparities in exposures: body burdens, personal care products, and the indoor environment	TU-SY-C1 Integrating Community Engaged Research into the Exposure Science Paradigm	TU-SY-D1 The Role of Product Use Information in Quantitative Exposure Analyses	TU-SY-E1 Cheminformatics Tools to Support Exposure Analysis, Data Aggregation, and Modelling	TU-SY-F1 Applying exposure science to increase the utility of in vitro data in efficacy and safety testing: research needs to support regulatory decision making.	TU-SY-G1 Responding to PFAS Contamination Across Multiple States: A Sticky Situation - Non-Stick Chemicals in Drinking Water, Biota, and Humans
10:30 am-11:00 am	**Coffee Break and Poster Viewing (Empire Ballroom)**						
11:00 am-12:00 pm	TU-PL-A2 Air Pollution and Noise	TU-PL-B2 Environmental Justice	TU-SY-C2 Engaged Exposure Science and Epidemiology: Diverse Communities Driving Research	TU-SY-D2 Exposure to Personal Care Products and Cosmetics in Europe: Data, Models and Regulatory Challenges	TU-SY-E2 The Role of PBPK Modelling in Holistic Exposure and Risk Assessment – Case Studies and Developments within the EU Project EuroMix	TU-SY-F2 Integrating Diverse Environmental Exposure Datasets to Study Human Health – from Satellite Sensing and Ground Monitoring to Personal Exposure Part (1): Resources, Technologies and Data Access	TU-SY-G2 Ensemble Learning for Air Pollution Exposure Assessment
12:00 pm-1:30 pm	**Lunch (Imperial Ballroom III)** **General Membership Meeting**						
1:30 pm-3:00 pm	TU-PL-A3 Occupational Exposure to Pesticides	TU-PL-B3 Air Pollution - Epidemiology	TU-SY-C3 Inspiring the next generation: Bringing exposure science into the STEM community	TU-SY-D3 Challenges and Opportunities: Assessing Exposures to Chemical Substances under Amended TSCA-Methods, Models, and Data - Part 1	TU-SY-E3 Exposure, Hazard, and Risk Assessment: Putting Exposure Back in the Process	TU-SY-F3 Integrating Diverse Environmental Exposure Datasets to Study Human Health – from Satellite Sensing and Ground Monitoring to Personal Exposure Part (2): Exposure Modeling, Data Integration, and Applications in Epidemiology	TU-SY-G3 Perinatal Exposures in the Home Environment: Sources, Measurements, and Associated Health Outcomes - Part 1
3:00 pm-3:30 pm-	**Coffee Break and Poster Viewing (Empire Ballroom)**						
3:30 pm-5:00 pm	TU-PL-A4 Pesticide Tools & Processes	TU-PL-B4 Respiratory Health Effects of Air Contaminants	TU-SY-C4 Engaging Citizens and Embracing Diversity in Air Pollution Exposure Research	TU-SY-D4 Challenges and Opportunities: Assessing Exposures to Chemical Substances under Amended TSCA-Methods, Models, and Data - Part 2	TU-SY-E4 Exposure Assessment and Epidemiology for Regulatory Decision Making- Challenges and Opportunities	TU-SY-F4 An Infrastructure for Generating Exposomes: Initial Lessons from the Utah PRISMS Platform	TU-SY-G4 Perinatal Exposures in the Home Environment: Sources, Measurements, and Associated Health Outcomes - Part 2
5:15 pm-7:00 pm	**Committee, Exhibit, Sensor and Technology Fair (Empire Ballroom)**						

Ancillary Meetings:

Diversity & S/NR Breakfast	6:30 am – 8:00 am	Piedmont
UNEP/SETAC official workshop	6:00 pm – 8:30 pm	Crown A/B
Food Truck Rodeo (sponsored by ICF)	6:45 pm – 9:00 pm	Sheraton Parking Area

Meeting-At-A-Glance

Wednesday, October 18

Time	Bull Durham A/B	Crown A/B	Royal A/B	Crystal Ballroom	Imperial 1	Imperial 2	Auditorium
7:30 am-5:30 pm	**Registration**						
8:00 am-9:00 am	**Plenary 4: (Imperial Ballroom IV - VII)** *Brian Southwell* **Challenges and opportunities in public engagement regarding environmental exposure**						
9:00 am-10:30 am	WE-PL-A1 Traffic Related Air Pollution - Part 1	WE-SY-B1 2,4-D – A Case Study Of Decades Of Exposure Science; A Discussion of Quality, Quantity, and Harmonization	WE-SY-C1 Synthetic Biology and Exposure Science: Integrating Chemistry, Genetic Engineering, and Risk Management	WE-SY-D1 Social Determinants of Health, Environmental Exposures, and Disproportionately Impacted Communities: What We Know and How We Tell Others- Part 1	WE-PL-E1 Climate Change	WE-SY-F1 Merging Non-Targeted Analytical Methods, Informatics, and Predictive Modeling to Advance Next-Generation Exposure Science	WE-SY-G1 Exposure sciences from east Asian perspectives
10:30 am-11:00 am	**Coffee Break and Poster Viewing (Empire Ballroom)**						
11:00 am-12:00 pm	WE-PL-A2 Semi-Volatiles in Dust/Air in Homes	WE-SY-B2 Total Exposure Health - Advances in Exposure Sciences for Diverse Communities	WE-SY-C2 Exposure science – from research to report back: Working with your communities to communicate results appropriately	WE-SY-D2 Social Determinants of Health, Environmental Exposures, and Disproportionately Impacted Communities: What We Know and How We Tell Others- Part 2	WE-SY-E2 The NTA Fractal: Metabolome, Exposome, and Biome	WE-SY-F2 Chemical Prioritization via Computational Exposure and Hazard Screening	WE-SY-G2 Exposure to Environmental Contaminants in Diverse Communities
12:00 pm-1:30 pm	**Lunch (Imperial Ballroom III) set in informal rounds**						
1:30 pm-3:00 pm	WE-PL-A3 Air Pollution Geospatial Models	WE-SY-B3 The Pyrethroids: Triangulating Exposure, Toxicology, and Epidemiology Part I	WE-SY-C3 Biomonitoring in Action – Identifying and Remedying Harmful Chemical Exposures with Innovative Laboratory Tests, Surveillance, and Effective Communication	WE-SY-D3 Social Determinants of Health, Environmental Exposures, and Disproportionately Impacted Communities: What We Know and How We Tell Others- Part 3	WE-SY-E3 Per- and polyfluorinated substances (PFAS) in drinking water: Where exposure assessment, epidemiology, and communities meet	WE-SY-F3 The Tox21 Triangle: Toxicity Testing, Translation, and the Environment	WE-SY-G3 ZIKA VIRUS SECONDARY EXPOSURES, IMPACTS, and GUIDANCE
3:00 pm-3:30 pm	**Coffee Break and Poster Viewing (Empire Ballroom)**						
3:30 pm-5:00 pm	WE-PL-A4 Traffic Related Air Pollution - Part 2	WE-SY-B4 The Pyrethroids: Triangulating Exposure, Toxicology, and Epidemiology Part II	WE-PL-C4 Environmental Epidemiology - Birth Cohorts	WE-PL-D4 Indoor Cooking Exposure	WE-SY-E4 Improving Our Understanding of Exposures to Tire Crumb Rubber Used on Playing Fields and Playgrounds	WE-SY-F4 Integrating exposure and hazard in risk assessment using computational tools	WE-SY-G4 Global harmonization of exposure science data
5:30 pm-6:30 pm	**Student/New Researcher Mixer** **Imperial Foyer**						
6:00 pm-7:30 pm	**Women's Networking event - Ticketed Event (Mez Restaurant)**						

Ancillary Meetings:

S/NR Mentorship Program Breakfast	6:30 am – 8:00 am	Piedmont
East-Asian Chapter Meeting	12:00 pm – 1:30 pm	Piedmont
JESEE Editorial Board Meeting	12:00 pm – 1:30 pm	Sandhills
Meet the Editors	12:00 pm – 1:30 pm	Windsor Boardroom

Meeting-At-A-Glance

Thursday, October 19

Time	Bull Durham A/B	Crown A/B	Royal A/B	Crystal Ballroom	Imperial 1	Imperial 2	Auditorium Theater
7:45 am-11:00 am	**Registration**						
8:30 am-10:00 am	TH-PL-A1 Behavioral & Policy Interventions for Traffic Related Air Pollution	TH-SY-B1 ENVIRONMENTAL, OCCUPATIONAL, AND COMMUNITY EXPOSURES TO LIVESTOCK AGRICULTURE	TH-PL-C1 Temporal Trends from Biomonitoring	TH-PL-D1 Consumer Product Exposure	TH-PL-E1 Metals - Human Health	TH-SY-F1 Modeling Longitudinal Patterns of Exposure Using Agent Based Modeling and Related Techniques	TH-PL-G1 Sensor Validation
10:00 am-10:30 am	**Coffee Break (Registration Area)**						
10:30 am-noon	TH-PL-A2 Traffic Related Air Pollution - Part 3	TH-PL-B2 Environmental Exposure and Health	TH-PL-C2 Exposure & Health Effects to Perfluorinated Compounds	TH-PL-D2 Tobacco Smoke Exposure	TH-PL-E2 Metal Exposures	TH-PL-F2 Water Contaminants	TH-PL-G2 Data Sharing and the Exposome

General Information

Registration Desk Hours

The registration desk for General Registration, located on the Conference Level, will be open during the following times:

Sunday, October 15	7:00 am	5:30 pm
Monday, October 16	7:00 am	5:30 pm
Tuesday, October 17	7:00 am	5:30 pm
Wednesday, October 18	7:00 am	5:30 pm
Thursday, October 19	7:45 am	11:00 am

Registration Materials, Badges & On-site Staff

At check-in each attendee will receive an Onsite Guide, meeting name badge, and other promotional materials. Printed programs will only be available to those who purchased one as part of pre-registration. Each participant must wear his/her own badge during the entire meeting. The badge is the admission pass to meeting rooms, meeting areas, and social events.

Meeting staff can be identified by orange staff ribbons affixed to their name badges. Feel free to ask them for information at any time. During hours of operation the registration area will always be staffed by at least one person.

Wi-Fi Access

There will be Wi-Fi available in the meeting space.

Official Language

The official language of the Annual Meeting is English.

About the Annual Meeting

ISES annual meetings provide a unique opportunity to network with colleagues and develop new relationships while learning about some of the most recent research activities in our field. ISES annual meetings are organized to promote an open exchange of new ideas across disciplines, and to provide a forum for broad interactions among participants. Everyone with an interest in exposure science is invited to participate and to take advantage of opportunities to present and learn about the latest research, discuss new insights, and interact with new and long-term colleagues.

The 2017 meeting is entitled *Integrating Exposure Science Across Diverse Communities*. The program strives to incorporate the meeting theme and emphasize the interdisciplinary and multi-scale nature of exposure science, as well as the different communities involved. The Research Triangle Park area is one of the world's first, and largest, research parks, and is strengthened and diversified by building on the close collaboration of three local, internationally renowned universities, and the concentration of and close connections among industry, academia, and government, as well as local community partnerships. Building on this "Triangle" theme, the three co-chairs (themselves representing a partnership among industry, academia and government as well as disciplines of technology, epidemiology, and exposure risk assessment) are encouraging creative symposia, talks and posters incorporating three distinct yet interconnected elements related to exposure science.

About Research Triangle Park (RTP)

RTP is one of the most prominent high-tech research and development parks in the world. The area is named for the three hub cities of Durham, Raleigh and Chapel Hill, or more properly for the three major research universities in those three cities (Duke University, North Carolina State University, and the University of North Carolina at Chapel Hill, respectively). The park covers 7,000 acres situated in a pine forest with 22,500,000 square feet of built space. The park is traversed by Interstate 40; the Durham Freeway; and NC 540 and is managed by the Research Triangle Foundation, a private non-profit organization.The park is home to over 200

General Information

About RTP [cont.]

companies employing 50,000 workers and 10,000 contractors, including the second largest IBM operation in the world, smaller only than the one in India. Additionally the park hosts one of GlaxoSmithKline's largest R&D centers and Cisco Systems' campus in RTP is the second highest concentration of its employees outside of its Silicon Valley corporate headquarters.

Hotel/Meeting Site

Sheraton Imperial Hotel & Convention Center
4700 Emperor Blvd
Durham, NC 27703

The Meeting will be held at the Imperial Sheraton Conference Center, a short distance from the RDU International Airport, and also located approximately in the center of Durham, Raleigh, Chapel Hill and other vibrant towns and communities in the area. It is only a short drive to destinations in the three hub cities, each of which offers vibrant downtown areas with numerous choices of restaurants, shopping, entertainment, museums and parks.

Beautifully appointed guest rooms offer a range of amenities, including free Wi-Fi access and the Sheraton Signature Beds. The hotel provides complimentary parking, an onsite business center, 24-hour luggage assistance, and complimentary safety deposit boxes. Complimentary passes to access Fitness Connection, adjacent to the Sheraton Imperial, will be available to ISES attendees and can be picked up at the front desk. Outdoor enthusiasts will love the tennis courts, jogging trail, and outdoor pool. Plus, the hotel is just minutes from some of North Carolina's most prestigious golf courses such as Lake Shore Golf Course, Brier Creek Country Club, Prestonwood Country Club, The Crossings Golf Club, and Old Chatham Golf Club. The hotel is completely smoke-free and equipped with the following features and amenities:

Transportation

- Self and Valet Parking Facilities (Complimentary)
- Free Airport Pick-Up and Drop-Off (24 hours, 7 days a week)
- Complimentary Shuttle Service within a 4 mile Radius of the Hotel (running at a quarter after and before each hour)

Guest Services

- Gift/Sundry Shop
- 24-Hour Front Desk
- Vending Machine
- Bellstand/Porters
- Concierge Service
- Laundry Service
- Express Check-Out
- Air Conditioned Facilities
- Non-Smoking Facilities
- Wheelchair Access
- Safe Deposit Boxes
- Smoke Detectors
- Luggage Storage
- Disability Accessible Facilities
- Business Center with copy/ printing service and an ATM
- Recreation & Entertainment
- Outdoor Whirlpool (Seasonal)
- Tennis Courts
- Outdoor Pool (Seasonal)
- Sheraton Club Lounge
- Jogging Trail
- Golf Course Nearby
- Fitness Center

Satisfy your appetite at the hotel with a visit to **Seasons** Restaurant where their culinary team creates locally sourced, organic fare as part of their unique and frequently changing dinner menus. Seasons Lobby Bar provides a casual atmosphere serving not only your favorite beverage, but also an assortment of tasty appetizers.

Begin your morning at Sheraton Imperial Hotel & Convention Center with a fresh cup of hot coffee or tea and a wide assortment of pastries and muffins at the **The Café & Market.**

Whether you are looking for a quick bite or a more elegant dining experience the Sheraton Imperial Hotel provides distinct venues for dining to suit any occasion. Experience a delicious selection of dining options without leaving the hotel.

General Information

Green Initiatives

ISES is committed to protecting the natural environment through responsible resource utilization at our annual meetings. The 2017 Meeting will be the fourth annual meeting to use an electronic application instead of a paper program, thereby saving more than 42,000 pages of paper! ISES is also committed to promoting environmental stewardship through the promotional give-away of a water bottle and the bag exchange. Additionally, Tuesday's box lunch is being provided in a biodegradable box and the company providing transportation for Monday's dinner, Greenway Transit, is the first, and only, green transportation company in the Southeast to run a 100% biodiesel fleet thus offering low-carbon rides.

BAG EXCHANGE

Participants at the 2017 Annual Meeting will receive a luggage handle grip and water bottle, but NOT a meeting bag. Participants are encouraged to bring bags from previous meetings and participate in a bag exchange. Bags will be placed on a table in registration and participants can simply leave their bag(s) and/or take a bag someone else has left. Any bags left on the table at the end of the meeting will be donated to the Durham Rescue Mission; a non-profit and North Carolina's oldest and largest long-term homeless shelter. This is a great opportunity to pick up a bag from a conference you missed…if you are a collector. Or clean out some closet space and allow others to make use of bags you no longer want. There is no limit to the number of bags you can bring. Join the fun and let's see how many different meeting bags people still have.

GREEN INITIATIVES at the VENUE

This year's meeting will be held at Sheraton Imperial Hotel, which has taken the steps noted below towards environmental stewardship. The Sheraton Imperial Hotel & Convention Center makes conserving water, energy and other resources rewarding each guest as well as being great for the environment. Guest can enjoy a $5 voucher at participating food and beverage outlets or 500 Starpoints® awarded at check-out for each night they decline housekeeping (except day of departure). To participate in the Make a Green Choice program, please inform the hotel at check-in or look for the door hanger in your guestroom.

Other Green Initiatives the Sheraton Imperial does to impact the environment:

RECYCLING: All departments recycle glass and plastic bottles, office paper, aluminum cans, cardboard and newspaper. They participate with the Think of Green program which uses and recycles ink and toner cartridges, double sided printing, eFolios.

SERVICE: Reusable utensils, cloth napkins and cloth tablecloths are used in food service in their Restaurant and Banquet department. Water and beverages are served in pitchers and dispensers when possible. Recyclable and biodegradable products are used.

HOUSEKEEPING: Guests have the option of reusing towels and sheets during their stay. Their laundry vendor, ALSCO, uses a state of the art water reclamation system. In addition, housekeepers use electrolyzed water in place of cleaning and sanitizing chemicals in guestrooms. Reusable cleaning rags are washed and sanitized.

KITCHEN: Utilizes electrolyzed water in place of cleaning and sanitizing chemicals. They have added an herb garden in the back of the hotel and use the herbs in their kitchen as well as composting in the kitchen, banquets and restaurant.

General Information

Green Initiatives [cont.]

SALES AND CATERING: They create a Meeting Impact Report where they demonstrate the impact of sustainable decisions made within the meeting planning process. They offer sustainable banquet and catering food menu, keep track of energy, water, waste generated and products recycled in banquet meetings.

LIGHTING: All guest room lamps are equipped with long-lasting energy efficient bulbs as well as LED lighting in all meeting and banquet rooms.

TRAINING: Hotel personnel are trained in water conservation practices and their recycling policy. Advisories about being good stewards of energy and water resources, not wasting water, and reporting problems or leaks, etc. are posted in employee areas on an ongoing basis. A Sustainability committee has been formed of employees assisting the hotel to its goal for sustainability.offer sustainable banquet and catering food menu, and keep track of energy, water, waste generated and products recycled in banquet meetings.

Mobile Event App

The ISES 2017 Meeting App is available for all registered delegates to download. Search for ISES2017 in the App Store or Google Play. It will install on your device and the icon will appear on your device when the installation is complete.

Note: You may need to enter your App Store Password in order to install. After downloading, **login with the email address you used during online registration and password ises2017.**

Ancillary Meetings - Several ancillary meetings are scheduled during the Annual Meeting.

Meeting	Date and Time	Location
ISES Board Meeting (closed)	**Sun., October 15** 10:00 am – 5:00 pm	Crystal Coast Ballroom
ISES Committee Chairs	**Mon., October 16** 12:00 - 1:30 pm	Sandhills
NIEHS Resource Room	**Mon., October 16** 12:00 - 1:30 pm	Piedmont
Diversity & S/NR Breakfast	**Tues., October 17** 6:30 – 8:00 am	Piedmont
UNEP/SETAC official workshop	**Tues., October 17** 6:30 – 8:00 am	Crown A/B
Food Truck Rodeo (sponsored by ICF)	**Tues., October 17** 6:45 – 9:00 pm	Sheraton Parking Area
S/NR Mentorship Program Breakfast	**Wed., October 18** 6:30 – 8:00 am	Piedmont
East-Asian Chapter Meeting	**Wed., October 18** 12:00 - 1:30 pm	Piedmont
JESEE Editorial Board Meeting	**Wed., October 18** 12:00 - 1:30 pm	Sandhills
Meet the Editors	**Wed., October 18** 12:00 - 1:30 pm	Windsor Boardroom

Presenter and Session Chair Instructions

Oral Presentation Instructions

We invite you to prepare your presentation using the following guidelines mentioned below.

Preparing your presentation:

- Generally, oral presentations will consist of 15 minutes of presentation with 3 minutes reserved for questions. In a few cases, oral presentation time slots may be 12 minutes with 3 minutes for questions due to scheduling issues. Please check the final program for your presentation time.
- Prepare your slides in landscape orientation and standard 16:9 format ratio. Have one slide per 1 to 1.5 minutes of the presentation.
- Bring your final presentation on a USB memo stick to the registration desk by 5:00 pm EDT the night before your session.

10 minutes before session start

- Meet your session's chairpersons on the podium in the meeting room
- If you need assistance on how to operate your slides from the lectern look for one of the audio visual technicians.
- You cannot use your own laptop for the presentation. Should you require special audio-visual equipment, please contact the meeting organizer well in advance.

During the session

- When speaking, make sure to face the microphone for good-quality sound.
- A monitor will show you your slides as they appear on the big screen behind you.
- Session chairs will strictly maintain net speaking times and may interrupt you if in case of a time overrun (see above for time guidelines).
- After your lecture, please stay in the meeting room to participate in subsequent discussions of your lecture topic.

Poster Presentation Instructions

All posters, should be posted no later than 9:00 am and taken down after 4:00 pm but no later than 7:00 pm on the day of the assigned poster session (Monday, Wednesday). On Tuesday posters need to be taken down by 4:00 pm. Posters not removed by 4:00 pm on Tuesday will be taken down by staff. At least one author of the abstract must be present at the poster during all designated viewing times on the assigned day.

Please note that if you were accepted for the Student Poster Competition you need to present your abstract **TWICE** during the Annual Meeting, once at the poster competition on Sunday, October 15, and a second time during your assigned Poster Session/Oral Date and Time. The best time to set up your poster for the student competition on Sunday will be before the opening plenary session on Sunday October 15th.

Each poster presentation will be assigned one side of a **4-foot high by 8-foot wide** poster board. The poster board is composed of soft material that allows easy mounting with push pins. Poster presenters must pin their poster onto the poster board labeled with their poster ID number. Push pins will be available in the poster board area and registration desk.

- When preparing your poster, use adequate letter type and size to ensure good readability. Well-designed figures, graphs and tables will enhance the attractiveness of your poster.

Presenter and Session Chair Instructions

Poster Presentation Instructions [cont.]

- Poster boards in the poster area will be numbered. You will also find your abstract code in the final program on the ISES 2017 website and in the app. We suggest you mention the abstract code on your poster for the convenience of poster viewers.
- The title on your poster should be identical to the title of the corresponding abstract.
- Posters should show the names and affiliations of all contributing authors appearing on the abstract.
- Financial support received for the work described in the poster should be acknowledged in the poster.
- You are suggested to bring hard copies of your poster as handouts if possible.
- Posters which are scheduled for presentation at ISES 2017 must be displayed during poster viewing hours.

Session Chair/Co-Chair Responsibilities

- Session Chairs/Co-Chairs are to be present in the session room no later than 15 minutes prior to the start of session.
- All presentations received by 5:00 p.m. the evening before will have been pre-loaded onto the computer in the session room. Ensure all have been pre-loaded.
- At the beginning of each session, remind the participants (presenters and audience) to place cell phones and pagers on "silent" mode or turn them off.
- Introduce each speaker prior to his/her presentation. In the interest of time, limit introductions to name, job title, and affiliation.
- Oral sessions are either 5 talks in 90 minutes (18 minute windows) or 3 talks in 60 minutes (20 minute windows). Actual talks should be limited to 15 minutes.
    - In 90 minute sessions, 3 minutes are available for transition/introduction and questions.
    - In 60 minute sessions, 5 minutes are available.
- In a few sessions, an extra talk has been included (6 in a 90 minute session or 4 in a 60 minute session). Please review your session contents before beginning and limit talk times and questions accordingly.
- It is essential that the session be kept on schedule. If a presentation is cancelled, conduct a question/answer period or a discussion portion in the session to fill the remaining time. Alternately, have a break and resume the session at the next scheduled presentation. This allows people to go back-and-forth between parallel sessions.
- Notify the speakers when they have 5 minutes and 1 minute remaining in their presentation. Observe the scheduled breaks and encourage the attendees to view posters during this time.
- A few minutes for questions and answers should be reserved out of the allocated time for each presentation. It is the Session Chair's responsibility to ensure that lengthy discussions occur outside the session.
- Ask the questioner to state his/her name and affiliation. Make sure the question is repeated when there is no floor microphone.

Student and New Researcher Program

The ISES Students and New Researchers (S/NR) Committee strives to increase and retain student and new researcher membership in the society, foster an environment of networking and support, provide opportunities for collaboration, and facilitate career searches. At this year's annual meeting in Research Triangle Park, we welcome the opportunity to meet new members and encourage all students and new researchers to participate in the variety of events we have planned. **Don't miss the following events at this year's annual meeting:**

Student Poster Competition

Empire Ballroom

Sunday, October 15

The Annual Student Poster Competition will be held during the opening reception, at 6:30 pm. It is open to all students whose abstracts were accepted and who registered for the meeting. Students from all over the world and from all fields of exposure science will present their research to their peers, judges, and society members. Everyone is invited to see what the students have been working on and interact with them during the opening reception.

Judges will determine the winners.

If you are participating in the competition, please arrive and set up your poster before 5:30. Stand by your poster starting at 6:30 pm so the judges can hear about your research and ask questions. Be ready to give a short presentation if requested. Students who are not standing by their poster during judging will not be considered for an award. Please take down your poster at the end of the reception at 8:30 pm.

Poster Competition Criteria

The poster competition provides a unique opportunity for students to practice and improve their critical thinking and oratory skills by presenting their research to a panel of judges, student peers, and other meeting attendees. The posters will be judged based on the following four criteria:

1. Poster's layout and visual appearance
2. Clarity and conciseness in oral presentation
3. The scientific impact of findings
4. Response to questions

Diversity & S/NR Breakfast

Piedmont

Tuesday, October 17

The Joint S/NR and Diversity Committee Breakfast will provide an opportunity for young researchers to learn from senior ISES members through a panel discussion. The discussion topics will include work-life balance, salary negotiations, publishing, writing grants, and many other topics of interest.

S/NR Mentorship Program Breakfast

Piedmont

Wednesday, October 18

The S/NR breakfast workshop is a time for potential protégés to meet and to network with senior ISES members interested in offering advice for a career in the field. Topics of this year's workshops are to be determined.

Student and New Researcher Program

Student/New Researcher Mixer

Wednesday, October 18

Imperial Foyer

A great peer-networking event! This cocktail networking event will be a time for students to engage with their peers. Join the Student and New Researcher Social Event which will be held in the Imperial Foyer from 5:30 - 6:30 pm. Drink tickets will be given away at the S/NR registration desk to all registered Students and New Researchers. Everyone is welcome!

Additional Information

Travel Awards

A total of 40 application forms were submitted for the ISES Travel Awards this year. Each application was considered for one or multiple travel award categories (S/NR, Diversity, and Developing Country) based on its eligibility. All application materials were de-identified and evaluated by at least three independent reviewers. The ISES Board of Directors generously awarded $18,000 in travel award funds to 22 applicants, among whom 21 were students or new researchers, 13 were from developing countries and 14 had diverse backgrounds.

Congratulations to all the awardees!

Travel award recipients may pick up their award payments at the registration desk.

Student Tables

At registration, there will be a designated Student/New Researcher Table to check in. Stop by to sign up, receive a drink ticket for the S/NR Social Event, and learn about the events specific for Students and New Researchers at the conference. Signing up on the S/NR email listserv is a good way to meet other students and build inter-university networks.

2017 Students and New Researchers (S/NR) Committee Members

Committee Chairs:

Cecilia Alcala, *Tulane University*

Crystal Romeo, *AECOM*

Members:

Nilla Barros, *U.S. Environmental Protection Agency*

Paloma Beamer, *University of Arizona*

Laura Kwong, *Stanford University*

Dingsheng Li, *University of Nevada*

Elizabeth Marder, *California Environmental Protection Agency*

Yoshira Ornelas, *University of Arizona*

Pallavi Pant, *University of Massachusetts Amherst*

Allison Patton, *Health Effects Institute (HEI)*

Lesliam Quiros-Alcala, *University of Maryland*

Hind Sibhi, *BC Children's Hospital Research Institute*

Katerina Stylianou, *University of Michigan*

Pre-Conference Courses

The Organizing Committee is delighted to host opportunities for professional enrichment in the form of pre-conference (Sunday) courses (**fee to attend**). These courses will be eligible for Continuing Education credits for many professional societies.

Sunday, October 15
8:00 am - 12:00 pm

Instructors:

Stephen Graham
Health and Environmental Impacts Division, U.S. Environmental Protection Agency

John Langstaff
Health and Environmental Impact, Division U.S. Environmental Protection Agency

Graham Glen
ICF, Inc.

Introduction to APEX: Estimating Population-based Air Pollutant Exposure, Dose, and Health Risk

This course will provide an introduction and overview of EPA's Air Pollution Exposure Model (APEX), a publically available computer program that can be used to estimate population-based human inhalation exposures, intake doses, and adverse health responses associated with exposure to air pollutants.

The model employs a flexible construct that allows users to:

- Estimate either short- or long-term exposures (e.g., 5 minutes, annual average) to single or multiple pollutants,
- Estimate individual exposures for study groups of any age, sex, race, ethnicity, or disease status (e.g., children with asthma),
- Incorporate default or user-defined inputs that account for input data variability via probability distributions and conditional statistics,
- Identify any number of exposure microenvironments and to customize their physical attributes, and
- Evaluate model output in either a population-level format or considering individual-level exposure, dose, and physiological attributes.

APEX uses several databases to estimate exposures and potential health risks including, time-location-activity pattern data, population demographic and commuting files, ambient concentrations, meteorological data, and anthropometric and physiologic attributes. Participants will be instructed in the basic principles of human inhalation exposure assessment considering a probabilistic exposure modeling approach, how to use the core features of the program, how to define study area domains and develop key model inputs, and how to generate basic exposure and risk output tables.

Sunday, October 15
8:00 am - 12:00 pm

Instructors:

Steve Dearwent
NIOSH/CDC

Alfonso Latoni
Chief of the Scientific Review Branch

Dan Shaughnessy
NIEHS Division of Extramural Research and Training (NIEHS DERT)

George Tucker
DERT, Chief of the Grants Management Branch

Unraveling the NIH Grants Process

Every year, the National Institutes of Health (NIH) invests nearly 80% of its approximately $30 Billion budget in supporting extramural research. Due to advances in the field of exposure science, and the efforts of the National Institute of Environmental Health Sciences (NIEHS), there is a growing awareness across the NIH of the central importance of understanding the impact of environmental exposures on health. With this increased visibility of the importance of understanding environmental exposures comes an opportunity for the exposure science community to increase its engagement in NIH funded research. This course seeks to provide an in-depth overview of the mission of NIH and its individual Institutes, its grant application and scientific peer review processes, and tips for developing a successful application.

The objectives of the course include:

- Understanding the NIH and its mission,
- Identifying funding opportunities to apply for grants throughout your career,
- Understanding the different types of research supported by NIH,
- Understanding the NIH scientific peer review and funding processes,
- Sharing tips and strategies for preparing a successful grant application, and
- Identifying the right person at NIH to ask for more information

Target Audience: Toxicologists, epidemiologists, exposure scientists, risk assessors, and risk managers interested in exploring the interpretation of biomonitoring data in a risk assessment context.

Pre-Conference Courses

Sunday, October 15
8:00 am - 12:00 pm

Instructors:

Peter Fantke
Department of Management Engineering, Technical University of Denmark

Olivier Jolliet
School of Public Health, University of Michigan

Lei Huang
School of Public Health, University of Michigan

Assessing Exposure to Chemicals in Consumer Products for Alternatives Assessment, Life Cycle Assessment, and High-throughput Risk Screening – The Product Intake Fraction Framework Theory and Practical Examples

Course Summary: To meet the increasing need for assessing exposure to chemicals in consumer products for life cycle assessment (LCA), chemical alternatives assessment (CAA), and high throughput risk-based screening (HTS), this course provides a practical overview of the mass-balance based tools to assess multi-pathway human exposure to chemicals in consumer products, and how to integrate this with health effects modelling based on comparative and quantitative metrics. We will illustrate how consumer exposure can be integrated into LCA, CAA, and HTS studies. We then guide the participants through examples developing exposure and impact factors for various consumers, exposure scenarios using a matrix-based modelling framework that is aligned in its approach with the UNEP/SETAC scientific consensus model USEtox® for characterizing human toxicity and ecotoxicity impacts. We will conclude with a demonstration of how this framework fills in important gaps in current assessments and how it can be used in various science-policy fields, including the prioritization and ranking of chemicals, chemical substitution and life cycle toxicity characterization.

Modules include:

- **Session 1:** Consumer exposure in different contexts: Product intake fraction and exposure matrix framework
- **Session 2:** Data and models for detergents, building materials, food contact materials and personal care products
- **Session 3:** Consumer exposure in alternatives assessments and life cycle analysis
- **Session 4:** Consumer exposure in risk-based screening assessments

All course attendees should bring laptops equipped with MS Excel (macro-enabled) software.

Sunday, October 15
1:00 pm - 5:00 pm

Instructors:

Elizabeth Chan
Health and Environmental Impacts Division U.S. Environmental Protection Agency

Zachary Pekar
Health and Environmental Impacts Division U.S. Environmental Protection Agency

Introduction to BenMAP-CE: Estimating the Risks and Benefits of Reducing Air Pollution

Course Summary: This course will provide an introduction and overview of the Environmental Benefits Mapping and Analysis Program (BenMAP), an open-source computer program that calculates the number and economic value of air pollution-related deaths and illnesses. The software incorporates a database that includes many concentration-response relationships, population files, and health and economic data needed to quantify these impacts. Participants will be instructed in the basic principles of air pollution risk and benefits assessment, how to use the core features of the program, how to select health impact functions from the library, and how to report both tabular results and maps.

Participants will need to provide their own laptops running MS Windows 7 or Windows 8, on which they have installed BenMAP-CE and loaded all training files.

Pre-Conference Courses

Sunday, October 15
1:00 pm - 5:00 pm

Instructors:

Barbara Wetmore
NERL, U.S. Environmental Protection Agency

Antony J. Williams
U.S. Environmental Protection Agency

Richard S. Judson
U.S. Environmental Protection Agency

John F. Wambaugh
U.S. Environmental Protection Agency

Using US EPA's Chemical Safety for Sustainability's Comptox Chemistry Dashboard and Tools for Bioactivity, Chemical and Toxicokinetic Modeling Analyses

Course Summary: Ongoing research within the US EPA's Chemical Safety for Sustainability program strives to integrate advances in in vitro experimentation, biotechnology, and in silico tools and modeling to evaluate chemicals for potential human health issues. Efforts have included compilation of information across multiple data streams for thousands of chemicals to capture physical-chemical properties, high-throughput bioactivity data, pharmacokinetic properties, consumer use, product and exposure information along with predictive computational tools developed to predict potential hazard and exposure. These data and tools are publicly available through the EPA's web-based CompTox Chemistry Dashboard, which also provides links to many other EPA databases, tools and public websites. This course will introduce students to these resources and provide guidance on how they can be mined to aid in chemical and biological data mining, pharmacokinetic modeling, and in vitro-in vivo extrapolation efforts to link assessments of in vitro exposure and toxicity to in vivo exposures.

Modules include:

- **Session 1:** Introduction to the US EPA's CompTox Chemistry Dashboard for Chemical and Biological Data Mining (AJW)
- **Session 2:** Applications of National Center for Computational Toxicology (NCCT) Dashboards and Computational Toxicology Approaches (RSJ)
- **Session 3**: Introduction to In Vitro-In Vivo Extrapolation and Pharmacokinetic Modeling (BAW)
- **Session 4:** Capabilities and Evaluation of the US EPA's HTTK (high throughput toxicokinetics) R package (JFW)

All course attendees should bring laptops equipped with R programming language and Wi-Fi capability.

Sunday, October 15
1:00 pm - 5:00 pm

Instructors:

Virginia Guidry
Office of Communications and Public Liaison, National Institute of Environmental Health Sciences

Elizabeth Marder
California EPA's Office of Environmental Health HazardAssessment

Science Communication for Exposure Scientists: From Traditional Media to Social Media

Course Summary: The ability to communicate about your research - with varying audiences - is an essential skill for successful scientists. Whether you need to describe your research to a journalist, want to tweet about scientific findings, are sharing an article on LinkedIn or ResearchGate, or are managing a Facebook page for study participants, communicating with the public is increasingly part of everyday life for a scientist. Engaging as a scientist in these public forums isn't easy, but with skill and preparation it can be an effective way to accurately bring science to wider audiences. This half-day workshop will provide training and guidance for effective and responsible science communication across media options.

Traditional Media Training: Participants will learn the skills and confidence needed to do a great media interview. Boiling down your science so nonscientists can understand it can be challenging. This section of the workshop will provide you with the tools you need to develop short and powerful descriptions of your research that reporters can use in stories about your research. Practical exercises will give you a chance to develop your key messages and practice your delivery, with professional feedback.

Using Social Media to Communicate Research: Whether through Facebook, LinkedIn, Twitter, ResearchGate, Reddit, or blogs, social media platforms can be effective and interactive ways to communicate your research. This part of the workshop will build on lessons about creating a clear message from part 1. We will review examples from active practitioners, discuss the possibilities and common pitfalls, and cover recommendations for best practices with the most frequently used platforms. Practical exercises will give you an opportunity to craft material in your chosen platform, as well as get feedback on your messaging. Prior to the workshop, please set up a profile on your preferred platform(s) from the following: Twitter, Facebook, LinkedIn, and ResearchGate. Workshop facilitators/instructors will be available prior to the session for hands-on assistance.

Practitioner Panel: Perspectives from individuals communicating or working in various media forms.

Pre-Conference Courses

Sunday, October 15
8:00 am - 5:00 pm

Instructors:

Liam O'Fallon
National Institute of Environmental Health Sciences

Steven Chillrud
Lamont-Doherty Earth Observatory of Columbia University

Darby Jack
Mailman School of Public Health of Columbia University

Jonathon Thornburg
RTI
Vasu Kilaru
U.S. Environmental Protection Agency

David Balshaw
National Institute of Environmental Health Sciences

Air Quality Monitors – Get out! Get active! Get data!

Course Summary: This engaging, hands-on workshop is a must for researchers, sensor developers, and citizen scientists. The workshop will be organized into two inter-related parts that involve data collection and analysis. In the morning, participants will get outside and be active while collecting air quality data using various air monitors. Participants can choose from four different activity options: 1) 5-mile run/walk in wooded park on dirt trails; 2) 7-mile run on a rails-to-trails path; 3) 3-mile walk/run in downtown Durham; 4) choose your own morning schedule. All groups will meet for lunch (cost not included) wearing the monitor(s) at the local BBQ. As participants run, walk and eat lunch, they will collect air quality data that will be used later in the workshop.

The second part of the workshop will focus on data analysis and visualization. Participants will see how their raw data look and assess data quality. They will discuss the differences in concentrations within the locations and across locations. Exposure will also be presented in the context of activity level and how that affects minute ventilation rates and thus the potential inhaled dose of air pollutants. Participants will hear from the sensor developers about the monitors as they highlight the function and limitations of devices including effort involved in cross-calibration of the devices.

Participants will use air quality monitors such as:

- MicroPEMs, a miniaturized light scattering nephelometer with a size selective inlet for PM2.5 or PM10 which also records activity via a 3-axis accelerometer and collects a filter for PM,
- MicroAeth monitors, which record levels of optically active PM (black carbon and UV-active sources such as cigarette smoke or wood smoke) and GPS;
- Inexpensive commercial air monitors aimed at citizen science, and
- HexoSkin biometric shirt that records 3 different sensors that can be used for estimating minute ventilation, heart rate EKG sensor, tri-axial accelerometer sensor and a dual band respiratory inductance plethysmography (RIP) sensor
- This workshop will be an ideal opportunity to see these devices in action while getting out and enjoying the natural surroundings of Durham and its cuisine.

At the end of this workshop, participants will be able to:

- Describe the strengths and limitations of the monitors and the concept of wearing compliance,
- Explain the results of air quality data collected,
- Compare the different monitors and the level of effort needed to clean and analyze the data, and
- Discuss potential inhaled dose and the strengths of weakness of different methods for measuring minute ventilation.

Special Events

Monday, October 16
12:00-1:30pm
Sandhills

Got Ideas, Want Grants!? The NIEHS Resource Room

Staff from the NIEHS Division of Extramural Research and Training will be available during lunch on Monday to meet with ISES 2017 attendees One-on-One to discuss the NIH application and review process and specific ideas for potential applications for grants. Grab your lunch and meet us in Sandhills.

Monday, October 16
6:00-9:00pm

MotorCo
723 Rigsbee Ave,
Durham, NC 27701

ISES Annual Dinner

The Monday evening dinner, in response to your requests for a more casual event will be held at **Motorco Music Hall**, an entertainment and event space, in Durham. This is your opportunity to enjoy the comradery of your colleagues in a relaxed setting and also sample some locally favorite foods. Motorco provides free parking facilities and roundtrip transportation will be provided between the Sheraton and Motorco.

The best brass players and the baddest drummer in the Triangle come together to bring you something old and something new!!! **Boom Unit Brass Band** brings the traditional New Orleans Second Line into modern times, fusing it with funk, rock, and pop music to lead off the entertainment for the dinner. The amazing sounds of Mastana will close out this fun and relaxing evening. The fee for the dinner will be $45 for students and Community Partners and $60 for non-students. Ticket sales are available as part of Registration.

Tuesday, October 17
5:15-7:00pm
Empire Ballroom

ISES Technology Fair

Don't miss this exciting, hands-on opportunity to engage with your fellow researchers and cutting edge technology developers! Introduced at the 2015 Annual Meeting as the Sensor Fair, this appealing event has broadened its scope to include all technologies and tools for exposure research (e.g. monitors, personal sensors, technology platforms, analyzers, samplers, applications, etc.). Combined with the annual Exhibitor and Committee Fairs, this event is sure to attract a large and engaged crowd!

Wednesday, October 18
12:00-1:30pm
Windsor Boardroom

Meet the Editors Lunch Meeting

Come join Sally Darney, Editor in Chief of ***EHP,*** and Timothy Lash, Editor of ***Epidemiology*** and the new journal ***Environmental Epidemiology*** at lunch on Wednesday, to learn more about these journals, editorial policies, how to be a reviewer, and much more. This informal session is open to all meeting attendees. Come with your questions, concerns, and curiosity. Pick up your lunch and come to Windsor Boardroom.

Wednesday, October 18
6:00-7:30pm

The Mez
5410 Page Rd
Durham, NC 27703

Women's Networking Event

Join your fellow female exposure scientists to discuss the unique career, workplace, and work-life balance challenges women in exposure science face! Create opportunities to build partnership with leaders in your field through "open conversation" and "speed-networking" at this popular annual event.

The event will be held at Mez, a contemporary Mexican restaurant, located in the heart of Triangle, just 0.5 miles away from our host hotel (Sheraton Imperial Hotel). This space offers the perfect cheerful ambiance to enjoy a margarita or your favorite beverage and some light fare while making connections! The fee for the dinner will be $20 for students and Community Partners and $25 for non-students. Ticket sales are available as part of Registration.

ISES Awards

Jerome J. Wesolowski Award

In recognition of outstanding contributions to the knowledge and practice of human exposure assessment

2017 Winner: Patrick Breysse PhD, MHS

Director, National Center for Environmental Health/Agency for Toxic Substances and Disease Registry (NCEH/ATSDR)

About the Jerome J. Wesolowski Award

Dr. Jerome J. Wesolowski was one of the founding members of ISEA and served as a Councilor from 1991 to 1993 and as the liaison with ISEA International Territorial Chapters until his death in 1994. Dr. Wesolowski had a distinguished career in public health. He made many scientific contributions to the understanding of human exposures to environmental pollutants and was dedicated to using that knowledge to improve public health.

Dr. Patrick Breysse is the Director of the National Center for Environmental Health and the Agency for Toxic Substances and Disease Registry (NCEH/ATSDR) at the Centers for Disease Control and Prevention. He joined CDC in December 2014 as the Director of NCEH/ATSDR. Dr. Breysse leads CDC's efforts to investigate the relationship between environmental factors and health. He played a leadership role in the CDC's response to the Flint water crisis and in developing the NCEH/ATSDR response to the growing problem of poly- and perfluoroalkyl substances contaminating drinking water supplies.

Dr. Breysse came to CDC from the Johns Hopkins University Bloomberg School of Public Health where he was on the faculty for nearly 30 years. His primary appointment was in the Department of Environmental Health Sciences with joint appointments in the Schools of Engineering and Medicine. He held leadership positions in numerous research centers including the Center for Childhood Asthma in Urban Environment, the Education and Research Center in Occupational Safety and Health, and the Institute for Global Tobacco Control.

During his 30 years at Johns Hopkins, Dr. Breysse established a long-standing expertise in environmental health exposure science as well as a strong record as a leader in the field. Dr. Breysse collaborated on complex health and exposure studies around the world including studies in Peru, Nepal, Mongolia, Columbia, and India. He has published over 240 peer-reviewed journal articles and is a frequent presenter at scientific meetings and symposia. His research focuses on the impact of indoor and outdoor air pollution on health.

Dr. Breysse received his PhD in Environmental Health Engineering from Johns Hopkins University in 1985 and completed postdoctoral training at the British Institute for Occupational Medicine in Edinburgh, Scotland. He is also a board certified Industrial Hygienist.

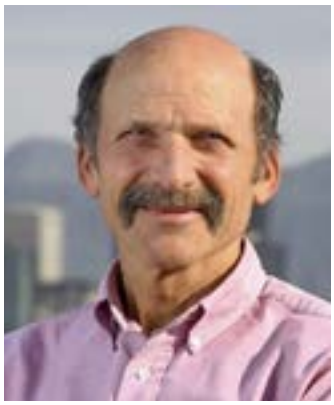
ISES Awards

Constance L. Mehlman Award

In recognition of outstanding contributions in exposure analysis research that helped shape a national or state policy or that provided new approaches for reduction or prevention of exposures.

2017 Winner: Ed Avol

Rancho Los Amigos Medical Center



Ed Avol has worked on improving applications of exposure assessment and understanding of the impacts of air pollution on human health for over 40 years. His research focus has been on how people of variable susceptibilities get exposed to air pollution, on documenting those exposures, and on understanding the short and long-term health impacts of those exposures. His research has resulted in improved policies and more protective evidence-based health standards to protect the public health.

His 15-year career at Rancho Los Amigos Medical Center, developing capacity to monitor and generate test atmospheres for controlled clinical exposures, resulted in publications regarding aerosol and gas exposures of adults and children. These were used to establish, defend, and develop state and national air quality standards. He subsequently moved to environmental consulting for a brief time, then found a home at USC as Deputy Director of a study that became internationally acclaimed – the Children's Health Study. The 100s of publications resulting from the USC research team supported and helped to develop improved health standards for ozone, nitrogen oxides, PM2.5, and PM10. Professor Avol served on the USEPA Clean Air Science Advisory Committee (CASAC), as part of the expert panel reviews for NOx and SOx, for PM2.5, and for ozone. In Southern California, he served on the Los Angeles Mayor's "No Net Increase" Task Force that resulted in the historic inaugural Clean Air Action Plan that brought together the ports of Los Angeles and Long Beach in a comprehensive program to reduce cargo goods movement-related emissions. He has advised on numerouse panels and committees, all towards reducing community exposure to airborne pollutants. His group's findings from the Children's Health Study have also been used regionally and statewide to develop guidelines and policies regarding housing and school placement in proximity to busy traffic corridors.

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About the Constance L. Mehlman Award

Myron Mehlman, the Society's first President and former managing editor of the Journal of Exposure Science and Environmental Epidemiology, endowed a new ISES award in 1999 in honor of his late wife, Constance Mehlman, an environmental attorney.

ISES Awards

Joan M. Daisey Outstanding Young Scientist Award

In recognition of outstanding contributions to the science of human exposure analysis by a young scientist.

2017 Winner: Nicole Deziel, MHS, PhD

Assistant Professor, Department of Environmental Health Sciences, Yale School of Public Health

About the Joan M. Daisey Outstanding Young Scientist Award

Joan Daisey was a founding ISEA member and past president (1995-1996), continuing to be active until her death in 2000. Daisey was senior staff scientist at the U.S. Department of Energy's Lawrence Berkeley National Laboratory (Berkeley Lab) and one of the nation's leading experts on indoor air quality.

Nicole Deziel received her Masters and PhD in Environmental Health from the Johns Hopkins Bloomberg School of Public Health and completed her postdoctoral fellowship at the National Cancer Institute in the Occupational and Environmental Epidemiology Branch. Dr. Deziel's research involves developing and applying innovative exposure assessment methods to answer critical research questions in environmental epidemiology of cancer and other outcomes. She combines existing and advanced statistical models, biomonitoring techniques, and environmental measurements to provide more comprehensive and quantitative assessments of exposure to multiple contaminants, with multiple sources, and varying spatiotemporal patterns.

Dr. Deziel serves as Principal Investigator of a study funded by the American Cancer Society investigating co-exposures to multiple flame retardants, pesticides, and other persistent pollutants and thyroid cancer risk. Most recently, she served as PI of the Ohio Water & Air Quality Study, one of the first hydraulic-fracturing-related, multi-media exposure and health studies, which measured multiple organic compounds in air and water, constructed geographic-information systems-based exposure metrics, and collected health surveys in communities with intense oil and gas development in the summer of 2016. The study observed that detection rates and/or concentrations of benzene, brominated disinfection byproducts, and gasoline-range organic compounds in drinking water were higher in those living within 2 km of an active shale gas well, compared to those living farther away. In another of her analyses in Ohio, she found that hydraulic fracturing waste sites are disproportionately located in areas of lower income. Expanding upon this research, she is leading a team of inter-disciplinary investigators on a project entitled "Drinking water vulnerability and neonatal health outcomes in relation to oil and gas production in the Appalachian Basin," which was recently selected for a three-year, $2 million EPA Grant.

Nicole has been a dedicated member of ISES for many years. She has served on four Technical Organizing committees and founded our Diversity Committee (with Judy LaKind) in 2014 and has continued to serve as Chair, overseeing important initiatives like the Travel Awards and the Women's Networking Event. She has also been actively involved in our society journal *JESEE*, currently serving on the Publications Committee and the Editorial Board.

ISES Awards

IPA/DGUV Award for Young Exposure Scientists

To foster research in exposure areas with linkages to biomonitoring for superior doctoral students working on their dissertation or superior first-year postdoctoral exposure scientists.

2017 Winner: Stephanie Hammel

Pursuing PhD in Environmental Chemistry at Duke University

Stephanie Hammel is currently pursuing a PhD in Environmental Chemistry at Duke University. Her dissertation work focuses on characterizing and validating silicone wristband use as an exposure metric for various semi-volatile organic compounds (SVOCs). Her research interests also include identifying sources and routes of exposure for SVOCs commonly used in consumer products. Previously, Stephanie was a graduate student intern with the California Department of Toxic Substance Control (DTSC) where she assisted with the implementation of their Safer Consumer Products Regulations, which took effect in October 2013. Stephanie received two Bachelor of Science degrees in Chemistry and Biological Sciences from the University of California, Irvine in 2012 and a Master's in Public Health degree in Epidemiology also at UC Irvine in 2014.

About the IPA/ DGUV Award for Young Exposure Scientists Award

The award from the DGUV Institute for Prevention and Occupational Medicine (IPA) was created to represent its high regard for the work of Professor Jüergen Angerer in furthering biomonitoring in exposure sciences in Europe and the rest of the world.

Society Awards New in 2017: Inaugural Winners

Best JESEE Paper Award

This is an annual award for the best paper authored by a current ISES member in the Journal of Exposure Science and Environmental Epidemiology in the prior volume year. This award recognizes innovative and creative exposure science research and scholarship from the ISES membership.

2017 Winner:

Zota, Ami R., Anne M. Riederer, Adrienne S. Ettinger, Laurel A. Schaider, James P. Shine, Chitra J. Amarasiriwardena, Robert O. Wright, and John D. Spengler. **"Associations between metals in residential environmental media and exposure biomarkers over time in infants living near a mining-impacted site."** Journal of Exposure Science & Environmental Epidemiology 26, no. 5 (2016): 510-519.

Dr. Zota is Assistant Professor in the Department of Environmental and Occupational Health at the Milken Institute School of Public Health at The George **Washington University.**

ISES Best Student Paper Award

This is an annual award for the best paper authored by a student in the prior publication year. This award recognizes the scholarship of students and recent graduates and their contributions to the field of exposure science, and is given to a submission representative of the best student research published in exposure science.

2017 Winner

Marder, M. Elizabeth, Parinya Panuwet, Ronald E. Hunter, P. Barry Ryan, Michele Marcus, and Dana Boyd Barr. **"Quantification of Polybrominated and Polychlorinated Biphenyls in Human Matrices by Isotope-Dilution Gas Chromatography–Tandem Mass Spectrometry."** Journal of Analytical Toxicology 40, no. 7 (2016): 511-518.

Dr. Marder is a staff scientist with CalEPA's Office of Environmental Health Hazard Assessment (OEHHA). She completed her PhD in Environmental Health Sciences at Emory University in December 2015 (Dissertation Chair: Dr. Dana Boyd Barr)

JESEE Meeting Award for Young Investigators

This is an annual award of $500 in reimbursement for travel by a student or new researcher (researcher within 10 years of terminal degree) to support young investigator participation in the ISES annual meeting. This award is sponsored by the *Journal of Exposure Science and Environmental Epidemiology (JESEE)*, a Springer Nature publication

2017 Winner

Darpa Jyethi

Dr. Jyethi is a Visiting Scientist with the Indian Statistical Institute, North-East Centre at Tezpur.

Plenary Sessions

Sunday, October 15
5:30 pm - 7:00 pm
Imperial Ballroom IV - VII

Visions of Exposure Science

Gwen Collman, PhD
National Institute of Environmental Health Sciences

Presentation:
Transforming Exposure Science: Needs for the Future

Gwen Collman is director of the NIEHS Division of Extramural Research and Training where she leads approximately 60 professional staff in areas of scientific program administration, peer review, and the management and administration of about 1,500 active grants each year. She directs scientific activities across the field of environmental health sciences including basic sciences (i.e., DNA repair, epigenetics, environmental genomics), organ-specific toxicology (i.e., reproductive, neurotoxicology, respiratory), public health related programs (i.e., environmental epidemiology, environmental public health), and training and career development. She also oversees the implementation of the Superfund Research Program and the Worker Education and Training Program.

Prior to her current role, Collman served in program development and management, beginning in 1992 as a member, then as Chief of the Susceptibility and Population Health Branch. During this time, she directed research on the role of genetic and environmental factors on the development of human disease, from animal models of genetic susceptibility to population studies focusing on etiology and intervention. She was responsible for building the NIEHS grant portfolio in environmental and molecular epidemiology, and developed several complex multidisciplinary research programs. These include the NIEHS Breast Cancer and the Environment Research Centers Program, the NIEHS/EPA Centers for Children's Environmental Health and Disease Prevention, and the Genes, Environment and Health Initiative. Also, under her guidance, a team created a vision for the Partnerships for Environmental Public Health programs for the next decade. In recognition of her achievements, she is the recipient of numerous NIEHS Merit Awards, two NIH Director's Awards, and the DHHS Secretary's Award for Distinguished Service. Collman received a Ph.D. in Environmental Epidemiology from the University of North Carolina School of Public Health where she was awarded the 2009 H.A. Tyroler Distinguished Alumni Award.

Randy Woodson, PhD
Chancellor, North Carolina State University

Presentation:
Exposure Science at NC State

Dr. Randy Woodson, the 14th chancellor of North Carolina State University, is a nationally recognized scholar and academic leader who oversees the largest university in North Carolina, with more than 34,000 students and a budget of $1.4 billion. Under his leadership, NC State has built upon its reputation as a pre-eminent research institution and has witnessed many transformative changes — the opening of the James B. Hunt Jr. Library on Centennial Campus, the launch of the College of Sciences and the completion of the Lonnie Poole Golf Course. Even in the face of unprecedented financial challenges, these advances were made possible thanks to Woodson's strategic plan, which aligned the university for greater effectiveness, efficiency and — most importantly — student success. As the landscape of funding for public universities continues to change, NC State consistently ranks in the top five best values among public universities in the U.S., according to U.S. News and World Report and Princeton Review. Chancellor Woodson has extensive experience as a member of university faculty and administration, with a reputation for consensus building throughout his 30-year career in higher education. He came to NC State from Purdue University, where he most recently served as executive vice president for academic affairs. Woodson is an internationally renowned plant molecular biologist specializing in reproductive processes in agricultural crops. He earned his undergraduate degree in horticulture from the University of Arkansas and his M.S. and Ph.D. degrees in plant physiology from Cornell University.

Plenary Sessions

Sunday, October 15
5:30 pm - 7:00 pm
Imperial Ballroom IV - VII

Visions of Exposure Science [cont.]

Tashni-Ann Dubroy, PhD
Executive Vice President and Chief Operating Officer at Howard University

Presentation: The Value of Minority Participation in Exposure Science – Lessons from Cuba to the Carolinas

Fresh from her recent appointment as the Executive Vice President and Chief Operating Officer at Howard University, **Dr. Tashni-Ann Dubroy**, (formerly President of Shaw University), has been awarded Female President of the Year by the HBCU Digest. Tashni-Ann Dubroy most recently served as the 17th President of the "Mother of all Historically Black Universities in the South", Shaw University. Appointed in August 2015 during the University's sesquicentennial celebratory year, Dr. Dubroy's administration positioned Shaw as a resource to the City of Raleigh through entrepreneurial innovation, civic presence and support for students and surrounding communities.

Dr. Dubroy's philosophy of fiscal conservatism and institutional capacity-building made her a fast-rising star in the higher education community. In its first year, the Dubroy Administration effectively reversed six consecutive years of enrollment declines and yielded a 15 percent increase of new and returning students in 2015. That same year, the administration closed a $4 million fundraising gap which included an institutional record $630,000 raised during Shaw's annual homecoming weekend, and earned positive change in net assets to counteract a two-year loss – all of which earned her honors as 2017 CEO of the Year in the Triangle region. She was named to the 40 Under 40: Excellence in Leadership list by the *Triangle Business Journal*. She has received numerous accolades from local philanthropic organizations.

Her path to the presidency was unconventional, but her leadership has been categorized as a fresh and needed vision for the sustainability of higher education in metropolitan settings. Dr. Dubroy began her career as a Research Scientist at BASF, the world's largest chemical company. She quickly ascended to the position of Global Technology Analyst, and after two years, was appointed to serve Chemical Procurement Manager, where she managed a strategic sourcing budget of $35 million.

Prior to joining Shaw University, she co-founded Tea and Honey Blends, a hair care company that manufactured and retailed natural hair care products, and co-owned downtown Raleigh's Element Beauty Bar. Her entrepreneurial success has landed her on the pages of *Money Magazine* and Bloomberg's *BusinessWeek*.

A nationally-recognized advocate for female participation in the sciences, Dr. Dubroy was recognized by Cosmopolitan Magazine, as a "Fun, Fearless Female" who is making waves in the science community as founder of the Brilliant & Beautiful Foundation. Dr. Dubroy also serves on the Executive Board of the Greater Raleigh Chamber of Commerce, the Downtown Raleigh Alliance and the Carolina Business Development Fund.

Dr. Dubroy earned her Ph.D. in Physical Organic Chemistry from North Carolina State University in 2007, and holds a Masters of Business Administration from Rutgers University in New Jersey. Prior to her executive appointment, the Shaw University alumna served as Special Assistant to the President, Chair of Shaw University's Department of Natural Sciences and Mathematics, and as an associate professor of Chemistry.

She is married to Dale Dubroy and they have one daughter, Marli-Jolie.

Plenary Sessions

Monday, October 16
8:00 pm - 9:00 am
Imperial Ballroom IV - VII

Karletta Chief, PhD
Assistant Professor & Extension Specialist, University of Arizona

Presentation: Desecration of Tó Baką'e and Diné way of life: How the Navajo Sacred Male River of the San Juan became the Yellow River

Dr. Karletta Chief (Diné) is an Assistant Professor and Specialist in Soil, Water, and Environmental Sciences at the University of Arizona (UA). Her research focuses on understanding, tools, and predictions of watershed hydrology, unsaturated flow in arid environments, and how natural and human disturbances impact water resources. Two of her primary tribal projects are The Pyramid Lake Paiute Tribe Climate Adaptation and Traditional Knowledge and The Navajo Nation Gold King Mine Spill Impacts. Dr. Chief received a B.S. and M.S. in Civil and Environmental Engineering from Stanford University in 1998 and 2000 and a Ph.D. in Hydrology and Water Resources from UA in 2007. In 2011, Dr. Chief was named American Indian Science and Engineering Society (AISES) Most Promising Scientist/ Scholar, 2013 Stanford University Distinguished Alumni Scholar award, 2015 Native American 40 under 40, 2016 AISES Professional of the Year, and 2016 Phoenix Indian Center Woman of the Year.

Tuesday, October 17
8:00 pm - 9:30 am
Imperial Ballroom IV - VII

Mary Wolff, PhD
Icahn School of Medicine at Mount Sinai

Presentation: "Consequential" Exposure Science. Lessons from Environmental Disparities

Dr. Wolff's career began as a post-doctoral fellow with Dr. Irving Selikoff whom she read about in the New Yorker. His research evolved from asbestos to other occupational and environmental threats during the 1970s. Some of the workplace exposures, including asbestos and lead, became increasingly important as general population exposures under his leadership. Mainly in clinical studies, both exposure biomarkers and questionnaire metrics were used to assess numerous environmental exposures. Among the exposures studied in the late 20th century were persistent halogenated aromatic agents in Michigan and among workers at the New York General Electrical manufacturing facility (DDT, PCB, PBB and others). Their research defined basic principles of exposure including distribution and sources, adipose:serum ratios, half-lives, and patterns of organochlorine residues in humans, both occupational and common, male vs female, as well as adult and child. In the 1980s, the hormonal potential of these chemicals was realized and the widespread general population exposures were documented. This led to projects in the 1990s to investigate potential risk for organochlorine exposures in relation to breast cancer, including breast cancer in minority women, because of the disparate risk of black women for early onset breast cancer and mortality and their higher exposures to environmental chemicals. To better incorporate a window of susceptibility for environmental exposures, later research focussed on intermediate endpoints for breast cancer, in particular puberty which had disparate demographic and environmental attributes similar to those for breast cancer. Also, it became necessary in study of endocrine disruptors to account for short-term nature of exposure biomarkers. This characterizes new-age, 21st century exposures that are highly prevalent as well as relevant to hormonally sensitive health endpoints. Recent research led to the first observations of associations with childhood behavior, birth size, and somatic growth as well as pubertal onset. She continues to emphasize the importance of appropriate use of exposure biomarkers, and to urge researchers to avoid inappropriate application of technologically feasible measurements, noting that as chemicals can be measured at lower and lower levels, it is important to consider relevance to health.

Plenary Sessions

Tuesday, October 17
8:00 pm - 9:30 am
Imperial Ballroom IV - VII

Patrick Breysse, PhD, MHS
Director, National Center for Environmental Health/ Agency for Toxic Substances and Disease Registry (NCEH/ATSDR)

2017 Weslowski Award Recipient

Presentation: Protecting the Health of Individuals and Communities from Environmental Exposures in Today's World: *Per- and Polyfluoroalkyl Substances (PFAS) in Water*

Dr. Patrick Breysse is the Director of the National Center for Environmental Health and the Agency for Toxic Substances and Disease Registry (NCEH/ATSDR) at the Centers for Disease Control and Prevention. He joined CDC in December 2014 as the Director of NCEH/ATSDR. Dr. Breysse leads CDC's efforts to investigate the relationship between environmental factors and health. He played a leadership role in the CDC's response to the Flint water crisis and in developing the NCEH/ATSDR response to the growing problem of poly- and perfluoroalkyl substances contaminating drinking water supplies.

Dr. Breysse came to CDC from the Johns Hopkins University Bloomberg School of Public Health where he was on the faculty for nearly 30 years. His primary appointment was in the Department of Environmental Health Sciences with joint appointments in the Schools of Engineering and Medicine. He held leadership positions in numerous research centers including the Center for Childhood Asthma in Urban Environment, the Education and Research Center in Occupational Safety and Health, and the Institute for Global Tobacco Control.

During his 30 years at Johns Hopkins, Dr. Breysse established a long-standing expertise in environmental health exposure science as well as a strong record as a leader in the field. Dr. Breysse collaborated on complex health and exposure studies around the world including studies in Peru, Nepal, Mongolia, Columbia, and India. He has published over 240 peer-reviewed journal articles and is a frequent presenter at scientific meetings and symposia. His research focuses on the impact of indoor and outdoor air pollution on health.

Dr. Breysse received his PhD in Environmental Health Engineering from Johns Hopkins University in 1985 and completed postdoctoral training at the British Institute for Occupational Medicine in Edinburgh, Scotland. He is also a board certified Industrial Hygienist.

Wednesday, October 18
8:00 pm - 9:00 am
Imperial Ballroom IV - VII

Brian Southwell
Program Director, Science in the Public Sphere, RTI International

Presentation: Challenges and Opportunities in Public Engagement Regarding Environmental Exposure

Dr. Brian Southwell is Director of the Science in the Public Sphere Program in the Center for Communication Science at RTI International. In addition, Dr. Southwell is an Adjunct Professor with Duke University, where he teaches about social marketing and behavioral interventions. He also is Research Professor (of Mass Communication) and Adjunct Associate Professor (of Health Behavior) at the University of North Carolina at Chapel Hill. Dr. Southwell's contributions appear in more than 100 journal articles and chapters and his various books, including the forthcoming Misinformation and Mass Audiences (which he edited for the University of Texas Press), have all been based in social science research. Southwell also is host of a public radio show, The Measure of Everyday Life, for WNCU (90.7 FM in the Raleigh-Durham, North Carolina, media market).

Program - Sunday, October 15

7:00 pm - 9:00 pm

Empire Ballroom
Welcome Reception & Student Poster Competition Posters

The following list of posters represents entries accepted for poster presentation later in the meeting. The poster competition is optional for students whose entered abstracts were accepted for oral presentation.

Su-P-01 **Urinary Concentrations of Organophosphate Flame Retardants and Fertility Outcomes among Couples Undergoing in Vitro Fertilization**
C. Carignan[1], L. Mínguez-Alarcón[1], J. Meeker[2], P. Williams[3], H. M. Stapleton[4], C. Butt[4], T. Toth[5], J. Ford[1], R. Hauser[1]; [1]Harvard T.H. Chan School of Public Health, Boston, MA, [2]University of Michigan, Ann Arbor, MI, [3]Harvard T.H. Chan School of Public Health, Boston, MA, [4]Duke University, Durham, NC, [5]Massachusetts General Hospital, Boston, MA

Su-P-02 **Dietary and inhalation exposure to polycyclic aromatic hydrocarbons (PAHs) and monohydroxy metabolites in urine: A panel study for the elderly in Tianjin**
B. Han[1], P. Li[2], X. Qin[3], L. Zhang[3], T. Ni[4], J. Fan[3], N. Zhang[1], F. He[5], J. Xu[6], W. Yang[1], W. Zhang[1], X. Wang[1], Z. Bai[1]; [1]Chinese Research Academy of Environmental Sciences, Beijing, China, [2]Tianjin University of Technology, Tianjin, China, [3]Tianjin Medical University, Tianjin, China, [4]Tianjin University of Sport, Tianjin, China, [5]Hubei Meteorological Service Center, Wuhan, China, [6]University of Washington, Seattle, WA

Su-P-03 **Systematic Review and Meta-Analysis of Occupational Styrene-Induced Dyschromatopsia**
A. R. Choi[1], J. M. Braun[2], G. D. Papandonatos[3], P. B. Greenberg[1]; [1]The Warren Alpert Medical School of Brown University, Providence, RI, [2]Brown University School of Public Health, Providence, RI, [3]Brown University School of Public Health, Providence, RI

Su-P-04 **Characterizing persistent EDC mixtures in a diverse pregnancy cohort**
S. Mehta[1], K. Coleman-Phox[2], N. E. Adler[3], B. Laraia[4], E. Epel[3], A. R. Zota[1]; [1]The George Washington University, Washington, DC, [2]University of California, San Francisco, San Francisco, CA, [3]University of California, San Francisco, San Francisco, CA, [4]University of California, Berkeley, Berkeley, CA

Su-P-05 **Characteristics of exposure factors for consumer products in Korean women and children**
M. Lim[1], J. Park[2], K. Kim[3], K. Lee[1]; [1]Graduate School of Public Health, Seoul National University, Seoul, Korea (the Republic of), [2]Seoul National University, Seoul, Korea (the Republic of), [3]Seoul National University of Science and Technology, Seoul, Korea (the Republic of)

Su-P-06 **The joint effects of metals on general cognitive ability in adolescents living near ferromanganese industry**
J. A. Bauer[1], B. Coull[2], J. Bobb[3], S. Guazzetti[4], S. Zoni[5], C. Fedrighi[5], D. Placidi[5], G. Cagna[5], R. White[1], M. Arora[6], R. O. Wright[6], D. R. Smith[7], R. G. Lucchini[5], B. Claus Henn[1]; [1]Boston University School of Public Health, Boston, MA, [2]Harvard T.H. Chan School of Public Health, Boston, MA, [3]University of Washington, Seattle, WA, [4]Azienda Unita Sanitaria Locale, Reggio Emilia, Italy, [5]University of Brescia, Brescia, Italy, [6]Icahn School of Medicine at Mount Sinai, New York, NY, [7]University of California, Santa Cruz, CA

Su-P-07 **Top-Down Toxicology: an Experimental Application of the Pesticide Exposome in Honey Bee Queens**
J. Milone, D. Tarpy; North Carolina State University, Raleigh, NC

Su-P-08 **Health effect of different gaseous formaldehyde fluctuation forms on mice: a preliminary study**
X. Zhang[1], Y. Zhao[2], X. Yang[2], Y. Zhang[1], R. Li[2]; [1]Tsinghua University, Beijing, China, [2]Central China Normal University, Wuhan, China

Su-P-09 **Predicting Daily $PM_{2.5}$ Concentrations in Texas Using High-Resolution Satellite Aerosol Optical Depth**
X. Zhang[1], Y. Chu[2], K. Zhang[1]; [1]The University of Texas Health Science Center at Houston School of Public Health, Houston, TX, [2]The University of Texas Health Science Center at Houston School of Public Health, Houston, TX

Su-P-10 **Associations Between First Trimester Blood Metal Levels and Childhood Obesity in the NEST Cohort**
WITHDRAWN

Su-P-11 **Analysis and Identification of Ozone-Squalene Particulate Phase By-Products**
B. Coffaro, C. Weisel; Rutgers, Highland Park, NJ

Su-P-12 **Impacts of Cold Weather on Emergency Hospital Admission in Texas, 2004-2013**
T. Chen, K. Zhang; University of Texas Health Science Center at Houston School of Public Health, Houston, TX

Su-P-13 **Relationships of Ambient Fine Particle Air Pollution, Endothelial Function, and Blood DNA Methylation Age: Implications for Renal Health**
J. Nwanaji-Enwerem[1], M. Weisskopf[2], A. Baccarelli[3], J. Schwartz[2]; [1]Harvard Medical School & Harvard School of Public Health, Boston, MA, [2]Harvard T.H. Chan School of Public Health, Boston, MA, [3]Columbia Mailman School of Public Health, New York, NY

Su-P-14 **Exposure to Air Pollutants in Selected High-rise Buildings in High Density Urban Areas in Hong Kong**
T. Li[1], W. Che[1], A. K. Lau[1], H. Frey[2]; [1]Hong Kong University of Science and Techonology, Hong Kong, Hong Kong, [2]North Carolina State University, Raleigh, CA

Program - Sunday, October 15

7:00 pm - 9:00 pm

Empire Ballroom
Welcome Reception & Student Poster Competition Posters [cont.]

Su-P-15 **Public's Risk Perception and Willingness-to-Pay for Air Pollution**
D. Bi[2], S. Pu1, J. Liu[2], S. Wu[2], J. Ding[2], M. Fang[1], X. Lu[2], M. Liu[1]; [1]Nanjing University, Nanjing, China, [2]Nanjing foreign language school, Nanjing, China

Su-P-16 **An exposure assessment of occupational exposures among small quantity pesticides users in amenity horticulture**
A. Connolly[1], K. Jones[2], K. Galea[3], I. Basinas[3], L. kenny[2], P. McGowan[4], M. Coggins[1]; [1]National University of Ireland Galway, Galway, Ireland, [2]Health and Safety Laboratory (HSL), Buxton, United Kingdom, [3]Institute of Occupational Medicine (IOM), Edinburgh, United Kingdom, [4]Irish Commissioners for Public Works, Co. Meath, Ireland

Su-P-17 **Patterns and Predictors of Environmental Chemical Mixtures Among Pregnant Women: The HOME Study**
WITHDRAWN

Su-P-18 **Early-life Manganese Exposure and Intrinsic Functional Connectivity of the Developing Brain**
E. de Water[1], E. Proal[3], V. Wang[2], S. Martínez Medina[3], L. Schnaas[3], M. M. Téllez-Rojo[4], R. O. Wright[1], C. Y. Tang[2], M. K. Horton[1]; [1]Icahn School of Medicine at Mount Sinai, New York, NY, [2]Icahn School of Medicine at Mount Sinai, New York, NY, [3]National Institute of Perinatology (INPer), Mexico City, Mexico, [4]National Institute of Public Health (INSP), Mexico City, Mexico

Su-P-19 **Comparing chemical exposures across diverse communities using silicone wristbands**
H. Dixon, C. Donald, A. Bergmann, G. Points III, R. Scott, B. Smith, K. A. Anderson; Oregon State University, Corvallis, OR

Su-P-20 **A Field Study to Validate Inhalation Exposure Factors Used to Create the Particle Inhalation Rate Metric**
L. Corlin[1], H. Amaravadi[2], N. Henderson[1], J. Cordova[2], S. Ball[2], M. Woodin[1], J. L. Durant[1], D. Gute[1], D. Brugge[2]; [1]Tufts University, Boston, MA, [2]Tufts University, Boston, MA

Su-P-21 **Comparison of Bioaerosol Samplers and Media for the Collection of Aerosolized Norovirus**
C. L. Boles, M. W. Nonnenmann; University of Iowa, Iowa City, IA

Su-P-22 **Assessing the potential impact of global warming on infiltration of outdoor air pollutants into residential indoor environments**
D. Liang[1], K. Ono[1], W. Lee[2], J. Liao[1], J. Lawrence[3], S. E. Sarnat[1], J. A. Sarnat[1], P. Koutrakis[3]; [1]Emory University, Decatur, GA, [2]National Taiwan University, Taipei, Taiwan, [3]Harvard University, Boston, MA

Su-P-23 **Performance of Consumer-Grade Air Pollution Measurement Devices in Residential Environments**
G. Mainelis, S. N. Manibusan; Rutgers University, Edison, NJ

Su-P-24 **Evaluating effects of global change on patterns of aeroallergens and ground-level ozone across the contiguous US**
T. Cai[1], Z. Mi[1], X. Ren[2], Y. Zhang[2], P. Georgopoulos[1]; [1]Rutgers University, Piscataway, NJ, [2]Rutgers University, Piscataway, NJ

Su-P-25 **Heat and Hydration Assessment of Migrant Grape-Workers in Sonora, Mexico**
R. Wagoner; University of Arizona, Tucson, AZ

Su-P-26 **Health Risk Ranking Assessment of Human Exposure to Multiple Air Pollutants Emitted from Municipal Solid Waste Incineration in China**
Q. Zhou, M. Liu, J. Bi; Nanjing University, Nanjing, China

Su-P-27 **Spatial-temporal Characteristics of Metal Contents in Ambient Fine Particles in Nanjing, China**
D. Bi[1], H. Cheng[1], X. Liu[2], M. Liu[2], J. Chen[1], X. Cui[2], Z. Zhu[1]; [1]Nanjing Foreign Language School, Nanjing, China, [2]Nanjing University, Nanjing, China

Su-P-28 **Health Risk Assessment of Endocrine Disruptor Organophosphorus Pesticides Exposure through Dietary Intake of Fresh Vegetables for children in Tehran, Iran**
WITHDRAWN

Su-P-29 **Individual's Exposure and Emotional Response to Visual Impact of Particulate Matter Pollution: A Psychophysiological Study**
J. Yang[1], X. Liu[1], J. Chen[2], M. Liu[1]; [1]Nanjing University, Nanjing, China, [2]Nanjing Foreign Language School, Nanjing, China

Su-P-30 **Perfluoroalkyl substances in the Fernald Community Cohort: Exposure distributions over time and associations with thyroid and kidney function and obesity**
B. E. Blake[1], S. M. Pinney[2], S. E. Fenton1, K. Ferguson[3]; [1]National Institute of Environmental Health Sciences, Durham, NC, [2]University of Cincinnati, Cincinnati, OH, [3]National Institute of Environmental Health Sciences, Durham, NC

Program - Sunday, October 15

7:00 pm - 9:00 pm

Empire Ballroom
Welcome Reception & Student Poster Competition Posters [cont.]

Su-P-31 **Exposure to Short Lived Air Pollutants on Public Transit in Brazil**
E. Patrick[1], J. F. Segura[2], A. C. Targino[2], M. Gibson[1]; [1]Dalhousie University, Halifax, Canada, [2]Universidade Tecnológica Federal do Paraná, Londrina, Brazil

Su-P-32 **Evaluating the synergistic effects of cyanotoxic mixtures on the ALS pathway using targeted proteomics and statistical design of experiments**
R. Martin, M. Bereman; NCSU, Raleigh, NC

Su-P-33 **Improving ambient ultrafine particle concentration predictions at residences by adding centralsite monitoring to a mobile monitoring campaign**
M. C. Simon[1], A. P. Patton[2], D. Brugge[3], J. L. Durant[1]; [1]Tufts University, Medford, MA, [2]Health Effects Institute, Boston, MA, [3]Tufts University, Boston, MA

Su-P-34 **Method development for the detection of pyrethroid metabolites in saliva**
M. Wren, I. Yang, B. Buckley; Rutgers University, Piscataway, NJ

Su-P-35 **Intraurban distributions of NO_2 and $PM_{2.5}$ at three dimensions in Lanzhou, China**
L. Jin[1], Y. Zhang[1], Y. Zhang[2], M. L. Bell[1]; [1]Yale University, New Haven, CT, [2]Gansu Academy of Environmental Sciences, Lanzhou, China

Su-P-36 **Spatial point pattern analysis of congenital heart defects in Lanzhou, China**
L. Jin[1], J. Reuning-Scherer[1], J. Qiu[2], Q. Liu[2], Y. Zhang[1], M. L. Bell[1]; [1]Yale University, New Haven, CT, [2]Gansu Provincial Maternity and Child Care Hospital, Lanzhou, China

Su-P-37 **Assessing the Role of Caregiver Stress and Cockroach Allergen in Asthma Related Healthcare Utilization**
WITHDRAWN

Su-P-38 **A Pilot Study on Migrant Grape Workers Exposure to Pesticides in Sonora, Mexico**
N. I. Lopez-Galvez; University of Arizona, Tucson, AZ

Su-P-39 **Household dust is a good predictor of children's lead exposure**
S. Cao[1], X. Duan[2], X. Zhao[1], C. Sun[3], F. Wei[4]; [1]Chinese Research Academy of Environmental Sciences, Beijing, China, [2]University of Science and Technology Beijing, Beijing, China, [3]Chinese Center for Disease Control and Prevention, Beijing, China, [4]China National Environmental Monitoring Center, Beijing, China

Su-P-40 **Personal exposure to black carbon among women in semi-rural Mozambique**
A. Curto Tirado[1], D. Donaire-Gonzalez[1], M. Manaca[2], R. Gonzalez[4], C. Sacoor[2], I. Rivas[1], G. Wellenius[3], J. Sunyer[1], C. Menéndez[4], C. Tonne[1]; [1]ISGlobal, Centre for Research in Environmental Epidemiology (CREAL), Barcelona, Spain, [2]Centro de Investigação em Saúde da Manhiça (CISM), Manhiça, Mozambique, [3]Brown University School of Public Health, Providence, RI, [4]ISGlobal, Centre for International Health Research (CRESIB), Hospital Clínic- UB, Barcelona, Spain

Su-P-41 **NO_2 Air Pollution Exposure Assessment in Urban Mysore, India**
A. A. Nori-Sarma[1], R. K. Thimulappa[2], V. G. Venkatareddy[3], A. K. Fauzie[3], S. K. Dey[2], M. L. Bell[1]; [1]Yale University, New Haven, CT, [2]JSS Medical College, Mysore, India, [3]University of Mysore, Mysore, India

Su-P-42 **Mercury Co-Benefits of Climate Policy in China**
K. Mulvaney[1], N. E. Selin[2], A. Giang[3], S. Y. Kwon[3], M. Muntean[4], M. Li[5], C. Li[6], D. Zhang[7], V. J. Karplus[8]; [1]University of North Carolina at Chapel Hill, Chapel Hill, NC, [2]Massachusetts Institue of Technology, Cambridge, MA, [3]Massachusetts Institue of Technology, Cambridge, MA, [4]European Commission, Joint Research Centre, Institute for Environment and Sustainability, Ispra, Italy, [5]Massachusetts Institute of Technology, Cambridge, MA, [6]Massachusetts Institute of Technology, Cambridge, MA, [7]Massachusetts Institute of Technology and Tsinghua University, Cambridge, MA, [8]Massachusetts Institute of Technology, Cambridge, MA

Su-P-43 **Can exposure surfaces and GPS data predict personal exposures to air pollution and noise? Findings from a panel study**
L. Minet[1], R. Liu[1], M. Valois[2], J. Xu[1], M. Shekarrizfard[1], S. Weichenthal[2], M. Hatzopoulou[1]; [1]University of Toronto, Toronto, Canada, [2]McGill University, Montreal, Canada

Su-P-44 **A New Approach for Deriving Numerical Relationships Between Different Elongate Mineral Particles (EMPs) Definitions**
Y. Shao[1], G. Ramachandran[2]; [1]University of Minnesota, Minneapolis, MN, [2]Johns Hopkins University, Baltimore, MD

Su-P-45 **A novel air quality model fusion method for improving spatial resolution (250m) of ambient air pollutant exposures**
J. Bates[1], A. F. Pennington[2], X. Zhai[1], M. Friberg[1], F. Metcalf[1], M. Strickland[3], L. Darrow[3], J. Mulholland[1], A. Russell[1]; [1]Georgia Institute of Technology, Atlanta, GA, [2]Emory University, Atlanta, GA, [3]University of Nevada, Reno, Reno, NV

Program - Sunday, October 15

7:00 pm - 9:00 pm

Empire Ballroom
Welcome Reception & Student Poster Competition Posters [cont.]

Su-P-46 **Health risks of heavy metals from drinking water exposure near a typical river basin area in China, after pollution control measurement**
X. Zhao[1], S. Cao[1], X. Duan[2], B. Zheng[1], Y. Ma[1]; [1]Chinese Research Academy of Environmental Sciences, Beijing, China, [2]University of Science and Technology Beijing, Beijing, China

Su-P-47 **Reconstructing Historical Exposures to Respirable Dust and Respirable Silica in the Taconite Mining Industry for 1956-2010**
Y. Shao[1], G. Ramachandran[2]; [1]University of Minnesota, Minneapolis, MN, [2]Johns Hopkins University, Baltimore, MD

Su-P-48 **Applications of Passive Silicone Wristband Samplers: Childhood Para-Occupational Exposures to Pesticide Mixtures**
C. Poutasse[1], T. Arcury[2], S. Quandt[3], P. Laurienti[4], K. A. Anderson[1]; [1]Oregon State University, Corvallis, OR, [2]Wake Forest School of Medicine, Winston-Salem, NC, [3]Wake Forest School of Medicine, Winston-Salem, NC, [4]Wake Forest School of Medicine, Winston-Salem, NC

Su-P-49 **Relationship between Reactive Oxygen Species (ROS) activity and Cytotoxicity of Ambient Particles**
Y. Wang[1], M. Plewa[2], V. Verma[1]; [1]University of Illinois at Urbana-Champaign, Urbana, IL, [2]University of Illinois at Urbana-Champaign, Urbana, IL

Su-P-50 **The Pregnancy Exposome: Multiple Environmental Exposures in the Iranian Environment and Neurodevelopmental Disorders (TEND) Birth Cohort**
WITHDRAWN

Su-P-51 **Statistical Fusion of Present-Day Observed Global Ozone Concentrations and CCMI-1 Multi-Model Surface Ozone Estimates**
M. Buechlein, M. Serre, J. West, Y. Zhang; UNC, Chapel Hill, NC

Su-P-52 **Citywide validation and improvement of the MAIAC aerosol product in Lima, Peru**
J. Bi[1], B. Vu[1], A. Wildani[2], Y. Wang[3], A. Lyapustin[3], Y. Liu[1]; [1]Emory University, Atlanta, GA, [2]Emory University, Atlanta, GA, [3]National Aeronautics and Space Administration, Greenbelt, MD

Su-P-53 **Harmonization of Sensor Metadata and Measurements to Support Exposomic Research**
N. Burnett[1], R. Gouripeddi[2], J. Wen[2], P. Mo[3], R. Madsen[3], R. Butcher[3], K. A. Sward[4], J. Facelli[2]; [1]University of Utah, Salt Lake City, UT, [2]University of Utah, Salt Lake City, UT, [3]University of Utah, Salt Lake City, UT, [4]University of Utah, Salt Lake City, UT

Su-P-54 **A Novel Method for Characterizing Resident Behaviors and Housing Attributes using Photo Survey**
P. Fabian, Z. Petropoulos, C. Scollaert, M. Scammell, J. I. Levy; Boston University School of Public Health, Boston, MA

Su-P-55 **Assessing Indoor $PM_{2.5}$ Concentrations in Households on the Hopi Reservation**
M. K. O'Rourke[1], S. Hadeed[1], G. Honanie[2], A. Mahkewa[2], M. Paukgana[2], C. Kelley[1], M. A. Alshammari[1], R. Canales[1], R. Harris[1]; [1]The University of Arizona, Tucson, AZ, [2]The Hopi Tribe, Kykotsmovi, AZ

Su-P-56 **Distributions of real time black carbon concentration and its association to $PM_{2.5}$ concentration at an urban hotspot in Seoul, South Korea : Preliminary study results**
S. Kim[1], S. Lee[1], H. KIM[1], J. Lee[1], S. Park[1], J. Park[2], B. Park[3]; [1]Soonchunhyang University, Asan, Korea (the Republic of), [2]KOREA TECH, Cheonan, Korea (the Republic of), [3]Korea Environment Corporation, Incheon, Korea (the Republic of)

Su-P-57 **Characterization of Organophosphate Pesticides in Urine and Home Environment Dust in an Agricultural Community**
C. Tamaro[1], M. Smith[1], T. Workman[1], W. Griffith[1], B. Thompson[2], E. Faustman[1]; [1]University of Washington, Seattle, WA, [2]Cancer Prevention Program, Fred Hutchinson Cancer Research Center, Seattle, WA

Su-P-58 **Modeling Historic Air Pollution Concentrations with Land Use Regression in Tucson, AZ**
N. Lothrop, M. Bell, H. Brown, M. Furlong, S. Guerra, M. K. O'Rourke, P. I. Beamer; University of Arizona, Tucson, AZ

Su-P-59 **Integrating Spatiotemporal Information System Approaches with Agent-Based Modeling for Studies of Human Exposures to Traffic Related Air Pollution (TRAP)**
Z. Mi, R. Laumbach, H. Kipen, P. Georgopoulos; Environmental and Occupational Health Sciences Institute, Rutgers University, Piscataway, NJ

Su-P-60 **Assessing Indoor $PM_{2.5}$ Concentrations in Households on the Hopi Reservation**
S. Hadeed[1], M. K. O'Rourke[1], G. Honanie[2], A. Mahkewa[2], M. Paukgana[2], C. Kelley[1], M. A. Alshammari[1], R. Canales[1], R. Harris[1]; [1]The University of Arizona, Tucson, AZ, [2]The Hopi Tribe, Kykotsmovi, AZ

Su-P-61 **Spatial variation of secondary inorganic $PM_{2.5}$ exposure: from exposure magnitude to exposure distance**
K. Stylianou, O. Jolliet; University of Michigan School of Public Health, Ann Arbor, MI

Program - Sunday, October 15

7:00 pm - 9:00 pm

Empire Ballroom
Welcome Reception & Student Poster Competition Posters [cont.]

Su-P-62 **Amyotrophic lateral sclerosis and exposure to diesel exhaust in a Danish cohort**
A. S. Dickerson[1], J. Hansen[2], O. Gredal[2], M. Weisskopf[1]; [1]Harvard T.H. Chan School of Public Health, Boston, MA, [2]Danish Cancer Society Research Center, Copenhagen, Denmark

Su-P-63 **Investigation of Arsenic and co-occurring metals near abandoned mine wastes in Cheyenne River, South Dakota (CRST)**
C. DeVore, L. Rodriguez Freire, J. Cerrato; University of New Mexico, Albuquerque, NM

Su-P-64 **Analyzing NO2 concentration variations from 2005 to 2016 over the atmosphere of Kazakhstan using Satellite data**
M. Amouei Torkmahalleh[1], Z. Darynova[1], T. Holloway[2]; [1]Nazarbayev University, Astana, Kazakhstan, [2]University of Wisconsin Madison, Madison, WI

Su-P-65 **Use of satellite imagery to identify a target population for recruitment of households within a largerural tribal area**
C. Kelley[1], R. Harris[1], J. Tabor[1], M. K. O'Rourke[1], G. S. Honanie2, L. Joshweseoma[2], S. Hadeed[1], M. A.Alshammari[1]; [1]University of Arizona, Tucson, AZ, [2]Hopi Tribe, Kykotsmovi, AZ

Su-P-66 **Daily and diurnal trends in PM_{10} & $_{2.5}$ collected by a TEOM 1405-DF on the Hopi Reservation of Arizona**
M. A. Alshammari[1], S. Hadeed[1], G. S. Honanie[2], A. Mahkewa[2], M. Paukgana[1], M. K. O'Rourke[1]; [1]University of Arizona, Tucson, AZ, [2]Hopi Tribe, Kykotsmovi, AZ

Su-P-67 **Risk Assessment of Polluted Soils in Relation to Transfer of Metals to Human Food Chain**
D. Golui, S. Datta, B. Dwivedi, M. Meena; ICAR-Indian Agricultural Research Institute, New Delhi, India

Program - Monday, October 16

9:00 am - 10:30 am

Bull Durham A/B
MO-PL-A1: Population Biomonitoring
Chair: Ben Blount, Centers for Disease Control and Prevention, Atlanta, GA

MO-PL-A1-67
California biomonitoring leads to region specific environmental exposure findings
K. Attfield, N. Wu; California Department of Public Health, Richmond, CA

MO-PL-A1-68
Contemporary Flame Retardants Exposures: Firefighters vs. Non-Occupationally Exposed Groups
M. Ospina, N. Jayatilaka, P. Restrepo, A. M. Calafat; Centers for Disease Control and Prevention, Atlanta, GA

MO-PL-A1-69
Characterization of Pregnant Women's Phthalate Exposure using Multiple Urine Samples
H. Shin1, D. Bennett2, X. Ye3, A. M. Calafat3, I. Hertz-Picciotto2; 1University of Texas, Arlington, Arlington, TX, 2University of California, Davis, Davis, CA, 3Centers for Disease Control and Prevention, Atlanta, GA

MO-PL-A1-70
Variation in glucuronidation of phthalate monoesters: Different metabolism or degradation?
J. W. Brock[1], J. Bell[2], D. Hagendorfer[1]; [1]University of North Carolina at Asheville, Asheville, NC, [2]Warren Wilson College, Asheville, NC

MO-PL-A1-71
Elaborating exposure reference values from the French national human biomonitoring program
L. Rambaud, A. Zeghnoun, A. Saoudi, C. Dereumeaux, C. Fillol; Santé publique France, Saint-Maurice, France

Crown A/B
MO-SY-B1: Diverse Applications of Exposure Science for Big Impact in Global Health - Domestic hazards
Chair: Laura Kwong, Stanford University, Stanford, CA

MO-SY-B1-72
Exposure to Lead from Used Lead-Acid Battery Recycling in Low- and Moderate-Income Countries
J. S. Keith, B. Ericson; Blacksmith Institute, Gardiner, NY

MO-SY-B1-73
Soil Ingestion Among Children 0-3 Years Old in Rural Bangladesh
L. Kwong[1], A. Ercumen[2], A. Pickering[3], L. Unicomb[4], J. Davis[1], J. O. Leckie[1], S. Luby[3]; [1]Stanford University, Palo Alto, CA, [2]UC Berkeley, Berkeley, CA, [3]Stanford University, Stanford, CA, [4]International Centre of Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh

MO-SY-B1-74
Human exposure to by-products from anthrax infected animals in Bangladesh
M. Islam[1], S. Hasan[1], F. Haque[1], N. Haider[1], M. B. Hossain[1], S. U. Ahmed[1], M. Rahman[2], J. S. Salzer[3], M. Kadzik[3], E. Kennedy[3], E. Gurley[1]; [1]icddr,b, Dhaka, Bangladesh, [2]Institute of Epidemiology Disease Control and Research, Dhaka, Bangladesh, [3]Centers for Disease Control and Prevention, Atlanta, GA

MO-SY-B1-75
Advances in measuring household air pollution: Findings from India and beyond
K. R. Smith[1], A. Pillarisetti[1], K. Balakrishnan[2], C. R. Garland[3], M. A. Johnson[3], S. Madhav[2], R. Piedrahita[3], S. Sambandam[2]; [1]University of California, Berkeley, Oakland, CA, [2]Sri Ramachandra University, Chennai, India, [3]Berkeley Air Monitoring Group, Berkeley, CA

MO-SY-B1-76
Dietary Exposure Analyses for Central and South America using Creme Global's Food Safety Model
C. O' Mahony, S. Pigat; Creme Global, Dublin, Ireland

MO-SY-B1-77
Panel Discussion on Applications of Exposure Science for Global Health
C. V. Muianga[5], J. S. Keith[2], C. O' Mahony[6], A. Pillarisetti[3], M. Islam[4], L. Kwong[1]; [1]Stanford University, Stanford, CA, [2]Blacksmith Institute, New York, NY, [3]UC Berkeley, Berkeley, CA, [4]International Centre of Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh, [5]Centers for Disease Control and Prevention, Atlanta, GA, [6]Creme Global, Dublin, Ireland

Program - Monday, October 16

9:00 am - 10:30 am

Royal A/B
MO-PL-C1: Risk Assessment Models
Chair: Cynthia Curl, Boise State University, Boise, ID

MO-PL-C1-78
A case study to illustrate the utility of the Aggregate Exposure Pathway and Adverse Outcome Pathway frameworks for integrating human health and ecological data into cumulative risk assessment
D. E. Hines, S. W. Edwards, R. B. Conolly, A. M. Jarabek; U.S. Environmental Protection Agency, Research Triangle Park, NC

MO-PL-C1-79
The U.S. EPA RTR Program's Tiered Screening Approach to Evaluating Ingestion Risks from Emissions of PBHAPs
C. Holder[1], G. Carter[1], A. Varghese[1], M. McVey[3], S. Kumar[1], T. Palma[2], J. Hirtz[2]; [1]ICF, Durham, NC, [2]U.S. Environmental Protection Agency, Research Triangle Park, NC, [3]ICF, Blue Hill, ME

MO-PL-C1-80
Leveraging Global Air Sampling Data - Validation for Regulatory Chemical Risk Assessment Models
R. Tibaldi[1], N. Barone[1], C. Money[2]; [1]ExxonMobil Biomedical Sciences, Annandale, NJ, [2]Cynara Consulting, Hampshire, United Kingdom

MO-PL-C1-81
Human Exposure Model (HEM): A Modular, Web-based Application to Characterize Near-field Chemical Exposures and Releases
K. Dionisio[1], K. Isaacs[1], K. Phillips[1], D. Lyons[1], N. Brandon[1], G. Glen[2], T. Hong[2], A. Varghese[2], J. Levasseur[2], H. Hubbard[2], D. A. Vallero[1], P. P. Egeghy[1], P. Price[1]; [1]Environmental Protection Agency, Research Triangle Park, NC, [2]ICF International, RTP, NC

MO-PL-C1-82
The DustEx model for calculating human exposure to semivolatile organic chemicals (SVOC) in dust: Evaluation and validation
V. Sukiene[1], N. von Goetz[1], A. C. Gerecke[2], M. Bakker[3], C. Delmaar[3], H. M. Koch[4], C. Paelmke[4], K. Hungerbuehler[1]; [1]ETH Zurich, Zurich, Switzerland, [2]EMPA, Dübendorf, Switzerland, [3]RIVM, Bilthoven, Netherlands, [4]DGUV, Bochum, Germany

Crystal Ballroom
MO-SY-D1: US EPA STAR Program: Novel Research for 21st Century Exposure Science - Part 1
Chairs: Meridith Fry, U.S. Environmental Protection Agency, National Center for Environmental Research, Washington, DC; Santhini Ramasamy, U.S. Environmental Protection Agency, National Center for Environmental Research, Washington, DC

MO-SY-D1-83
Novel Research in 21st Century Exposure Science: Introduction and Welcome
M. Fry, S. Ramasamy; US Environmental Protection Agency, Washington, DC

MO-SY-D1-84
Rapid Methods to Estimate Exposure to SVOCs in the Indoor Environment
J. Little, Y. Wu, C. Eichler, L. Marr; Virginia Tech, Blacksburg, VA

MO-SY-D1-85
Determining Indoor Source Strengths: Utilizing Measurements and Models
D. Bennett[1], C. Moschet[1], H. Shin[2], T. Young[1]; [1]University of California, Davis, Davis, CA, [2]University of Texas, Arlington, Arlington, TX

MO-SY-D1-86
On-site monitoring of occupational exposure to volatile organic compounds by a portable comprehensive 2-dimensional gas chromatography device
J. Lee[1], S. Sayler[2], M. Zhou[1], H. Zhu[1], R. J. Richardson[2], R. Neitzel[2], K. Kurabayashi[3], X. Fan[1]; [1]University of Michigan, Ann Arbor, MI, [2]University of Michigan, Ann Arbor, MI, [3]University of Michigan, Ann Arbor, MI

MO-SY-D1-87
Young Children's Exposure to Phthalates in the Home Environment
H. M. Stapleton[1], K. Hoffman[1], A. Lorenzo[1], A. Killius[1], S. C. Hammel[1], A. Phillips[1], X. Ye[3], A. M. Calafat[3], T. F. Webster[2]; [1]Duke University, Durham, NC, [2]Boston University, Boston, MA, [3]Centers for Disease Control & Prevention, Atlanta, GA

Imperial 1
MO-PL-E1: Indoor Air Quality & Particulates
Chair: John Adgate, University of Colorado, CSPH, Aurora, CO

MO-PL-E1-88
Prevalence and timing of indoor PM emission events observed in a small cohort of homes using low-cost dust sensors
WITHDRAWN

Program - Monday, October 16

9:00 am - 10:30 am

Imperial 1
MO-PL-E1: Indoor Air Quality & Particulates [cont.]

MO-PL-E1-89
Assessing Indoor PM2.5 Concentrations in Households on the Hopi Reservation
M. K. O'Rourke[1], S. Hadeed[1], G. Honanie[2], A. Mahkewa[2], M. Paukgana[2], C. Kelley[1], M. A. Alshammari[1], R. Canales[1], R. Harris[1]; [1]The University of Arizona, Tucson, AZ, [2]The Hopi Tribe, Kykotsmovi, AZ

MO-PL-E1-90
Assessment of air exchange rate in classrooms of middle schools with natural ventilation in Beijing, China
Z. Sun, C. Cai, R. Du, Y. Zhang; Tsinghua University, Beijing, China

MO-PL-E1-91
Reductions in Personal PM2.5 Exposure via Indoor Air Filtration in the Reducing Air Pollution in Detroit Intervention Study (RAPIDS)
M. M. Maestas[1], R. Brook[2], R. Bard[2], R. Ziemba[3], F. Li[1], R. Crane[1], K. Thompson[4], S. Adar[4], C. Spino[4], M. Morishita[1]; [1]Michigan State University, East Lansing, MI, [2]University of Michigan, Ann Arbor, MI, [3]Community Health Nursing, Ann Arbor, MI, [4]University of Michigan, Ann Arbor, MI

MO-PL-E1-92
Indoor air quality in inner-city schools; Spatial and seasonal variability
E. Majd[1], M. McCormack[5], F. Connolly[2], P. Leaf[3], C. Gummerson[5], D. Clemons-Erby[1], F. Curriero[3], M. Davis[3], T. Webb[4], N. Price[4], K. Spicer[3], K. Koehler[1]; [1]Johns Hopkins University, Baltimore, MD, [2]Johns Hopkins University, Baltimore, MD, [3]Johns Hopkins University, Baltimore, MD, [4]Baltimore City Public Schools, Baltimore, MD, [5]Johns Hopkins University, Baltimore, MD

Imperial 2
MO-SY-F1: Pathways and mechanisms linking exposure to the natural environment with health and well-being benefits
Chairs: Andrey, Egorov, U.S. Environmental Protection Agency, Chapel Hill, NC; Timothy Buckley, U.S. Environmental Protection Agency, Research Triangle Park, NC

MO-SY-F1-93
Green health pathways: a theoretical framework and applications
J. Roe; University of Virginia, Charlottesville, VA

MO-SY-F1-94
Properties of urban green spaces facilitating psychological restoration
M. van den Bosch[1], P. Währborg[2], J. Björk[3], P. Grahn[2], E. Skärbäck[2], P. Jönsson[4], M. Wallergård[3], G. Johansson[3], B. Karlson[†3], P. Östergren[3]; [1]The University of British Columbia, Vancouver, Canada, [2]Swedish University of Agricultural Sciences, Alnarp, Sweden, [3]Lund University, Lund, Sweden, [4]Högskolan Kristianstad, Kristianstad, Sweden

MO-SY-F1-95
Linking urban green spaces with physical activity
J. A. Hipp; NC State University, Raleigh, NC

MO-SY-F1-96
Fine-scale health-related measures of exposure to urban green spaces
L. E. Jackson; U.S. EPA, Research Triangle Park, NC

MO-SY-F1-97
How vegetation affects local air quality and human exposure
R. Baldauf; US EPA, Durham, NC

Auditorium
MO-SY-G1: The Influence of Aviation Emissions on Exposures at Local, Regional and National Scales
Chair: Neelakshi Hudda, Tufts University, Medford, MA

MO-SY-G1-98
A Simple Dispersion Model of Ground Level Ultrafine Particle Concentrations Downwind of a Major Airport
T. V. Larson[1], N. Hudda[2], S. Fruin[3], S. Boonyarattaphan[1]; [1]University of Washington, Seattle, WA, [2]Tufts University, Boston, MA, [3]University of Southern California, Los Angeles, CA

MO-SY-G1-99
The Impact of Aviation Emissions on Ultrafine Particulate Matter (UFP) Concentrations in Communities at Varying Distances from Flight Paths
C. Kim, J. I. Levy; Boston University School of Public Health, Boston, MA

Program - Monday, October 16

9:00 am - 10:30 am

Auditorium
MO-SY-G1: The Influence of Aviation Emissions on Exposures at Local, Regional and National Scales [cont.]

MO-SY-G1-100
Model-based Assessment of Particle Mass and Number Concentrations due to Commercial Aircraft Activity in the U.S.
S. Arunachalam[1], J. Huang[1], L. P. Vennam[1], B. Murphy[2], F. Binkowski[2]; [1]University of North Carolina at Chapel Hill, Chapel Hill, NC, [2]U.S. Environmental Protection Agency, Research Triangle Park, NC

MO-SY-G1-101
Local-and national-scale impacts of emissions from leaded aviation gasoline
P. J. Wolfe; Self, Ann Arbor, MA

MO-SY-G1-102
Crossover and Distinction between Methods, Models, and Data to Assess Long-term Aviationrelated Air Pollutant Exposures at Local, Regional, and National Spatial Scales
N. Hudda[1], T. Larson[2], P. J. Wolfe[3], S. Arunachalam[4], J. I. Levy[5]; [1]Tufts University, Medford, MA, [2]University of Washington, Seattle, WA, [3]MIT, Cambridge, MA, [4]University of North Carolina, Chapel Hill, NC, [5]Boston University, Boston, MA

11:00 am - 12:00 pm

Bull Durham
MO-PL-A2: Wrist Bands As Sensors
Chair: Elizabeth Boyle, National Academies of Sciences, Engineering, and Medicine, Washington, DC

MO-PL-A2-103
Passive Sampling-Silicone Wristbands Are Not Just A Fashion Statement
H. Rubenstein[1], K. A. Anderson[2], G. Wilson[2], R. Scott[2], F. Kathy[1]; [1]USAF, Beavercreek, OH, [2]Oregon State University, Corvallis, OR

MO-PL-A2-104
Comparing chemical exposures across diverse communities using silicone wristbands
H. Dixon, C. Donald, A. Bergmann, G. Points III, R. Scott, B. Smith, K. A. Anderson; Oregon State University, Corvallis, OR

MO-PL-A2-105
Passive wristband sampling of pesticide exposures among adolescent Latina girls in an agricultural community
K. Harley[1], R. Gunier[1], J. Nolan[1], K. A. Anderson[2], C. Poutasse[2], R. Scott2, A. Bradman[1]; [1]UC Berkeley, Berkeley, CA, [2]Oregon State University, Corvallis, OR

Crown A/B
MO-PL-B2: Biomass Burning & Health
Chair: Jonathan Thornburg, RTI International, Research Triangle Park, NC

MO-PL-B2-106
Personal exposure to black carbon among women in semi-rural Mozambique
A. Curto Tirado[1], D. Donaire-Gonzalez[1], M. Manaca[2], R. Gonzalez[4], C. Sacoor[2], I. Rivas[1], G. Wellenius[3], J. Sunyer[1], C. Menéndez[4], C. Tonne[1]; [1]ISGlobal, Centre for Research in Environmental Epidemiology (CREAL), Barcelona, Spain, [2]Centro de Investigação em Saúde da Manhiça (CISM), Manhiça, Mozambique, [3]Brown University School of Public Health, Providence, RI, [4]ISGlobal, Centre for International Health Research (CRESIB), Hospital Clínic- UB, Barcelona, Spain

MO-PL-B2-107
Biomonitoring Human Exposure to Household Air Pollution and Association with Self-reported Health Symptoms - A Stove Intervention Study in Peru
Z. Li[1], A. Commodore[2], S. Hartinger[3], M. Lewin[1], A. Sjodin[4], E. Pittman[4], D. Trinidad[4], K. Hubbard[4], C. Lanata[5], A. Gil[5], D. Mäusezahl[6], L. Naehe[7]; [1]Agency for Toxic Substances and Disease Registry, Atlanta, GA, [2]Medical University of South Carolina, Charleston, SC, [3]Universidad Peruana Cayetano Heredia, Lima, Peru, [4]Centers for Disease Control and Prevention, Atlanta, GA, [5]Instituto de Investigación Nutricional, Lima, Peru, [6]Swiss Tropical and Public Health Institute, Basel, Switzerland, [7]University of Georgia, Athens, GA

MO-PL-B2-108
Elevated blood pressure and household solid fuel use in premenopausal women: Analysis of 12 Demographic and Health Surveys (DHS) from 10 countries
R. E. Arku[1], M. Ezzati[2], J. Baumgartner[3], G. Fink[4], P. Hystad[5], M. Brauer[1]; [1]University of British Columbia, Vancouver, Canada, [2]Imperial College London, London, United Kingdom, [3]McGill University, Montreal, Canada, [4]Harvard T.H. Chan School of Public Health, Boston, MA, [5]Oregon State University, Corvallis, OR

Program - Monday, October 16

11:00 am - 12:00 pm

Royal A/B
MO-SY-C2: Tribal Sovereign Rights, Knowledge and Data Protections and Protocols in the Environmental Health Sciences

Chair: Clarita Lefthand-Begay, University of Washington, Seattle, WA

MO-SY-C2-109
Native American Knowledge Systems: Sovereign Rights, Protections and Protocols
C. Lefthand-Begay; University of Washington, Seattle, WA

MO-SY-C2-110
Protections and communication for tribal entities involved in research
M. Gonzales[2], E. Erdei[1]; [1]University of New Mexico College of Pharmacy, Albuquerque, NM, [2]University of New Mexico School of Medicine, Albuquerque, NM

MO-SY-C2-111
Communicating Home Well Water Quality Results to Families
J. Doyle[2], M. J. Eggers[1]; [1]Montana State University Bozeman, Bozeman, MT, [2]Little Big Horn College, Crow Agency, MT

Crystal Ballroom
MO-SY-D2: US EPA STAR Program: Novel Research for 21st Century Exposure Science - Part 2

Chairs: Meridith Fry, U.S. Environmental Protection Agency, National Center for Environmental Research, Washington, DC; Santhini Ramasamy, U.S. Environmental Protection Agency, National Center for Environmental Research, Washington, DC

MO-SY-D2-112
A Suspect Screening Method for Characterizing Multiple Chemical Exposures among a Demographically Diverse Population of Pregnant Women in San Francisco, CA
A. Wang[1], J. M. Schwartz[2], R. R. Gerona[3], T. Lin[3], M. Sirota[4], R. Morello-Frosch[5], D. Woodruff[2]; [1]University of California, San Francisco, San Francisco, CA, [2]University of California, San Francisco, San Francisco, CA, [3]University of California, San Francisco, San Francisco, CA, [4]University of California, San Francisco, San Francisco, CA, 5University of California, Berkeley, Berkeley, CA

MO-SY-D2-113
Toxicogenetics of PERC Metabolism and Toxicity: Collaborative Cross Mouse Population Approach to Address Remaining Gaps in Human Health Assessments
I. Rusyn, J. Cichocki, W. Chiu, D. Threadgill; Texas A&M University, College Station, TX

MO-SY-D2-114
Panel Discussion
M. Fry; US Environmental Protection Agency, Washington, DC

Imperial 1
MO-PL-E2: Food Packaging

Chair: Jennifer Thomasen, Bayer CropScience, Research Triangle Park, NC

MO-PL-E2-115
A Quantitative Property-Property Relationship for Estimating Packaging-Food Partition Coefficients of Organic Compounds
L. Huang[1], A. Ernstoff[2], H. Xu[1], S. Lu[1], P. Fantke[3], O. Jolliet[1]; [1]University of Michigan, Ann Arbor, MI, [2]Quantis Lausanne, Lausanne, Switzerland, [3]Technical University of Denmark, Lyngby, Denmark

MO-PL-E2-116
Migration modeling to estimate exposure to chemicals in food packaging for application in highthroughput risk-based screening and Life Cycle Assessment
A. S. Ernstoff[1], O. Jolliet[2], L. Huang[2], P. Fantke[1]; [1]DTU, Kgs. Lyngby, Denmark, [2]University of Michigan, Ann Arbor, MI

MO-PL-E2-117
Consumer Exposures to Engineered Nanomaterials through Dietary Sources
K. Grieger; RTI International, Research Triangle Park, NC

Imperial 2
MO-SY-F2: Pathways and mechanisms linking exposure to the natural environment with health and well-being benefits - Part 2

Chairs: Andrey, Egorov, U.S. Environmental Protection Agency, Chapel Hill, NC; Timothy Buckley, U.S. Environmental Protection Agency, Research Triangle Park, NC

MO-SY-F2-118
Using Health Effect Biomarkers to Characterize Benefits of Urban Green Spaces
A. I. Egorov, S. Griffin, R. Converse, J. Styles, E. Sams, A. Wilson, R. Baldauf, V. Isakov, L. E. Jackson, T. Wade; United States Environmental Protection Agency, RTP, NC

Program - Monday, October 16

11:00 am - 12:00 pm

Imperial 2
MO-SY-F2: Pathways and mechanisms linking exposure to the natural environment with health and well-being benefits - Part 2 [cont.]

MO-SY-F2-119
The promises of the General Social Survey (GSS) as a research platform for evaluating well-being benefits from the natural environment
T. Smith; NORC, Chicago, IL

MO-SY-F2-120
Assessing the Effect of the Natural Environment on Subjective Well-being
R. A. Silva[1], S. Prince[2], F. Cochran[1], A. Neale[2], K. Rogers[2], T. J. Buckley[2]; [1]U.S. Environmental Protection Agency, Research Triangle Park, NC, [2]U.S. Environmental Protection Agency, Research Triangle Park, NC

Auditorium
MO-SY-G2: Road Work Ahead: Progress in Assessing and Mitigating Exposure to Traffic-Related Air Pollution
Chairs: Maria Costantini, Health Effects Institute, Boston, MA; Hanna Boogaard, Health Effects Institute, Boston, MA

MO-SY-G2-121
Strategies to reduce exposures to traffic-related air pollution at the local level
R. Baldauf; US EPA, Durham, NC

MO-SY-G2-122
Development of Internal Indicators of Primary Traffic Exposures Using Environmental Metabolomics in the Dorm Room Inhalation to Vehicle Emissions (DRIVE) Study
D. Liang[1], J. L. Moutinho[2], R. Golan[3], T. Yu[4], C. N. Ladva[1], M. Niedzwiecki[1], S. E. Sarnat[1], H. Chang[4], R. Greenwald[5], D. P. Jones[6], A. Russell[2], J. A. Sarnat[1]; [1]Emory University, Atlanta, GA, [2]Georgia Institute of Technology, Atlanta, GA, [3]Ben Gurion University of the Negev, Beer Sheva, Israel, [4]Emory University, Atlanta, GA, [5]Georgia State University, Atlanta, GA, [6]Emory University, Atlanta, GA

MO-SY-G2-123
Enhancing models and measurements of traffic-related air pollutants using a spatio-temporal Bayesian spatial model
V. Berrocal[1], S. Batterman[2], O. Gilani[3]; [1]University of Michigan, Ann Arbor, MI, [2]University of Michigan, Ann Arbor, MI, [3]Bucknell University, Lewisburg, PA

1:30 pm - 3:00 pm

Bull Durham
MO-PL-A3: Spatial Temporal Modeling of Air Pollution
Chairs: Carol Shreffler, National Institute of Environmental Health Sciences, Research Triangle Park, NC

MO-PL-A3-124
Modeling Historic Air Pollution Concentrations with Land Use Regression in Tucson, AZ
N. Lothrop, M. Bell, H. Brown, M. Furlong, S. Guerra, M. K. O'Rourke, P. I. Beamer; University of Arizona, Tucson, AZ

MO-PL-A3-125
Analyzing NO2 concentration variations from 2005 to 2016 over the atmosphere of Kazakhstan using Satellite data
M. Amouei Torkmahalleh[1], Z. Darynova[1], T. Holloway[2]; [1]Nazarbayev University, Astana, Kazakhstan, [2]University of Wisconsin Madison, Madison, WI

MO-PL-A3-126
Spatial-temporal Characteristics of Metal Contents in Ambient Fine Particles in Nanjing, China
D. Bi[1], H. Cheng[1], X. Liu[2], M. Liu[2], J. Chen[1], X. Cui[2], Z. Zhu[1]; [1]Nanjing Foreign Language School, Nanjing, China, [2]Nanjing University, Nanjing, China

MO-PL-A3-127
Intraurban distributions of NO2 and PM2.5 at three dimensions in Lanzhou, China
L. Jin[1], Y. Zhang[1], Y. Zhang[2], M. L. Bell[1]; [1]Yale University, New Haven, CT, [2]Gansu Academy of Environmental Sciences, Lanzhou, China

MO-PL-A3-128
Spatial and Temporal Covariation of Ultrafine Particles and Nitrogen Oxides in Urban Air: Implications for Exposure Assessment
J. L. Durant[1], L. Corlin[1], M. C. Simon[1], M. Woodin[1], D. Gute[1], D. Brugge[2]; [1]Tufts University, Boston, MA, [2]Tufts University, Boston, MA

Program - Monday, October 16

1:30 pm - 3:00 pm

Crown A/B
MO-SY-B3: Toxic chemical water contaminants in low and middle income countries Part I: A global grand challenge for the WASH development sector

Chair: Josh Kearns, NC State University, Raleigh, NC

MO-SY-B3-129
Synthetic chemicals as agents of global change
E. Bernhardt; Duke University, Durham, NC

MO-SY-B3-130
Shifting Exposures, Shifting Paradigms: Global Trends Warrant a Focus on Chemical Contaminants in the WASH Sector
A. M. Aceituno; RTI International, Research Triangle Park, NC

MO-SY-B3-131
Minimizing potential groundwater and surface water exposures associated with agricultural practices
J. Durant; ATSDR, Atlanta, GA

MO-SY-B3-132
Annual meeting of the WASH Toxics working group
J. Kearns; North Carolina State University, Raleigh, NC

Royal A/B
MO-SY-C3: ATSDR Methods for Assessing Exposure to Air Pollutants in Diverse Communities

Chair: Bradley Goodwin, Agency for Toxic Substances and Disease Registry, Atlanta, GA

MO-SY-C3-133
Estimating exposure to air pollutants from a pulp and paper mill in a coastal NW Washington community
B. Goodwin, J. Durant, D. Gable; Agency for Toxic Substances and Disease Registry, Atlanta, GA

MO-SY-C3-134
Measuring Exposure to Hydrogen Sulfide and Particulate Matter in a Community Adjacent to a Construction and Demolition Debris Landfill in Louisiana
B. Goodwin, A. Young; ATSDR, Atlanta, GA

MO-SY-C3-135
Estimating Hydrogen Sulfide Emissions and Ambient Air Concentrations from Beef Cattle Feedlot Operations
C. V. Muianga; Agency for Toxic Substances and Disease Registry (ATSDR), Atlanta, GA

MO-SY-C3-136
Measuring Particulate Matter, Hydrogen Sulfide, and Ammonia Levels in a Native American Community near Dairy Animal Feeding Operations (AFOs)
D. Gable, A. Young, A. Grober; Agency for Toxic Substances and Disease Registry, Atlanta, GA

MO-SY-C3-137
Panel Discussion
P. J. Kowalski; Agency for Toxic Substance and Disease Registry, Atlanta, GA

Crystal Ballroom
MO-SY-D3: Consumer Exposure Assessment: Tools and Information to Support a Fit-for-Purpose Approach to Exposure and Risk Assessment

Chair; Rosemary Zaleski, ExxonMobil Biomedical Sciences, Inc., Annandale, NJ; Annette Guiseppi-Elie, U.S. EPA Office of Research and Development, National Exposure Research Laboratory, Research Triangle Park, NC

MO-SY-D3-138
Advancing Models and Data for Characterizing Exposures to Chemicals in Consumer Products
K. Isaacs[1], K. Dionisio[1], K. Phillips[1], J. Wambaugh[2], P. Price[1], A. Guiseppi-Elie[1]; [1]US Environmental Protection Agency, Durham, NC, [2]United States Environmental Protection Agency, Research Triangle Park, NC

MO-SY-D3-139
Overview of OPPT Consumer Exposure Models, Use Descriptors, and Related Indoor Exposure Data
C. Fehrenbacher[1], C. Bevington[1], X. Liu[1], M. Lee[1], Z. Guo[2], H. Hubbard[2], A. Williams[2], C. Stevens[2], T. Hong[2]; [1]Environmental Protection Agency, Washington, DC, [2]ICF, RTP, NC

MO-SY-D3-140
REACH Consumer Exposure and Risk Tools
H. Qian[1], T. Dudzina[1], C. Rodriguez[2], R. Zaleski[1]; [1]EMBSI, Annandale, NJ, [2]Procter & Gamble, Brussels, Belgium

Program - Monday, October 16

1:30 pm - 3:00 pm

Crystal Ballroom

MO-SY-D3: Consumer Exposure Assessment: Tools and Information to Support a Fit-for-Purpose Approach to Exposure and Risk Assessment [cont.]

MO-SY-D3-141
Tiering Consumer Product Exposure Tools
C. Cowan-Ellsberry[1], R. Zaleski[2], B. Greggs[3]; [1]CE2 Consulting, Cincinnati, OH, [2]ExxonMobil Biomedical Sciences, Inc., Annandale, NJ, [3]Soleil Consulting, Sanibel, FL

MO-SY-D3-142
Panel Discussion for ISES Symposium Topic: Consumer Exposure Assessment: Tools and Information to Support a Fit-for-Purpose Approach to Exposure and Risk Assessment
R. Zaleski[1], A. Guiseppi-Elie[2]; [1]ExxonMobil Biomedical Sciences, Inc., Annandale, NJ, [2]Environmental Protection Agency, Research Triangle Park, NC

Imperial 1

MO-SY-E3: Childhood Multimedia Lead Exposures: Innovative Modeling and Data Collection Efforts by the Federal Family to Guide Public Health Decision-Making

Chairs: Kacee Deener, U.S. EPA Office of Research and Development, Office of Science Policy, Washington, DC; Jennifer Orme-Zavaleta, U.S. EPA Office of Research and Development, National Exposure Research Laboratory, Research Triangle Park, NC

MO-SY-E3-143
Community Engagement Efforts in Flint, MI
D. Russell; U.S. EPA, Flushing, MI

MO-SY-E3-144
Multimedia Lead Exposure Modeling, and Water Monitoring Perspectives
V. G. Zartarian, J. Xue, R. Tornero-Velez, J. Brown, T. Speth, J. Garland; USEPA, Boston, MA

MO-SY-E3-145
Establishing a new Blood Lead Reference Value
P. Breysse, A. Ettinger; Centers for Disease Control and Prevention, Atlanta, GA

MO-SY-E3-146
The Distribution of Lead-Based Paint Hazards in U.S. Housing
P. J. Ashley, W. Friedman, E. A. Pinzer; U.S. Department of Housing and Urban Development, Washington, DC

MO-SY-E3-147
FDA Total Diet Study data on lead in food: current understanding, data gaps, and future efforts
J. H. Spungen[1], A. Gavelek[1], R. Pouillot[2], T. Councell[1], M. Wirtz[1]; [1]U.S. Food and Drug Administration, College Park, MD, [2]Consultant, Buenos Aires, Argentina

Imperial 2

MO-SY-F3: Quantitative High-Throughput Exposure Methods for Chemical Alternatives and Comparative Risk Assessment

Chair: Peter Fantke, Technical University of Denmark, Kgs. Lyngby, Denmark

MO-SY-F3-148
The landscape of existing models for high-throughput exposure assessment
O. Jolliet[1], P. Fantke[2], L. Huang[1]; [1]University of Michigan, Ann Arbor, MI, [2]Technical University Denmark, Lyngby, Denmark

MO-SY-F3-149
Identifying Potential Alternatives using Chemical Functional Use
K. Phillips[1], J. Wambaugh[2], C. Grulke[2], K. Dionosio[1], K. Isaacs[1]; [1]U.S. Environmental Protection Agency, Research Triangle Park, NC, [2]U.S. Environmental Protection Agency, Research Triangle Park, NC

MO-SY-F3-150
Integrating Toxicity, Toxicokinetic, and Exposure Data for Risk-based Chemical Alternatives Assessment
J. Wambaugh[1], B. A. Wetmore[2], K. Mansouri[3], B. Ingle[2], R. Tornero-Velez[2], R. Judson[1], K. Isaacs[2], K. Phillips[2], C. Nicolas[3], R. W. Setzer[1], R. S. Thomas[1]; [1]U.S. Environmental Protection Agency, Research Triangle Park, NC, [2]U.S. Environmental Protection Agency, Research Triangle Park, NC, [3]Scitovation, Research Triangle Park, NC

MO-SY-F3-151
A First Case Study of a Life Cycle-Based Alternatives Assessment (LCAA)
P. Fantke[1], L. Huang[2], M. Overcash[3], E. Griffing[3], O. Jolliet[2]; [1]Technical University of Denmark, Kgs. Lyngby, Denmark, [2]University of Michigan, Ann Arbor, MI, [3]Environmental Clarity, Inc., Reston, VA

MO-SY-F3-152
Suspect Screening and Non-Targeted Analysis of Coupled Soil and House Dust Samples
WITHDRAWN

Program - Monday, October 16

1:30 pm - 3:00 pm

Auditorium
MO-SY-G3: Exposure, cumulative risk, and epidemiology in communities near upstream energy development Part 1
Chair: Lisa McKenzie, University of Colorado, Anschutz Medical Campus, Aurora, CO

MO-SY-G3-153
An industrial activity model approach to differentiating exposure categories for oil and gas epidemiological studies
W. Allshouse, J. Adgate, B. Blair, L. McKenzie; Colorado School of Public Health, Aurora, CO

MO-SY-G3-154
Spatial Patterning of Hydraulic Fracturing Wastewater Injection Wells: Environmental Justice in Ohio
G. Silva, J. Warren, N. Deziel; Yale School of Public Health, New Haven, CT

MO-SY-G3-155
Community Engaged Volatile Organic Compounds Sampling in Guernsey County, Ohio
E. Haynes[1], J. Quirolgico[1], R. Roberts[2], R. Shepler[1], R. Jandarov[1]; [1]University of Cincinnati, Cincinnati, OH, [2]Guernsey County Resident, Cambridge, OH

MO-SY-G3-156
Techniques for Estimating Community Exposure from Hydraulic Fracturing Operations
M. McCawley, J. Barre, M. Nye, T. Knuckles; West Virginia University, Morgantown, WV

MO-SY-G3-157
Truck and multivehicle truck accidents near Colorado oil and gas operations
B. Blair, J. Hughes, W. Allshouse, L. McKenzie, J. Adgate; University of Colorado, Aurora, CO

3:30 pm - 5:00 pm

Bull Durham
MO-PL-A4: Novel Methods for Spatial Analysis
Chair: Kai Zhang, The University of Texas Health Science Center at Houston, Houston, TX

MO-PL-A4-158
Fine-scale spatio-temporal variation in particulate matter in a small wood-burning town revealed by a network of continuous low-cost sensors
WITHDRAWN

MO-PL-A4-159
A novel air quality model fusion method for improving spatial resolution (250m) of ambient air pollutant exposure
J. Bates[1], A. F. Pennington[2], X. Zhai[1], M. Friberg[1], F. Metcalf[1], M. Strickland[3], L. Darrow[3], J. Mulholland[1], A. Russell[1]; [1]Georgia Institute of Technology, Atlanta, GA, [2]Emory University, Atlanta, GA, [3]University of Nevada, Reno, Reno, NV

MO-PL-A4-160
Improved Community Air Quality Monitoring Networks: Achieving Sensitivity to Pollutant Gradients Using Lower-Cost Sensors and Machine Learning
N. Zimmerman[1], A. Presto[1], S. Kumar[2], J. Gu[2], E. Robinson[1], A. L. Robinson[1], S. Ramachandran[1]; [1]Carnegie Mellon University, Pittsburgh, PA, [2]Sensevere LLC, Pittsburgh, PA

MO-PL-A4-161
Predicting Daily $PM_{2.5}$ Concentrations in Texas Using High-Resolution Satellite Aerosol Optical Depth
X. Zhang[1], Y. Chu[2], K. Zhang[1]; [1]The University of Texas Health Science Center at Houston School of Public Health, Houston, TX, [2]The University of Texas Health Science Center at Houston School of Public Health, Houston, TX

MO-PL-A4-162
Air Quality Land Use Regression Model Robustness from Routine Mobile Monitoring Using Google Street View Cars
K. P. Messier[1], S. Gani[2], R. C. Vermeulen[3], C. Portier[4], R. Alvarez[4], J. Apte[2]; [1]Environmental Defense Fund/ UT-Austin, Austin, TX, [2]University of Texas at Austin, Austin, TX, [3]Institute for Risk Assessment Science, Utrecht University, Utrecht, Netherlands, [4]Environmental Defense Fund, Austin, TX

Program - Monday, October 16

3:30 pm - 5:00 pm

Crown A/B
MO-SY-B4: Toxic chemical water contaminants in low and middle income countries Part II: Analytics, risk analysis, and mitigation strategies
Chair: Josh Kearns, NC State University, Raleigh, NC

MO-SY-B4-163
Using a risk-based approach to rank toxic chemicals in drinking water to support prioritization of risk mitigation strategies in low resource settings
J. H. Redmon; RTI International, Research Triangle Park, NC

MO-SY-B4-164
Cost-Effective, Scalable Field and Laboratory Approaches for Quantitation of Established and Emerging Chemicals in the Environment
K. E. Levine, J. M. Harrington, P. Presler-Jur, A. Essader, J. Davis; RTI International, Research Triangle Park, NC

MO-SY-B4-165
Volatile organics in open dumps and their removal using municipal solid waste biochar
M. Vithanage; National Institute of Fundamental Studies, KANDY, Sri Lanka

MO-SY-B4-166
A potential never-ending story of chemical water pollution in LMICs: Proliferation of legacy and replacement PFAS
J. DeWitt[1], C. Higgins[2]; [1]East Carolina University, Greenville, NC, [2]Colorado School of Mines, Golden, CO

MO-SY-B4-167
Activation of Biochar Adsorbents with Base and Ash Leachates for the Removal of Organic Micropollutants in Low-Cost Water Treatment
M. J. Bentley[1], J. Kearns[2], R. Summers[1]; [1]University of Colorado Boulder, Boulder, CO, [2]North Carolina State University, Raleigh, NC

Royal A/B
MO-SY-C4: ATSDR Exposure Assessments: Science, Collaboration, and Communication to Inform Public Health Decisions in diverse communities
Chair: Peter Kowalski, Agency for Toxic Substances and Disease Registry, Atlanta, GA

MO-SY-C4-168
Characterizing exposure to dioxins/furans and other toxins from a biomass power plant near L'Anse Indian Reservation, MI.
M. P. Caudill; ATSDR, Chicago, IL

MO-SY-C4-169
Spatial, temporal and meteorological trends in benzene air concentrations in Corpus Christi Refinery Row, Texas
J. Durant, D. Langmann; ATSDR, Atlanta, GA

MO-SY-C4-170
Assessing Children's Lead Exposure in a Colorado Neighborhood near a Historic Smelter
L. Rosales-Guevara[1], B. Tierney[1], D. Dorian[1], B. A. Anderson[1], C. Nevin-Woods, D.O.[2]; [1]CDC/ATSDR, Atlanta, GA, [2]El Paso County, Colorado Springs, CO

MO-SY-C4-171
Assessing Children's Lead and Arsenic Exposure in Two Rural Arizona Communities near a Copper Smelter
B. Gerhardstein[1], B. Tierney[2], J. Rayman[1], B. A. Anderson[2]; [1]Agency for Toxic Substances and Disease Registry, San Francisco, CA, [2]Agency for Toxic Substances and Disease Registry, Atlanta, GA

MO-SY-C4-172
Characterizing manganese inhalation exposure and the evaluation of neuropsychological health outcomes in two Ohio towns
M. A. Colledge[1], J. Julian[2], R. Bowler[3], V. Gochev[a3], E. Kornblith[4], C. Beseler[5], D. Lobdell[6], G. Bollweg[7]; [1]ATSDR/CDC, Evanston, IL, [2]United States Environmental Protection Agency, Chicago, IL, [3]San Francisco State University, San Francisco, CA, [4]Alliant International University, San Francisco, CA, [5]Colorado State University, Fort Collins, CO, [6]United States Environmental Protection Agency, Research Triangle Park, NC, [7]United States Environmental Protection Agency, Chicago, IL

Program - Monday, October 16

3:30 pm - 5:00 pm

Crystal Ballroom
MO-SY-D4: Characterizing Consumer Habits & Practices to Refine Consumer Product Exposure Assessment
Chair: Michelle Embry, HESI, Washington, DC

MO-SY-D4-173
Current Exposure Assessment Practices in the Eu for Chemicals in Consumer Products
N. Corea; SC Johnson, Camberley, United Kingdom

MO-SY-D4-174
Data for High Tier Consumer Product Exposure Assessment
S. A. Tozer; Procter & Gamble, Surrey, United Kingdom

MO-SY-D4-175
The ECETOC Exposure Database
C. O' Mahony; Creme Global, Dublin, Ireland

MO-SY-D4-176
Development of Product Categories Linking Ingredient Data and Consumer Habits and Practices for Exposure Prediction
K. Isaacs, K. Dionosio, K. Phillips, P. Price; US Environmental Protection Agency, Durham, NC

MO-SY-D4-177
Calendar-based consumer product use survey data: application to exposure modelling
B. M. Young[1], J. H. Driver[2], J. Blattner[3]; [1]Bayer CropScience, RTP, NC, [2]risksciences.net, LLC, Manassas, VA, [3]SC Johnson, Racine, WI

Imperial 1
MO-SY-E4: Pediatric Manganese Exposure and Neurodevelopment across Diverse Populations
Chair: Erin Haynes, University of Cincinnati, Cincinnati, OH

MO-SY-E4-178
Maternal Manganese During Pregnancy And Neurodevelopment In Young Children From The Infants' Environmental Health (ISA) Study
A. Mora[1], L. Cordoba[1], M. Quiros-Lepiz[1], A. Fajardo-Soto[1], D. R. Smith[2], J. A. Menezes-Filho[3], B. Eskenazi[4], D. Mergler[5], B. van Wendel de Joode[1]; [1]Universidad Nacional, Costa Rica, Heredia, Costa Rica, [2]University of California at Santa Cruz, Santa Cruz, CA, [3]Federal University of Bahia, Salvador, Brazil, [4]University of California at Berkeley, Berkeley, CA, [5]University of Quebec in Montreal, Montreal, Canada

MO-SY-E4-179
Neurodevelopment and Manganese Exposure in Rural, Appalachian Ohio
E. Haynes[1], H. Sucharew[2], K. Dietrich1; [1]University of Cincinnati, Cincinnati, OH, [2]Cincinnati Children's Hospital Medical Center, Cincinnati, OH

MO-SY-E4-180
Genetic variants in Mn transporters
K. E. Wahlberg; Lund University, Lund, Sweden

MO-SY-E4-181
Manganese Exposure and Neurodevelopment among Italian Adolescents Residing near Ferro-Alloy Industry
B. Claus Henn[1], M. Arora[2], Y. Chiu[2], J. A. Bauer[1], C. Austin[2], S. Guazzetti[6], H. Hsu[2], S. Zoni[5], C. Fedrighi[5], M. Peli[5], C. Benedetti[5], B. A. Coull[3], R. O. Wright[2], D. R. Smith[4], R. G. Lucchini[2]; [1]Boston University, Boston, MA, [2]Icahn School of Medicine, NY, NY, [3]Harvard Chan School of Public Health, Boston, MA, [4]University of California, Santa Cruz, Santa Cruz, CA, [5]University of Brescia, Brescia, Italy, [6]Public Health Agency Reggio Emilia, Reggio Emilia, Italy

MO-SY-E4-182
Uncovering prenatal and early childhood critical windows of Mn exposure using tooth-matrix biomarkers
M. Arora, Y. Chiu, R. G. Lucchini, R. O. Wright; Icahn School of Medicine at Mount Sinai, New York, NY

Imperial 2
MO-SY-F4: A Collaborative Trial for Integrating Exposome, High-Throughput Screening, and Non-Targeted Analysis Research
Chairs: John Sobus, U.S. Environmental Protection Agency, Research Triangle Park, NC; Elin Ulrich, U.S. Environmental Protection Agency, Research Triangle Park

MO-SY-F4-183
Setting the Stage for EPA's Non-Targeted Analysis Collaborative Trial (ENTACT)
J. R. Sobus[1], E. M. Ulrich[1], A. Williams[2], A. Richard[2], C. Grulke[2], A. McEachran[3], S. Newton[1], M. Stryar[1], K. Isaacs[1], J. Wambaugh[2]; [1]US EPA, Research Triangle Park, NC, [2]US EPA, Research Triangle Park, NC, [3]US EPA, Research Triangle Park, NC

Program - Monday, October 16

3:30 pm - 5:00 pm

Imperial 2
MO-SY-F4: A Collaborative Trial for Integrating Exposome, High-Throughput Screening, and Non-Targeted Analysis Research [cont.]

MO-SY-F4-184
EPA's Non-Targeted Analysis Collaborative Research Trial (ENTACT): Evaluating the State-of-the-Science for Non-Targeted Analysis

E. M. Ulrich[1], J. R. Sobus[1], A. Richard[2], C. Grulke[2], A. Williams[2], S. Newton[1]; [1]US EPA, Durham, NC, [2]US EPA, Durham, NC

MO-SY-F4-185
Using the US EPA's CompTox Chemistry Dashboard to Advance Non-Targeted Analysis and Exposure Research

A. McEachran[1], J. Grossman[2], S. Newton[2], K. Isaacs[2], K. Phillips[2], N. Baker[3], C. Grulke[3], J. R. Sobus[2], A. Williams[3]; [1]US EPA/ORISE, Durham, NC, [2]US EPA, Durham, NC, [3]US EPA, Durham, NC

MO-SY-F4-186
Using structural similarity to estimate concentrations of known unknowns in suspect screening analyses

J. Grossman[1], A. McEachran[2], A. Marcotte[1], A. Williams[2], J. R. Sobus[1]; [1]US EPA, Research Triangle Park, NC, [2]US EPA, Research Triangle Park, NC

MO-SY-F4-187
Evaluating the Chemical Space of House Dust, Human Serum, and Silicone Wristband Passive Samplers Using Suspect Screening Analysis

S. Laughlin-Toth[1], J. Grossman[2], A. Marcotte[1], S. Newton[3], A. McEachran[4], A. Williams[5], E. M. Ulrich[3], J.R. Sobus[3]; [1]ORISE Program Participant - US Environmental Protection Agency, Durham, NC, [2]ORAU Program Participant - US Environmental Protection Agency, Durham, NC, [3]US Environmental Protection Agency, Durham, NC, [4]ORISE Program Participant - US Environmental Protection Agency, Durham, NC, [5]US Environmental Protection Agency, Durham, NC

Auditorium
MO-SY-G4: Exposure, cumulative risk, and epidemiology in communities near upstream energy development Part 2

Chair: Lisa McKenzie, University of Colorado, Anschutz Medical Campus, Aurora, CO

MO-SY-G4-188
Estimating Cumulative Exposure and Risks from Oil and Gas Development in the Denver Julesburg Basin

J. Adgate, L. McKenzie, B. Blair, W. Allshouse; University of Colorado, CSPH, Aurora, CO

MO-SY-G4-189
A Tale of Two Cities: Associations between subclinical biomarkers and active oil and gas development

L. McKenzie[1], J. Adgate[1], B. Blair[1], J. Peel[3], J. Crooks[2]; [1]University of Colorado Denver, Aurora, CO, [2]National Jewish Hospital, Denver, CO, [3]Colorado State University, Fort Collins, CO

MO-SY-G4-190
Residential proximity to unconventional oil and gas wells, drinking water contaminants, and health symptoms in the Ohio Utica shale formation

E. G. Elliott[1], X. Ma[3], D. L. Plata[2], B. P. Leaderer[1], L. McKay[1], C. J. Pedersen[1], C. Wang[1], C. Gerber[1], T. Wright[1], M. Brennan[2], N. Deziel[1]; [1]Yale University, New Haven, CT, [2]Yale University, New Haven, CT, [3]Yale University, New Haven, CT

MO-SY-G4-191
Community-driven approach to understanding exposures at urban oil drilling sites

J. Johnston[1], A. Collier[2], S. Navarro[3], M. Hannigan[2]; [1]University of Southern California, Los Angeles, CA, [2]University of Colorado Boulder, Boulder, CO, [3]Esperanza Community Housing, Los Angeles, CA

MO-SY-G4-192
Panel Discussion on Exposure, Cumulative Risk, and Epidemiology in Communities near Upstream Energy Development

L. McKenzie[1], J. Adgate[1], N. Deziel[3], E. Haynes[4], M. McCawley[5], A. Miller[2]; [1]University of Colorado Denver, Aurora, CO, [2]National Institutes of Health, Bethesda, MD, [3]Yale School of Public Health, New Haven, CT, [4]University of Cincinnati, Cincinnati, OH, [5]West Virginia University, Morgantown, WV

Program - Monday, October 16

10:30 am - 11:00 am/3:00 pm - 3:30 pm

Empire Ballroom
MO-PO: Monday Poster Session

MO-PO-193 **Composition of particulate matter (PM) originated from desert dust storms in the Eastern Mediterranean region**
S. Achilleos[1], P. Koutrakis[1], M. Hadjicharalambous[2], E. G. Stephanou[3], M. Iakovides[4]; [1]Harvard University, Boston, MA, [2]Cyprus University of Technology, Limassol, Cyprus, [3]The Cyprus Institute, Nicosia, Cyprus, [4]University of Crete, Hearklion, Greece

MO-PO-194 **Personal Fine Particles (PM2.5) Mass and Components Exposures in the General Population of Hong Kong: Variability and Contributing Factors**
X. Chen[1], T. J. Ward[2], J. Cao[4], S. Lee[3], J. C. Chow[7], S. Yim[5], G. Lau[1], K. Ho[6]; [1]The Chinese University of Hong Kong, Hong Kong, China, [2]University of Montana, Missoula, MT, 3The Hong Kong Polytechnic University, Hong Kong, China, [4]Xi'an Jiaotong University, Xi'an, China, [5]The Chinese University of Hong Kong, Hong Kong, China, [6]The Chinese University of Hong Kong, Hong Kong, China, [7]Desert Research Institute, Reno, NV

MO-PO-195 **The Personal exposure of Traffic policemen in Ulaanbaatar, Mongolia**
E. Erdenebayar; Mongolian National University of Medical Sciences, Ulaanbaatar, Mongolia

MO-PO-196 **Daily and diurnal trends in PM_{10} & $_{2.5}$ collected by a TEOM 1405-DF on the Hopi Reservation of Arizona**
M. A. Alshammari[1], S. Hadeed[1], G. S. Honanie[2], A. Mahkewa[2], M. Paukgana[1], M. K. O'Rourke[1]; [1]University of Arizona, Tucson, AZ, [2]Hopi Tribe, Kykotsmovi, AZ

MO-PO-197 **A New Approach for Deriving Numerical Relationships Between Different Elongate Mineral Particles (EMPs) Definitions**
Y. Shao[1], G. Ramachandran[2]; [1]University of Minnesota, Minneapolis, MN, [2]Johns Hopkins University, Baltimore, MD

MO-PO-198 **Relationship between Reactive Oxygen Species (ROS) activity and Cytotoxicity of Ambient Particles**
Y. Wang[1], M. Plewa2, V. Verma[1]; [1]University of Illinois at Urbana-Champaign, Urbana, IL, [2]University of Illinois at Urbana-Champaign, Urbana, IL

MO-PO-199 **Citywide validation and improvement of the MAIAC aerosol product in Lima, Peru**
J. Bi[1], B. Vu[1], A. Wildani[2], Y. Wang[3], A. Lyapustin[3], Y. Liu[1]; [1]Emory University, Atlanta, GA, [2]Emory University, Atlanta, GA, [3]National Aeronautics and Space Administration, Greenbelt, MD

MO-PO-200 **Distributions of real time black carbon concentration and its association to $PM_{2.5}$ concentration at an urban hotspot in Seoul, South Korea: Preliminary study results**
S. Kim[1], S. Lee[1], H. Kim[1], J. Lee1, S. Park[1], J. Park[2], B. Park[3]; [1]Soonchunhyang University, Asan, Korea (the Republic of), [2]KOREA TECH, Cheonan, Korea (the Republic of), [3]Korea Environment Corporation, Incheon, Korea (the Republic of)

MO-PO-201 **Facilitating Collaboration Among South Asian Countries towards Better Understanding of Air Pollution**
P. Pant[1], A. Gurung[2]; [1]University of Massachusetts, Amherst, MA, [2]University of Texas at Austin, Austin, TX

MO-PO-202 **Environmental Exposures to Particulate Matter among Rural, High Risk and Underserved Children in Eastern NC**
S. Cho[1], G. Kearney[2], L. Wei[2], M. McCombs[1], D. Collier[2], K. Gowdy[2], L. Johnson[3], B. Kilburg-Basnyat[2], A. Kuranga[2], N. Siripanichgon[1], T. Blount[3]; [1]RTI International, Research Triangle Park, NC, [2]East Carolina University, Greenville, NC, [3]Vidant Medical Center, Greenville, NC

MO-PO-203 **Variability of bisphenol-A concentrations in first morning, bedtime, and 24-hour urine samples in 50 North Carolina adults over a six-week period**
M. K. Morgan[1], M. Nash[1], D. B. Barr[2], J. R. Sobus[1]; [1]USEPA, Research Triangle Park, NC, [2]Emory University, Atlanta, GA

MO-PO-204 **Perfluoroalkyl substances in the Fernald Community Cohort: Exposure distributions over time and associations with thyroid and kidney function and obesity**
B. E. Blake[1], S. M. Pinney[2], S. E. Fenton[1], K. Ferguson[3]; [1]National Institute of Environmental Health Sciences, Durham, NC, [2]University of Cincinnati, Cincinnati, OH, [3]National Institute of Environmental Health Sciences, Durham, NC

MO-PO-205 **In vivo x-ray fluorescence measured toenail manganese as a biomarker of exposure among welders**
A. J. Specht[2], X. Zhang[1], J. Weuve[3], L. H. Nie[1], M. Weisskopf[2]; [1]Purdue University, West Lafayette, IN, [2]Harvard T.H. Chan School of Public Health, Boston, MA, [3]Boston University, Boston, MA

MO-PO-206 **German Environmental Specimen Bank (ESB): Time Trend of the Internal Exposure to Phthalates from 1988 - 2015**
T. Weber[1], H. M. Koch[2], A. Conrad[1], M. Rüther[1], P. Apel[1], M. Kolossa-Gehring[1]; [1]German Environment Agency (UBA), Berlin, Germany, [2]Institute for Prevention and Occupational Medicine of the German Social Accident Insurance – Institute of the Ruhr-Universität Bochum (IPA), Bochum, Germany

MO-PO-207 **Urinary measurements of bisphenol A in children, mothers and fathers from Slovenia: Overall results and determinants of exposure**
J. Snoj Tratnik, T. Kosjek, E. Heath, D. Mazej, M. Horvat; Jozef Stefan Institute, Ljubljana, Slovenia

Program - Monday, October 16

10:30 am - 11:00 am/3:00 pm - 3:30 pm

Empire Ballroom
MO-PO: Monday Poster Session [cont.]

MO-PO-208 **Biomonitoring Six Per- and Polyfluoroalkyl Substances Included in the U.S. EPA Third Unregulated Contaminant Monitoring Rule**
L. Blum, S. Donovan, D. Schiller, B. Yue; NMS Labs, Willow Grove, PA

MO-PO-209 **Laser Ablation Inductively Coupled Plasma Spectrometry calibration for the Quantification of Manganese in Human Hair**
B. Reiss[2], N. Seixas[1], E. A. Riley[1], C. D. Simpson[1]; [1]University of Washington, Seattle, WA, [2]The University of Arizona, Tucson, AZ

MO-PO-210 **Impacts of Cold Weather on Emergency Hospital Admission in Texas, 2004-2013**
T. Chen, K. Zhang; University of Texas Health Science Center at Houston School of Public Health, Houston, TX

MO-PO-211 **Evaluating effects of global change on patterns of aeroallergens and ground-level ozone across the contiguous US**
T. Cai[1], Z. Mi[1], X. Ren[2], Y. Zhang[2], P. Georgopoulos[1]; [1]Rutgers University, Piscataway, NJ, [2]Rutgers University, Piscataway, NJ

MO-PO-212 **Heat and Hydration Assessment of Migrant Grape-Workers in Sonora, Mexico**
R. Wagoner; University of Arizona, Tucson, AZ

MO-PO-213 **Mercury Co-Benefits of Climate Policy in China**
K. Mulvaney[1], N. E. Selin[2], A. Giang[3], S. Y. Kwon[3], M. Muntean[4], M. Li[5], C. Li[6], D. Zhang[7], V. J. Karplus[8]; [1]University of North Carolina at Chapel Hill, Chapel Hill, NC, [2]Massachusetts Institue of Technology, Cambridge, MA, [3]Massachusetts Institue of Technology, Cambridge, MA, [4]European Commission, Joint Research Centre, Institute for Environment and Sustainability, Ispra, Italy, [5]Massachusetts Institute of Technology, Cambridge, MA, [6]Massachusetts Institute of Technology, Cambridge, MA, [7]Massachusetts Institute of Technology and Tsinghua University, Cambridge, MA, [8]Massachusetts Institute of Technology, Cambridge, MA

MO-PO-214 **Quantifying recent associations between meteorology and multipollutant day types to inform future air quality projections**
J. L. Pearce[1], J. Runkle[2], H. Chang[3], S. E. Sarnat[3], L. Waller[3]; [1]Medical University of South Carolina, Charleston, SC, [2]North Carolina State University, Raleigh, NC, [3]Emory University, Atlanta, GA

MO-PO-215 **Land-Use Regression Models of Parcel Level Intra-Urban Surface Temperature in Three Cities in Massachusetts**
K. J. Lane, J. I. Levy, Y. Zhang, P. Fabian; Boston University School of Public Health, Boston, MA

MO-PO-216 **Report-Back for Location-based Personal Monitoring Data on Individual Experienced Temperature in Outdoor Workers**
J. Runkle[1], L. Thompson[2], M. Sugg[2]; [1]NCSU, Asheville, NC, [2]Appalachian State University, Boone, NC

MO-PO-217 **Exposure assessment through modeling approach for urban air pollutants using climate indicators**
F. Naseem, A. Rashid; PMAS Arid Agriculture University, Rawalpindi, Pakistan

MO-PO-218 **The Astonishing role of soil lead in the exposure of children: Lessons from Hurricane Katrina**
H. W. Mielke; Tulane University School of Medicine, New Orleans, LA

MO-PO-219 **Associations Between First Trimester Blood Metal Levels and Childhood Obesity in the NEST Cohort**
S. S. Park[1], Y. Luo[2], T. Darrah[3], R. L. Maguire[1], J. Tzeng[2], C. Hoyo[1]; [1]North Carolina State University, Raleigh, NC, [2]North Carolina State University, Raleigh, NC, [3]The Ohio State University, Columbus, OH

MO-PO-220 **A Literature Review and Data Mining Project to Identify Associations between Stressors and Health Outcomes for Children**
S. Utile[2], N. S. Tulve[1], K. Thomas[1]; [1]Environmental Protection Agency, Durham, NC, [2]Student Services Contractor assigned to NERL/ORD, Research Triangle Park, NC

MO-PO-221 **Household dust is a good predictor of children's lead exposure**
S. Cao[1], X. Duan[2], X. Zhao[1], C. Sun[3], F. Wei[4]; [1]Chinese Research Academy of Environmental Sciences, Beijing, China, [2]University of Science and Technology Beijing, Beijing, China, [3]Chinese Center for Disease Control and Prevention, Beijing, China, [4]China National Environmental Monitoring Center, Beijing, China

MO-PO-222 **Measuring Children's Personal Exposure to Household Air Pollution Using the Enhanced Children's MicroPEM**
R. Chartier[1], M. Dherani[2]; [1]RTI International, Research Triangle Park, NC, [2]University of Liverpool, Liverpool, United Kingdom

MO-PO-223 **Association between body mass index and waist circumference with urinary paraben concentrations among adults, NHANES 2005-2014**
L. Quiros-Alcala, M. D. Boyle; University of Maryland, Rockville, MD

Program - Monday, October 16

10:30 am - 11:00 am/3:00 pm - 3:30 pm

Empire Ballroom
MO-PO: Monday Poster Session [cont.]

MO-PO-224 **The Fernald Community Cohort: Lessons Learned from a Large Environmental Epidemiology Cohort with a 25 Year Heritage**
S. M. Pinney, C. Xie, R. Leung, J. M. Buckholz; University of Cincinnati College of Medicine, Cincinnati, OH

MO-PO-225 **Integrating exposure knowledge and serum exposomics as a new approach to biomonitoring: An application in firefighters and office workers**
R. Grashow[1], V. Bessonneau[1], R. R. Gerona[2], A. Wang[3], J. Trowbridge[4], T. Lin[2], R. A. Rudel[1], R. Morello-Frosch[4]; [1]Silent Spring Institute, Newton, MA, [2]University of California, San Francisco, San Francisco, CA, [3]University of California, San Francisco, San Francisco, CA, [4]University of California, Berkeley, Berkeley, CA

MO-PO-226 **Top-Down Toxicology: an Experimental Application of the Pesticide Exposome in Honey Bee Queens**
J. Milone, D. Tarpy; North Carolina State University, Raleigh, NC

MO-PO-227 **Toward Capturing the Exposome: Biomarker Variability and Co-exposure Patterns in the Shared Environment**
M. Chung[1], R. Sundaram[3], K. Kannan[2], G. Buck Louis[4], C. J. Patel[1]; [1]Harvard University, Boston, MA, [2]Wadsworth Center, New York State Department of Health, Albany, NY, [3]The National Institutes of Health, Rockville, MD, [4]The National Institutes of Health, Rockville, MD

MO-PO-228 **A Quantitative Health Risk Assessment for Stachybotrys chartarum- toxic mold**
N. Sunger[1], B. Prasad[2], P. Morgan[1], E. Lennon[2], C. N. Haas[2]; [1]TE-West Chester University, Chester Springs, PA, [2]Drexel University, Philadelphia, PA

MO-PO-229 **Data for Policy - Human biomonitoring's contribution to evidence-informed environmental health policy-making**
A. Conrad, E. Rucic, C. Schulz, G. Schwedler, M. Rüther, P. Apel, M. Schmied-Tobies, T. Weber, M. Kolossa-Gehring; German Environment Agency (UBA), Berlin, Germany

MO-PO-230 **Complementing in vitro Hazard Assessment with Exposure and Pharmacokinetics Considerations for Chemical Prioritization**
C. Tan[3], J. A. Leonard[1], C. Stevens[4], K. Mansouri[2], D. Chang[5]; [1]Oak Ridge Institute for Science and Education, Oak Ridge, TN, [2]ScitoVation, Durham, NC, [3]US EPA, Durham, NC, [4]US EPA, Athens, GA, [5]US EPA, Washington, DC

MO-PO-231 **Defining the relationship between individuals' aggregate and maximum source-specific exposures**
P. Price; US EPA, Research Triangle Park, NC

MO-PO-232 **A Computational Framework for Modeling Multisystem Biological Effects of Multiroute Human Exposures to Ozone and Associated Air Pollutants**
L. Chao, D. Mukherjee, C. Weschler, H. Kipen, P. Georgopoulos; Rutgers University, Piscataway, NJ

MO-PO-233 **Re-evaluating the Inhalation Unit Risk for Chloroprene**
S. Sax, K. Mundt, R. Gentry; Ramboll Environ, Amherst, MA

MO-PO-234 **Countering compounding conservatism - acute risk assessment trends in EU and JMPR**
J. Stewart; BASF, Durham, NC

MO-PO-235 **Inhalation cancer risk estimation of source-specific personal exposure for particulate matter bound polycyclic aromatic hydrocarbons (PAHs) based on Positive Matrix Factorization (PMF)**
B. Han[1], N. Zhang[1], J. Xu[2], W. Yang[1], X. Wang[1], Z. Bai[1]; [1]Chinese Research Academy of Environmental Sciences, Beijing, China, [2]University of Washington, Seattle, WA

MO-PO-236 **Insulation Usage and Asbestos Exposures: Historical Trends and Exposure Assessment**
E. Hsu, D. Fung, C. barlow; Cardno ChemRisk, Boulder, CO

MO-PO-237 **Multimodal Physicochemical Characterization of Tire Crumbs Used at Synthetic Turf Fields**
E. M. Heithmar, S. Gardner, K. Kovalcik, G. Momplaisir, A. Williams, M. Medina-Vera, T. Jones-Lepp; U.S. Environmental Protection Agency, Las Vegas, NV

MO-PO-238 **A multi-site recycled tire crumb rubber characterization study: recruitment strategy and field sampling approach**
K. Benson[1], A. Grober[1], J. Truhe[1], K. Scruton[1], K. Thomas[2], M. K. Morgan[2], C. Croghan[2], E. A. Irvin-Barnwell[1]; [1]CDC/NCEH-ATSDR, Atlanta, GA, [2]U.S. Environmental Protection Agency, Office of Research and Development, National Exposure Research Laboratory, Research Triangle Park, NC

MO-PO-239 **Athletes' Selected Micro-Activities on Turf Fields: Utilizing Extant Videography for Quantification of Events During Soccer, American Football, and Field Hockey Play**
K. Hibbert[1], M. K. Morgan[1], G. Grissom[2], S. Utile[2]; [1]U.S. Environmental Protection Agency, Research Triangle Park, NC, [2]U.S. EPA, Research Triangle Park, NC

Program - Monday, October 16

10:30 am - 11:00 am/3:00 pm - 3:30 pm

Empire Ballroom
MO-PO: Monday Poster Session [cont.]

MO-PO-240 **Characterization of Semi-Volatile Organic Chemicals from Tire Crumb Rubber**
M. S. Clifton[1], D. Mills[2], X. Liu[1], K. Thomas[1]; [1]U. S. Environmental Protection Agency, RTP, NC, [2]National Student Services Contractor administered by Oak Ridge Associated Universities to U.S. Environmental Protection Agency, RTP, NC

MO-PO-241 **Characterization of Formaldehyde Emissions from Tire Crumb Rubber in Small Environmental Chambers**
X. Liu[1], K. Krebs[1], M. Allen[3], K. Thomas[2], M. Stryar[2], D. Greenwell[1]; [1]U.S. Environmental Protection Agency, RTP, NC, [2]U.S. Environmental Protection Agency, RTP, NC, [3]Jacobs Technology Inc., Tullahoma, TN

MO-PO-242 **Arguments used to justify the ongoing use of asbestos: Myths or facts?**
J. P. Ramos-Bonilla[1], E. Algranti[2], F. Cavariani[3], D. Marsili[4], A. Mazzeo[7], R. Pasetto[4], V. Santana[6], B. Terracini[8], A. Trotta[5], P. Comba[4]; [1]Universidad de los Andes, Bogotá, Colombia, [2]Fundacentro, Sao Paulo, Brazil, [3]Centro di Riferimento Regionale Amianto, Civita Castellana, Italy, [4]Istituto Superiore di Sanità, Rome, Italy, [5]Universidad Nacional de Lanus, Lanus, Argentina, [6]Universidade Federal da Bahia, Salvador, Brazil, [7]University of Bologna, Bologna, Italy, [8]University of Turin (Now Retired), Turin, Italy

MO-PO-243 **Asbestos: Is the "safe use" concept supported by peer-reviewed scientific studies?**
M. Valenzuela, J. P. Ramos-Bonilla, M. Giraldo, S. Gallo-Murcia, J. Pineda, L. Santos; Universidad de los Andes, Bogotá, Colombia

MO-PO-244 **Exposure Data For Toothpastes**
M. Chiter[1], M. Gomez-Berrada[1], I. Boudieres-Laffont[1], A. Rielland[2], S. Guillou[2], D. De Javel[2], P. Ferret[1]; [1]Pierre Fabre Dermo-Cosmétique, Toulouse, France, [2]Eurosafe, Saint Grégoire, France

MO-PO-245 **Identifying Novel Data Sources to Refine Consumer Product Exposure Assessment: Multi-stakeholder Collaboration Addressing the Behavioral Data Gap in Consumer Product Chemical Exposure**
M. Embry[1], T. J. Buckley[2], R. Zaleski[3]; [1]HESI, Washington, DC, [2]USEPA, Research Triangle Park, NC, [3]ExxonMobil Biomedical Sciences, Inc., Annandale, NJ

MO-PO-246 **Characteristics of exposure factors for consumer products in Korean women and children**
M. Lim[1], J. Park[2], K. Kim[3], K. Lee[1]; [1]Graduate School of Public Health, Seoul National University, Seoul, Korea (the Republic of), [2]Seoul National University, Seoul, Korea (the Republic of), [3]Seoul National University of Science and Technology, Seoul, Korea (the Republic of)

MO-PO-247 **Fluoride and arsenic uptake by bone char: quantifying uptake mechanisms for low-cost household water treatment systems**
M. Fitzstevens[1], J. Kearns[2], A. Krupp[4], S. Mitchell[4], O. Duckworth[1], J. M. Harrington[3], D. Knappe[2], M. Polizzotto[1]; [1]North Carolina State University, Raleigh, NC, [2]North Carolina State University, Raleigh, NC, [3]Research Triangle Institute, Research Triangle Park, NC, [4]Caminos de Agua, San Miguel de Allende, Mexico

Program - Tuesday, October 17

9:30 am - 10:30 am

Bull Durham A/B
TU-PL-A1: Air Pollution Measurement Error
Chair: Donghai Liang, Emory University, Atlanta, GA

TU-PL-A1-248
Implications of Exposure Measurement Error for Interpreting Epidemiological Results for Studies of Exposure to PM, NO_2, or SO_2
J. Richmond-Bryant, T. Long; U.S. EPA, Rtp, NC

TU-PL-A1-249
Do Differences in Exposures Explain the Observed Heterogeneity in $PM_{2.5}$ - Mortality Associations across U.S. cities?
L. K. Baxter, K. Dionisio, P. Pradeep, L. Neas; U.S. Environmental Protection Agency, Research Triangle Park, NC

TU-PL-A1-250
How well do epidemiologic studies that use composite monitor values capture underlying variability in ambient ozone levels across larger urban areas in the U.S.?
Z. Pekar[1], D. Simon[1], T. Luben[2], B. Wells[1]; [1]US EPA, RTP, NC, [2]US EPA, RTP, NC

Crown A/B
TU-SY-B1: Disentangling disparities in exposures: body burdens, personal care products, and the indoor environment
Chair: Robin Dodson, Silent Spring Institute, Newton, MA

TU-SY-B1-251
Racial/ethnic disparities in cumulative exposures to phthalates and parabens and implications for uterine fibroid size
A. R. Zota[1], J. Opoku-Anane[2], J. Robinson[3], G. Moawad[4]; [1]George Washington University Milken School of Public Health, Washington, DC, [2]UCSF, San Francisco, CA, [3]MedStar Washington Hospital Center, Washington, DC, [4]George Washington University School of Medicine and Health Sciences, Washington, DC

TU-SY-B1-252
Endocrine disrupting chemicals in hair products marketed towards women of color
J. S. Helm[1], M. Nishioka[2], J. G. Brody[1], R. A. Rudel[1], R. Dodson[1]; [1]Silent Spring Institute, Newton, MA, [2]Battelle Memorial Institute, Columbus, OH

TU-SY-B1-253
Characterization of Seafood Consumption and Mercury Exposure in Chicago Asian Communities
M. Turyk[1], J. Zhang[2], Y. Liu[1], Z. Xiao[2], N. Chavez[3], H. Liu[4], S. Buchanan[2]; [1]University of Illinois at Chicago, Chicago, IL, [2]University of Illinois at Chicago, Chicago, IL, [3]University of Illinois at Chicago, Chicago, IL, [4]Midwest Asian Health Association, Chicago, IL

Royal A/B
TU-SY-C1: Integrating Community Engaged Research into the Exposure Science Paradigm
Chair: Liam O'Fallon, National Institute of Environmental Health Sciences, Research Triangle Park, NC

TU-SY-C1-254
Community assessment of exposure to traffic-related air pollution in near-highway neighborhoods
J. L. Durant[2], W. Zamore[3], E. Reisner[3], D. Brugge[1]; [1]Tufts University, Medford, MA, [2]Tufts University, Medford, MA, [3]Somerville Transportation Equity Partnership, Somerville, MA

TU-SY-C1-255
Citizen Science in Exposure Assessment: From Ecosystem to Biomarkers of Environmental Health
S. Croisant[1], C. Elferink[2]; [1]The University of Texas Medical Branch, Galveston, TX, [2]The University of Texas Medical Branch, Galveston, TX

TU-SY-C1-256
Community-engaged Assessment of Exposures to Particulate Matter in Imperial, CA Using a Network of 40 Community-operated Air Quality Monitors
E. Seto; University of Washington, Seattle, WA

Program - Tuesday, October 17

9:30 am - 10:30 am

Crystal Ballroom
TU-SY-D1: The Role of Product Use Information in Quantitative Exposure Analyses

Chair: Jeffrey Driver, risksciences.net, LLC & Univ. of South Florida, Longboat Key, FL

TU-SY-D1-257
Development and application of temporal consumer product use survey data to inform residential and aggregate exposure modeling
B. M. Young[1], M. Crowley[2], J. H. Driver[3], J. Blattner[4]; [1]Bayer CropScience, RTP, NC, [2]US EPA, Washington, DC, [3]risksciences.net, LLC, Manassas, VA, [4]SC Johnson, Racine, WI

TU-SY-D1-258
Estimating concentrations of soil fumigants in ambient air using an atmospheric dispersion model and agricultural product use information to inform bystander exposure
I. Van Wesenbeeck, S. Cryer, O. deCirugeda Helle; Dow AgroSciences, Salem, OR

TU-SY-D1-259
Residential and Population Generator (RPGen): Creating a detailed description of housing and occupants for predicting and describing chemical exposures
G. Glen[1], H. Hubbard[1], J. Levasseur[1], P. Price[2], K. Dionosio[2], D. A. Vallero[2], P. P. Egeghy[2]; [1]ICF, Durham, NC, [2]EPA, Research Triangle Park, NC

Imperial 1
TU-SY-E1: Cheminformatics Tools to Support Exposure Analysis, Data Aggregation, and Modelling

Chairs: Andrew McEachran, U.S. Environmental Protection Agency - ORISE, Research Triangle Park, NC; Antony Williams, U.S. Environmental Protection Agency, Research Triangle Park, NC

TU-SY-E1-260
Exposure Science in The Comparative Toxicogenomics Database: Linking Chemical Stressors to Outcomes via an Exposure Ontology
C. Mattingly, C. Grondin, A. Davis, J. Wiegers, T. Wiegers; NC State University, Raleigh, NC

TU-SY-E1-261
Exploring environmental chemical space through HR/AM mass spectrometry and cheminformatics: The example of wastewater-derived organic micropollutants
L. Ferguson[1], G. J. Getzinger[2]; [1]Duke University, Durham, NC, [2]ETH Zurich, Zurich, Switzerland

TU-SY-E1-262
New databases and cheminformatics tools for exposomics and toxicology
Y. Djoumbou Feunang; University Of Alberta, Edmonton, Canada

TU-SY-E1-263
The US EPA CompTox Chemistry Dashboard - an integrated data hub for environmental chemistry
A. Williams[1], C. Grulke[1], A. McEachran[1], K. Dionosio[2], K. Phillips[2], K. Isaacs[2], J. Wambaugh[1], R. Judson[1], A. Richard[1]; [1]US Environmental Protection Agency, Durham, Research Triangle Park, NC, [2]US Environmental Protection Agency, Durham, Research Triangle Park, NC

Imperial 2
TU-SY-F1: Applying exposure science to increase the utility of in vitro data in efficacy and safety testing: research needs to support regulatory decision making

Chair: Justin Teeguarden, Pacific Northwest National Laboratory, Richland, WA

TU-SY-F1-264
Incorporating exposure driven approaches and in vitro data into regulatory decision making
N. Kleinstreuer; NTP Interagency Center for the Evaluation of Alternative Toxicological Methods (NICEATM), Durham, NC

TU-SY-F1-265
Physiologically-based kinetic modelling in risk assessment - reaching a whole new level in regulatory decision-making
C. Tan[1], A. Paini[2]; [1]US EPA, Durham, NC, [2]JRC, Ispra, Italy

TU-SY-F1-266
A road map for exposure-driven non-animal approaches
N. Gellatly, N. Burden, F. Sewell; NC3Rs, London, United Kingdom

Program - Tuesday, October 17

9:30 am - 10:30 am

Auditorium
TU-SY-G1: Responding to PFAS Contamination Across Multiple States: A Sticky Situation - Non-Stick Chemicals in Drinking Water, Biota, and Humans
Chair: Kathleen Bush, NH Department of Health and Human Services, Concord, NH

TU-SY-G1-267
PFAS 101, and PFAS in a Prized Fishery
C. Bush; Mich Dept Health & Human Services, Lansing, MI

TU-SY-G1-268
PFAS Blood Testing in New Hampshire: An Evolving Response to Community Health Concerns
J. Sagona[1], K. Bush[1], C. Bean[1], A. Cosser[1], M. Levesque[1], B. Kernen[2], N. Whitley[1], J. Parrott[1], E. Daly[1], B. Chan[1]; [1]New Hampshire Department of Health and Human Services, Concord, NH, [2]New Hampshire Department of Environmental Services, Concord, NH

TU-SY-G1-269
Using a representative sampling approach to conduct biomonitoring in a large community
W. Hsu, Q. Gao, S. Forand, E. Lewis-Michl, S. Hwang; New York State Department of Health, Albany, NY

11:00 am - 12:00 pm

Bull Durham A/B
TU-PL-A2: Air Pollution and Noise
Chair: Paul Price, U.S. Environmental Protection Agency, Research Triangle Park, NC

TU-PL-A2-270
A Combined Emission and Receptor-Based Approach to Modelling Environmental Noise in Toronto, Canada
WITHDRAWN

TU-PL-A2-271
Options and strategy to disentangle the cardiovascular health effects of noise and traffic related particulate matter
L. Dekoninck[1], L. Int Panis[2], D. Botteldooren[1]; [1]Ghent University, Ghent, Belgium, [2]VITO, Mol, Belgium

TU-PL-A2-272
Can exposure surfaces and GPS data predict personal exposures to air pollution and noise? Findings from a panel study
L. Minet[1], R. Liu[1], M. Valois[2], J. Xu[1], M. Shekarrizfard[1], S. Weichenthal[2], M. Hatzopoulou[1]; [1]University of Toronto, Toronto, Canada, [2]McGill University, Montreal, Canada

Crown A/B
TU-PL-B2: Environmental Justice
Chair: Nilla Barros, ORISE, U.S. Environmental Protection Agency, Research Triangle Park, NC

TU-PL-B2-273
Social and environmental determinants of disaster preparedness among U.S. adults
C. Ekenga, Z. Lan; Washington University in St. Louis, St. Louis, MO

TU-PL-B2-274
Assessing Environmental Justice and Risk-based Coronary Heart Disease (CHD) Burden in Allegheny County, PA Using High-Resolution GIS-based Traffic-related Air Pollution Exposure Modeling
J. P. Fabisiak[1], E. M. Jackson[2], A. Presto[3]; [1]University of Pittsburgh Graduate School of Public Health, Pittsburgh, PA, [2]University of Pittsburgh, Pittsburgh, PA, [3]Carnegie Mellon University, Pittsburgh, PA

TU-PL-B2-275
School environment and links to student performance in an urban, mid-Atlantic Region
J. D. Berman[1], M. McCormack[2], K. Koehler[4], F. Connolly[3], M. Davis[4], F. C. Curriero[1]; [1]Johns Hopkins School of Public Health, Newington, CT, [2]Johns Hopkins School of Medicine, Baltimore, MD, [3]Johns Hopkins School of Education, Baltimore, MD, [4]Johns Hopkins School of Public Health, Baltimore, MD

Program - Tuesday, October 17

11:00 am - 12:00 pm

Royal A/B

TU-SY-C2: Engaged Exposure Science and Epidemiology: Diverse Communities Driving Research

Chair: Katlyn May, Center for Human Health and the Environment, Raleigh, NC

TU-SY-C2-276
40 Years and Three Generations: Science + Community Engagement + Public Health = Better Science and a Healthier Community
M. Marcus[6], J. Nyerges[1], M. Pearson[6], M. Cheatham[2], J. Keon[3], N. Keon[2], E. Lorenz[4], P. Muldoon[1], S. Schrader[5], J. Kesner[5], H. Barton[6], M. Terrell[6], A. Smith[6], K. Conneely[6], D. B. Barr[6], M. Marder[7], M. Jacobsen[6]; [1]PBB Citizens Advisory Board, Grand Rapids, MI, [2]Mid-Michigan District Health Department, Ithaca, MI, [3]Pine River Superfund Citizens Task Force, St. Louis, MI, [4]Alma College, Alma, MI, [5]NIOSH, Cincinnati, OH, [6]Emory University, Atlanta, GA, [7]California Environmental Protection Agency, Sacramento, CA

TU-SY-C2-277
The Ramapough Nation: A Tribe in scientific crisis
J. Zelikoff[1], S. Cataldo[1], C. Mann[2]; [1]New York University School of Medicine, Tuxedo, NY, 2Ramapough Lenape Tribal Nation, Ringwood, NJ

TU-SY-C2-278
Defeating Environmental Exposures in Durham: A Community-Based Particpatory Research Approach
K. May[1], L. Smith[2]; [1]NC State University, Raleigh, NC, [2]Partnership Effort for the Advancement of Children's Health, Durham, NC

Crystal Ballroom

TU-SY-D2: Exposure to Personal Care Products and Cosmetics in Europe: Data, Models and Regulatory Challenges

Chair: Cian O' Mahony, Creme Global, Dublin, Ireland

TU-SY-D2-279
Exposure assessment within the Context of Cosmetic Ingredients in Europe
F. Almeida; Cosmetics Europe, Brussels, Belgium

TU-SY-D2-280
Exposure assessment within the Long Range Science Strategy at Cosmetics Europe
S. A. Tozer; Procter & Gamble, Surrey, United Kingdom

TU-SY-D2-281
Ingredient Concentration Surveys - A Key Input for Exposure Assessment
C. O' Mahony; Creme Global, Dublin, Ireland

Imperial 1

TU-SY-E2: The Role of PBPK Modelling in Holistic Exposure and Risk Assessment - Case Studies and Developments within the EU Project EuroMix

Chairs: Cecile Karrer, Swiss Federal Institute of Technology (ETH), Zurich, Switzerland; Natalie von Goetz, Swiss Federal Institute of Technology (ETH), Zurich, Switzerland

TU-SY-E2-284
PBPK Modelling of Bisphenol S and Bisphenol F
C. Karrer[1], T. Roiss[1], N. von Goetz[1], D. Gramec Skledar[2], L. Peterlin Mašič[2], K. Hungerbuehler[1]; [1]ETH Zurich, Zurich, Switzerland, [2]University of Ljubljana, Ljubljana, Slovenia

TU-SY-E2-285
Development of a toxicokinetic modeling approach to estimate the cumulative exposure to pyrethroids
P. QUINDROIT, C. BROCHOT; INERIS, Verneuil-en-Halatte, France

TU-SY-E2-286
A web-based toolbox linking kinetic models to risk assessment
W. D. Boer, H. Van der Voet, J. Kruisselbrink, M. Van Lenthe; Biometris, Wageningen, Netherlands

Program - Tuesday, October 17

11:00 am - 12:00 pm

Imperial 2
TU-SY-F2: Integrating Diverse Environmental Exposure Datasets to Study Human Health - from Satellite Sensing and Ground Monitoring to Personal Exposure Part (1): Resources, Technologies and Data Access

Chairs: Yuxia Cui, National Institute of Environmental Health Sciences Research Triangle Park, NC; Bonnie Joubert, National Institute of Environmental Health Sciences Research Triangle Park, NC

TU-SY-F2-287
Observing Air Pollution from Space: A Multi-Pollutant, Satellite-Based Health-Air Quality Index
B. Duncan[1], L. Lamsal[1], K. Cromar[2]; [1]NASA, Greenbelt, MD, [2]New York University, New York, NY

TU-SY-F2-288
Data Architecture and Infrastructure to Support Exposure Science
V. Kilaru; U.S. Environmental Protection Agency, Research Triangle Park, NC

TU-SY-F2-289
Emerging capabilities in personal exposure assessment
RE. Seto; University of Washington, Seattle, WA

Auditorium
TU-SY-G2: Ensemble Learning for Air Pollution Exposure Assessment

Chair: J. Richard (Cole) Brokamp, Cincinnati Children's Hospital Medical Center, Cincinnati, OH

TU-SY-G2-290
Assessing Daily Exposure to PM2.5 with Machine Learning and Remote Sensing
C. Brokamp[1], R. Jandarov[2], M. Hossain[1], P. Ryan[1]; [1]Cincinnati Children's Hospital Medical Center, Cincinnati, OH, [2]University of Cincinnati, Cincinnati, OH

TU-SY-G2-291
Ensemble Learning and Constrained Optimization Applications in Spatiotemporal Modeling of Long-Term Air Pollution Concentrations in Southern California
L. Li[1], F. W. Lurmann[2], J. Wu[3], R. Urman[1], C. Breton[1], F. Gilliland[1], R. Habre[1]; [1]University of Southern California, Los Angeles, CA, [2]Sonoma Technology Inc., Petaluma, CA, [3]University of California Irvine, Irvine, CA

TU-SY-G2-292
Approaches for Predicting Short-Term Traffic-Related Air Pollution with Irregular Monitoring Data
E. Noth[1], H. Minor[2], F. W. Lurmann[2], K. Hammond[1]; [1]University of California, Berkeley, Berkeley, CA, [2]Sonoma Technology, Inc., Petaluma, CA

1:30 pm - 3:00 pm

Bull Durham A/B
TU-PL-A3: Occupational Exposure to Pesticides

Chair: Nicolas Lopez-Galvez, University of Arizona, Tucson, AZ

TU-PL-A3-293
An exposure assessment of occupational exposures among small quantity pesticides users in amenity horticulture
A. Connolly[1], K. Jones[2], K. Galea[3], I. Basinas[3], L. kenny[2], P. McGowan[4], M. Coggins[1]; [1]National University of Ireland Galway, Galway, Ireland, [2]Health and Safety Laboratory (HSL), Buxton, United Kingdom, [3]Institute of Occupational Medicine (IOM), Edinburgh, United Kingdom, [4]Irish Commissioners for Public Works, Co. Meath, Ireland

TU-PL-A3-294
Human exposure to spray drift: investigations into modelling the spray exposure of residents and bystanders and its variability
C. Butler-Ellis[2], M. Kennedy[3], R. Alanis[2], C. Tuck[2], C. J. Kuster[1]; [1]Bayer, Monheim, Germany, [2]Silsoe Spray Application Unit, Silsoe, United Kingdom, [3]Fera, York, United Kingdom

TU-PL-A3-295
Real-Time Particle Monitoring of Pesticide Drift from Two Different Orchard Sprayers
M. N. Blanco, R. A. Fenske, E. J. Kasner, E. Seto, E. Austin, M. G. Yost; University of Washington, Portland, OR

TU-PL-A3-296
Exposure To Thiabendazole In Mothers And Children From The Infant's Environmental Health Study In Costa Rica
B. van Wendel de Joode[1], M. Mora[1], L. Cordoba[1], A. Mora[1], M. Öberg[2], J. Hoppin[3], C. Lindh[4]; [1]Universidad Nacional, Heredia, Costa Rica, [2]Karolinska Institute, Stockholm, Sweden, [3]NCSU, North Carolina, NC, [4]Lund University, Lund, Sweden

Program - Tuesday, October 17

1:30 pm - 3:00 pm

Bull Durham A/B
TU-PL-A3: Occupational Exposure to Pesticides [cont.]

TU-PL-A3-297
Chlorpyrifos and the health of agricultural workers and their families
WITHDRAWN

Crown A/B
TU-PL-B3: Air Pollution – Epidemiology
Chair: Jeremy Leonard, US Environmental Protection Agency, RTP, NC

TU-PL-B3-298
Individual's Exposure and Emotional Response to Visual Impact of Particulate Matter Pollution: A Psychophysiological Study
J. Yang[1], X. Liu[1], J. Chen[2], M. Liu[1]; [1]Nanjing University, Nanjing, China, [2]Nanjing Foreign Language School, Nanjing, China

TU-PL-B3-299
Amyotrophic lateral sclerosis and exposure to diesel exhaust in a Danish cohort
A. S. Dickerson[1], J. Hansen[2], O. Gredal[2], M. Weisskopf[1]; [1]Harvard T.H. Chan School of Public Health, Boston, MA, [2]Danish Cancer Society Research Center, Copenhagen, Denmark

TU-PL-B3-300
Estimating exposure to oxidative potential of ambient particulate matter using emission source impacts
J. Bates[1], R. Weber[2], J. Abrams[3], V. Verma[4], T. Fang[2], C. Ivey[5], M. Klein[3], M. Strickland[5], S. E. Sarnat[3], H. Chang[3], J. Mulholland[1], P. Tolbert[3], A. Russell[1]; [1]Georgia Institute of Technology, Atlanta, GA, [2]Georgia Institute of Technology, Atlanta, GA, [3]Emory University, Atlanta, GA, [4]University of Illinois Urbana-Champaign, Urbana-Champaign, IL, [5]University of Nevada, Reno, Reno, NV

TU-PL-B3-301
Relationships of Ambient Fine Particle Air Pollution, Endothelial Function, and Blood DNA Methylation Age: Implications for Renal Health
J. Nwanaji-Enwerem[1], M. Weisskopf[2], A. Baccarelli[3], J. Schwartz[2]; [1]Harvard Medical School & Harvard School of Public Health, Boston, MA, [2]Harvard T.H. Chan School of Public Health, Boston, MA, [3]Columbia Mailman School of Public Health, New York, NY

TU-PL-B3-302
Impact of Fine Particulate Matter on Lipids/Lipoproteins in a Cohort of Midlife Women
WITHDRAWN

Royal A/B
TU-SY-C3: Inspiring the next generation: Bringing exposure science into the STEM community
Chair: Liam O'Fallon, National Institute of Environmental Health Sciences, Research Triangle Park, NC

TU-SY-C3-303
Making Chemical Exposures Relevant to Students: Strategies for integrating the concept of the Exposome into STEM Education
D. B. Haine; UNC-Chapel Hill, Chapel Hill, NC

TU-SY-C3-304
Understanding Air: A hands-on STEM package for learning about climate change and air pollution
K. M. Vandiver; Massachusetts Institute of Technology, Cambridge, MA

TU-SY-C3-305
AQ Treks: Where Students and Other Citizen Scientists Explore Air Pollution in their Neighborhoods
J. W. Birks, C. Williford, D. Meyers, J. Hatz, J. Ellenburg; 2B Technologies, Inc. and GO3 Foundation, Boulder, CO

TU-SY-C3-306
Water Quality Testing and Citizen Science for Rural Middle and High School Students
E. Haynes[1], R. Shepler[1], R. Roberts[2]; [1]University of Cincinnati, Cincinnati, OH, [2]Cambridge Schools, Cambridge, OH

TU-SY-C3-307
Environmental Health "Science Take Out" Kits: Tools for teaching exposure science in the classroom - and beyond
K. Korfmacher; University of Rochester, Rochester, NY

Program - Tuesday, October 17

1:30 pm - 3:00 pm

Crystal Ballroom

TU-SY-D3: Challenges and Opportunities: Assessing Exposures to Chemical Substances under Amended TSCA- Methods, Models, and Data - Part 1

Chairs: Eva Wong, U.S. EPA Office of Pollution Prevention and Toxics, Washington, DC; Charles Bevington, U.S. EPA Office of Pollution Prevention and Toxics, Washington, DC; Cathy Fehrenbacher, U.S. EPA Office of Pollution Prevention and Toxics, Washington, DC

TU-SY-D3-308
Overview of Amended TSCA: Pipeline of New and Existing Chemical Assessments
C. Fehrenbacher; U.S. EPA, Washington DC

TU-SY-D3-309
Assessing Environmental Exposure under Amended TSCA: Models, Data, and Methods
E. M. Wong, J. Gallagher, N. N. Mottl, J. Todd, N. Orentas, H. Bethel; U.S. EPA, Washington, DC

TU-SY-D3-310
Assessing Human Exposure under Amended TSCA
C. Bevington, C. Baier-Anderson, S. Sarraino, N. N. Mottl, H. Bethel, F. Branch; U.S. EPA, Washington, D.C.

TU-SY-D3-311
Data Gathering Methods for Existing Chemicals Risk Evaluations under the Amended TSCA: Proposal for Using Natural Language Processing to Prioritize the Literature Search and Review
M. Cawley[3], A. Varghese[1], H. Hubbard[3], C. Henning[3], F. Branch[2], A. Benson[2], I. Camacho[2]; [1]ICF International, Durham, NC, [2]U.S EPA, D.C., [3]ICF, Durham, NC

TU-SY-D3-312
Characterization of Uses of Chemical Substances for Exposure Assessment
N. N. Mottl, C. Bevington, C. Baier-Anderson, N. Orentas, S. Sarraino, A. Corado; U.S. EPA, Washington D.C.

Imperial 1

TU-SY-E3: Exposure, Hazard, and Risk Assessment: Putting Exposure Back in the Process

Chair: Debra A. Kaden, Ramboll Environ, Boston, MA

TU-SY-E3-313
Hazard versus Risk: Blurring of the Lines
D. Kaden; Ramboll Environ, Boston, MA

TU-SY-E3-314
Global Trends in Risk Assessment in Pesticide Regulation
I. D. Kelly; Bayer Crop Science, Research Triangle Park, NC

TU-SY-E3-315
Risk, Hazard and Precaution in the United States and Europe
J. B. Wiener; Duke University, Durham, NC

TU-SY-E3-316
Threats to the Use of Exposure Science and Public Health for the Regulatory Process
B. D. Goldstein; Univ Pittsburgh, Pittsburgh, PA

TU-SY-E3-317
Using 21st Century Exposure Science to Improve Risk Assessment
A. Guiseppi-Elie; United States Environmental Protection Agency, Research Triangle Park, NC

Imperial 2

TU-SY-F3: Integrating Diverse Environmental Exposure Datasets to Study Human Health - from Satellite Sensing and Ground Monitoring to Personal Exposure Part (2): Exposure Modeling, Data Integration, and Applications in Epidemiology

Chairs: Yuxia Cui, National Institute of Environmental Health Sciences Research Triangle Park, NC; Bonnie Joubert, National Institute of Environmental Health Sciences Research Triangle Park, NC

TU-SY-F3-318
Observations from the 2017 ATS Workshop on Air Pollution Monitoring for Health Research and Patient Care
K. Cromar; New York University, New York, NY

TU-SY-F3-319
OpenAQ: An Air Quality Open Data Resource and Global, Grassroots Community
C. Hasenkopf; OpenAQ, Washington, DC

Program - Tuesday, October 17

1:30 pm - 3:00 pm

Imperial 2
TU-SY-F3: Integrating Diverse Environmental Exposure Datasets to Study Human Health - from Satellite Sensing and Ground Monitoring to Personal Exposure Part (2): Exposure Modeling, Data Integration, and Applications in Epidemiology [cont.]

TU-SY-F3-320
Remote sensing air pollution, exposure modeling, and health effects
Y. Liu[1], X. Hu[1], Z. Ma[2], M. Strickland[3]; [1]Emory University, Atlanta, GA, [2]Nanjing University, Nanjing, China, [3]University of Nevada, Reno, Reno, NV

TU-SY-F3-321
Geographic Information Sciences, Sensor Systems and Data Fusion for Better Exposure Estimation
M. Jerrett; University of California, Los Angeles, Los Angeles, CA

TU-SY-F3-322
Estimating exposure to nature and its relation to human health within the Nurses' Health Study Cohorts
P. James[1], J. E. Hart[2], F. Laden[2]; [1]Harvard Medical School & Harvard Pilgrim Health Care Institute, Boston, MA, [2]Harvard Medical School & Brigham and Women's Hospital, Boston, MA

Imperial 2
TU-SY-G3: Perinatal Exposures in the Home Environment: Sources, Measurements, and Associated Health Outcomes - Part 1
Chairs: Heather Stapleton, Duke University, Durham, NC; Kate Hoffman, Duke University, Durham, NC

TU-SY-G3-323
Investigating Toddlers' Exposure to Organophosphate Flame Retardants in the Home Environment
A. Phillips[1], S. C. Hammel[1], K. Hoffman[1], A. Lorenzo[1], T. F. Webster[2], H. M. Stapleton[1]; [1]Duke University, Durham, NC, [2]Boston University School of Public Health, Boston, MA

TU-SY-G3-324
Young Children's Exposures to Molds and Consumer Product Ingredients in their Homes
N. S. Tulve[1], M. S. Clifton[1], S. Vesper[1], P. P. Egeghy[1], K. Thomas[1], E. M. Ulrich[1], D. Stout[1], K. Isaacs[1], D. Werthmann[2], F. Rabito[2]; [1]United States Environmental Protection Agency, Research Triangle Park, NC, [2]Tulane University, New Orleans, LA

TU-SY-G3-325
Organophosphate flame retardants and phthalates in dust from children's bedrooms compared with whole-house measurements
M. Frederiksen[1], V. Andersen[2], L. Knudsen[3], L. Mikkelsen[4]; [1]Danish Building Research Institute, Aalborg University, Copenhagen, Denmark, [2]Green Lab Brugerinnovation, Ballerup, Denmark, [3]University of Copenhagen, Copenhagen, Denmark, [4]The Ecological Council, Copenhagen, Denmark

TU-SY-G3-326
Self-Reported Consumption of School Lunches and Urinary Phthalate Metabolite Levels in US Children
K. Ferguson[1], R. C. Lewis[2], J. Meeker[2], J. Colacino[2]; [1]NIEHS, Durham, NC, [2]University of Michigan, Ann Arbor, MI

TU-SY-G3-327
Exploring Children's Chemical and Non-Chemical Stressors by Non-Targeted Analysis of House Dust
D. Mills[2], A. Marcotte[3], J. R. Sobus[1], N. S. Tulve[1], E. M. Ulrich[1]; [1]US Environmental Protection Agency, Research Triangle Park, NC, [2]US Environmental Protection Agency, Research Triangle Park, NC, [3]US Environmental Protection Agency, Research Triangle Park, NC

3:30 pm - 5:00 pm

Bull Durham A/B
TU-PL-A4: Pesticide Tools & Processes
Chairs: M. Elizabeth Marder, Office of Environmental Health Hazard Assessment, Sacramento, CA

TU-PL-A4-329
Assessing Global Endocrine Disrupting Activity in Drinking Water with Bioassays: A Possible Tool for Population-level Exposure Assessment
R. R. Jones[1], M. Inoue-Choi[1], D. Stavreva[3], L. Varticovski[3], P. Weyer[4], M. D. Wichman[5], T. Cain[5], N. Chavis[2], B. Graubard[1], L. Beane Freeman[1], G. Hager[3], M. H. Ward[1]; [1]National Cancer Institute, Bethesda, MD, [2]George Washington University, Washington, DC, [3]National Cancer Institute, Bethesda, MD, [4]University of Iowa, Iowa City, IA, [5]University of Iowa, Coralville, IA

Program - Tuesday, October 17

3:30 pm - 5:00 pm

Bull Durham A/B
TU-PL-A4: Pesticide Tools & Processes [cont.]

TU-PL-A4-330
Efficacy and exposure risks of total release foggers
Z. DeVries[1], R. Santangelo[1], J. Crissman[2], R. Mick[1], A. Suazo[3], C. Schal[1]; [1]North Carolina State University, Raleigh, NC, [2]Columbia University, New York, NY, [3]NC Department of Agriculture and Consumer Services, Raleigh, NC

TU-PL-A4-331
Improving Spatial Resolution of Pesticide Applications from Arizona's Pesticide Use Reporting System
M. Furlong, P. I. Beamer; University of Arizona, Tucson, AZ

TU-PL-A4-332
Pesticide residues dietary exposure in Europe
L. Villamar-Bouza; European Food Safety Authority (EFSA), Parma, Italy

Crown A/B
TU-PL-B4: Respiratory Health Effects of Air Contaminants
Chair: Srikanth Nadadur, NIEHS, Durham, NC

TU-PL-B4-333
Survey for dust exposure and the respiratory effect in toner-handling workers. -10-year cohort-
A. Ogami[1], K. Ikegami[1], S. Michii[1], H. Ando[1], R. Sugano[1], N. Yanagi[1], M. Uehara[2], T. Higashi[3]; [1]Institute of Industrial Ecological Sciences, Univ. of Occupational and Environmental Health, Japan, Kitakyushu, Japan, [2]Institute of Industrial Ecological Sciences, University of Occupational and Environmental Health, Japan, Kitakyushu, Japan,[3]University of Occupational and Environmental Health, Japan, Kitakyushu, Japan

TU-PL-B4-334
Prenatal Exposure to Environmental Mixtures and Asthma Risk Among Children
R. Khalili[2], S. Korrick[3], V. Vieira[1]; [1]University of California, Irvine, Irvine, CA, [2]University of California, Irvine, Irvine, CA, [3]Brigham and Women's Hospital, Boston, MA

TU-PL-B4-335
Particulate Exposure in Asthmatic Kids (PEAK); Fine and ultrafine particle exposures among inner-city children
E. Majd[1], K. Koehler[1], M. McCormack[2], N. Hansel[2]; [1]Johns Hopkins University, Baltimore, MD, [2]School of Medicine, Johns Hopkins University, Baltimore, MD

TU-PL-B4-336
Short-Term Effects of Airport-Associated Ultrafine Particle Exposure on Lung Function and Inflammation in Asthmatics
R. Habre[1], S. Eckel[2], H. Zhou[1], T. Enebish[1], S. Fruin[1], E. Rappaport[1], T. Bastain[1], F. Gilliland[1]; [1]University of Southern California, Los Angeles, CA, [2]University of Southern California, Los Angeles, CA

TU-PL-B4-337
Reconstructing Historical Exposures to Respirable Dust and Respirable Silica in the Taconite Mining Industry for 1956-2010
Y. Shao[1], G. Ramachandran[2]; [1]University of Minnesota, Minneapolis, MN, [2]Johns Hopkins University, Baltimore, MD

Royal A/B
TU-SY-C4: Engaging Citizens and Embracing Diversity in Air Pollution Exposure Research
Chairs: Seung-Hyun Cho, RTI International, Research Triangle Park, NC; Edmund Seto, University of Washington, Seattle, WA

TU-SY-C4-338
Shared Air/Shared Action: A cross-community coalition to understand air quality
W. Griswold; University of Memphis, Memphis, TN

TU-SY-C4-339
"Low-cost" Sensors for Measuring Gaseous and Particle Air Pollutants: Results from Three Years of Field and Laboratory Testing, and Real-Life Sensor Applications
A. Polidori, V. Papapostolou, B. Feenstra, H. Zhang; South Coast Air Quality Management District, Diamond Bar, CA

Program - Tuesday, October 17

3:30 pm - 5:00 pm

Royal A/B

TU-SY-C4: Engaging Citizens and Embracing Diversity in Air Pollution Exposure Research [cont.]

TU-SY-C4-340
Engaging Citizens in Air Quality and Exposure Research - Field Study Implementation
S. Cho[1], L. Cicutto[2], K. Crews[2], M. McCullough[2], W. Hawthorne[3], J. Harris[3], J. Thornburg[1], G. Thomas[4], M. Ogletree[4], G. Harshfield[5]; [1]RTI International, Research Triangle Park, NC, [2]National Jewish Health, Denver, CO, [3]Groundwork-Denver, Denver, CO, [4]Denver Dept. of Environmental Health, Denver, CO, [5]Colorado Dept. of Public Health & Environment, Denver, CO

TU-SY-C4-341
Addressing wood smoke with student citizen scientists in a multi-cultural rural setting
E. Austin[1], E. Seto[1], J. L. Black[2], E. Spalt[1], M. Tchong-French[1], K. Hartin[1], E. Min[1], O. Stampfer[1], C. Karr[1]; [1]University of Washington, Seattle, WA, [2]Heritage University, Toppenish, WA

TU-SY-C4-342
Low-Cost Air Quality Monitoring in Environmental Justice Communities in Allegheny County
S. Ramachandran[1], N. Zimmerman[1], S. Kumar[1], R. Tanzer[1], J. Gu[3], J. Downs[2], A. Presto[1]; [1]Carnegie Mellon University, Pittsburgh, PA, [2]Carnegie Mellon University, Pittsburgh, PA, [3]SenSevere, Pittsburgh, PA

Crystal Ballroom

TU-SY-D4: Challenges and Opportunities: Assessing Exposures to Chemical Substances under Amended TSCA- Methods, Models, and Data - Part 2

Chairs: Eva Wong, U.S. EPA Office of Pollution Prevention and Toxics, Washington, DC; Charles Bevington, U.S. EPA Office of Pollution Prevention and Toxics, Washington, DC; Cathy Fehrenbacher, U.S. EPA Office of Pollution Prevention and Toxics, Washington, DC

TU-SY-D4-343
Overview and Examples of EPA/ OPPT Occupational Exposure and Releases Assessment and Tools
S. Prothero, G. Macek; US EPA, Washington, DC

TU-SY-D4-344
Exposure Modeling Tools and Databases for Consideration for Relevance to the Amended TSCA
K. Isaacs[1], J. Wambaugh[2], P. Price[1], J. Bare[3], K. Dionisio[1], K. Phillips[1], R. W. Setzer[2], C. Barber[1], B. A. Wetmore[1], R. Tornero-Velez[1], J. Orme-Zavaleta[1], R. S. Thomas[2], E. M. Wong[4], C. Fehrenbacher[4]; [1]US Environmental Protection Agency, Durham, NC, [2]US EPA, Research Triangle Park, NC, [3]US EPA, Research Triangle Park, NC, [4]US EPA, Washington, DC

TU-SY-D4-345
Generating Exposure-Relevant Measurement Data for Potential Use in Support of TSCA Requirements
J. Wambaugh[1], J. R. Sobus[1], A. Williams[1], X. Liu[1], M. Stryar[1], C. Grulke[1], A. Richard[1], E. M. Ulrich[1], S. Newton[1], K. Phillips[1], K. Isaacs[1], C. Sonich-Mullin[1], J. Orme-Zavaleta[1], R. S. Thomas[1], C. Bevington[2], C. Fehrenbacher[2]; [1]U.S. Environmental Protection Agency, Research Triangle Park, NC, [2]U.S. Environmental Protection Agency, Washington, DC

TU-SY-D4-346
Chemical exposure assessment under the new Toxic Substances Control Act: An NGO's perspective
J. McPartland, L. McCormick; Environmental Defense Fund, Washington, DC

TU-SY-D4-347
Challenges and Opportunities: Assessing Exposure to Chemical Substances under Amended TSCA
R. Zaleski; ExxonMobil Biomedical Sciences, Inc., Annandale, NJ

Imperial 1

TU-SY-E4: Exposure Assessment and Epidemiology for Regulatory Decision Making- Challenges and Opportunities

Chairs: Zhongyu (June) Yan, Dow AgroSciences, LLC, Indianapolis, IN; Judy LaKind, LaKind Associates, LLC and Department of Epidemiology and Public Health, University of Maryland School of Medicine, Catonsville, MD

TU-SY-E4-348
Challenges for the Agrochemical Industry
J. E. Collins; CropLife America, Washington, DC

TU-SY-E4-349
Estimating pesticide exposures: areas of strength and weakness in epidemiologic studies
C. J. Burns; Burns Epidemiology Consulting, Sanford, MI

TU-SY-E4-350
Transparent and Systematic Reviews of Exposure Data in Environmental Epidemiology: Approaches and Case Studies
J. LaKind; LaKind Associates, LLC, Catonsville, MD

Program - Tuesday, October 17

3:30 pm - 5:00 pm

Imperial 1

TU-SY-E4: Exposure Assessment and Epidemiology for Regulatory Decision Making- Challenges and Opportunities [cont.]

TU-SY-E4-351
How Epidemiologic Studies Can Be Used Qualitatively and Quantitatively in the Regulatory Decision Making Process
T. Luben[1], E. Kirrane[1], J. Lee[1], A. Davis[1], S. jenkins[2], J. Sacks[1]; [1]U.S. EPA, RTP, NC, [2]U.S. EPA, RTP, NC

TU-SY-E4-352
Regulatory Human Health Risk Assessment Calls for Good Epidemiology Practice
H. Lynch[2], J. Goodman[2], Z. Yan[1]; [1]Dow AgroSciences, Indianapolis, IN, 2Gradient, Cambridge, MA

Imperial 2

TU-SY-F4: An Infrastructure for Generating Exposomes: Initial Lessons from the Utah PRISMS Platform
Chair: Ramkiran Gouripeddi, University of Utah, Salt Lake City, UT

TU-SY-F4-353
Introduction to Utah PRISMS Platform
K. A. Sward; University of Utah, Salt Lake City, UT

TU-SY-F4-354
Utah PRISMS Data Acquisition System for Generating Exposomes
N. Patwari[1], P. Lundrigan[2], K. Min[1], K. Kelly[3], M. Meyer[2], K. A. Sward[4]; [1]University of Utah, Salt Lake City, UT, [2]University of Utah, Salt Lake City, UT, [3]University of Utah, Salt Lake City, UT, [4]University of Utah, Salt Lake City, UT

TU-SY-F4-355
Utah PRISMS Data Integration Platform for Generating Exposomes
R. Gouripeddi[1], M. Cummins[2], N. Burnett[1], R. Madsen[3], P. Mo[3], P. Warner[3], R. Butcher[3], K. A. Sward[2], J. Facelli[1]; [1]University of Utah, Salt Lake CIty, UT, [2]University of Utah, Salt Lake City, UT, [3]University of Utah, Salt Lake City, UT

TU-SY-F4-356
Mathematical Modeling and Uncertainty Quantification for Exposomic Studies
J. Facelli, A. Lund; University of Utah, Salt Lake City, UTO

TU-SY-F4-357
Presentation and Visualization of Exposomic Data for Research Use-cases
K. A. Sward; University of Utah, Salt Lake City, UT

Auditorium

TU-SY-G4: Perinatal Exposures in the Home Environment: Sources, Measurements, and Associated Health Outcomes - Part 2
Chairs: Heather Stapleton, Duke University, Durham, NC; Kate Hoffman, Duke University, Durham, NC

TU-SY-G4-358
Prenatal Exposure to Perfluoroalkyl Substances (PFAS) in the Home Environment and Associations with Birth Weight
J. A. Craig[1], T. F. Webster[1], K. Hoffman[2], S. C. Hammel[2], A. Phillips[2], A. Lorenzo[2], H. M. Stapleton[2]; [1]Boston University, Weymouth, MA, 2Duke University, Durham, NC

TU-SY-G4-359
Children's Exposure to Organophosphate Esters: Socioeconomic Factors and Associations with BMI
S. C. Hammel[1], K. Hoffman[1], A. Lorenzo[1], A. L. Phillips[1], M. Frenchmeyer[1], B. Flaherty[1], T. F. Webster[2], H. M. Stapleton[1]; [1]Duke University, Durham, NC, [2]Boston University, Boston, MA

TU-SY-G4-360
Prenatal EDC exposures and biomarkers of the chronic stress response
A. R. Zota[1], L. Romano[1], K. Coleman-Phox[2], N. E. Adler[3], B. Laraia[4], E. Epel[3]; [1]George Washington University Milken School of Public Health, Washington, DC, [2]University of California San Francisco, San Francisco, CA, [3]University of California San Francisco, San Francisco, CA, [4]University of California Berkeley School of Public Health, Berkeley, CA

TU-SY-G4-361
Prenatal Exposure to Organophosphate Flame Retardants and Children's Gestational Duration and Growth
K. Hoffman[1], H. M. Stapleton[1], A. Lorenzo[1], J. L. Daniels[2]; [1]Duke University, Durham, NC, [2]UNC Gilling School of Global Public Health, Chapel Hill, NC

TU-SY-G4-362
Trajectories of Early Life PBDE Exposure in Relation to Neurocognitive Development in Children
W. Cowell[1], A. Margolis[1], V. Rauh[1], A. Sjodin[2], R. Jones[2], Y. Wang[1], S. Wang[1], J. Herbstman[1]; [1]Columbia Center for Children's Environmental Health, New York, NY, [2]Centers for Disease Control and Prevention, Atlanta, GA

Program - Tuesday, October 17

10:30 am - 11:00 am/3:00 pm - 3:30 pm

Empire Ballroom
TU-PO: Tuesday Poster Session

TU-PO-363 **Assessing Indoor $PM_{2.5}$ Concentrations in Households on the Hopi Reservation**
S. Hadeed[1], M. K. O'Rourke[1], G. Honanie[2], A. Mahkewa[2], M. Paukgana[2], C. Kelley[1], M. A. Alshammari[1], R. Canales[1], R. Harris[1]; [1]The University of Arizona, Tucson, AZ, [2]The Hopi Tribe, Kykotsmovi, AZ

TU-PO-364 **Carbon Dioxide Accumulation Inside Vehicles: The Effect of Ventilation and Driving Conditions**
N. Hudda[1], S. Fruin[2]; [1]Tufts University, Medford, MA, [2]University of Southern California, Los Angeles, CA

TU-PO-365 **Analysis and Identification of Ozone-Squalene Particulate Phase By-Products**
B. Coffaro, C. Weisel; Rutgers, Highland Park, NJ

TU-PO-366 **Evaluating air pollutant exposure with air quality index (AQI)**
Y. Huang[1], Y. Lin[2]; [1]National Kaohsiung First University of Science and Technology, Kaohsiung, Taiwan, [2]Fu-Jen Catholic University, New Taipei City, Taiwan

TU-PO-367 **Real-Time Personal Ozone Monitoring Versus Ambient Ozone Monitoring in the Ironbound District of Newark, NJ**
J. Therkorn[2], Y. Son1, R. Laumbach[1], Q. Meng[1]; [1]Rutgers University, Piscataway, NJ, [2]Johns Hopkins University Applied Physics Laboratory, Laurel, MD

TU-PO-368 **Statistical Fusion of Present-Day Observed Global Ozone Concentrations and CCMI-1 Multi-Model Surface Ozone Estimates**
M. Buechlein, M. Serre, J. West, Y. Zhang; UNC, Chapel Hill, NC

TU-PO-369 **Spectral Identification of Localized Roadway, Aircraft and Rail Transportation Noise Sources and Correlation with Ultrafine Particulates**
D. Leaffer[1], J. L. Durant[1], D. Brugge[1], N. Hudda[1], B. Tracey[2], M. C. Simon[1], A. Hastings[3]; [1]Tufts University, Medford, MA, [2]Tufts University, Medford, MA, [3]US Department of Transportation, Cambridge, MA

TU-PO-370 **Characterization of Particulate Matter in Urban Traffic Roads and Health Effects on the Pulmonary System in Mice with Lung Inflammation**
V. G. Venkatareddy[3], A. K. Fauzie[1], R. K. Thimulappa[2], A. A. Nori-Sarma[3], M. L. Bell[3]; [1]Mysore University, Mysore, India, [2]JSS Medical College, Mysore, India, [3]Yale University, New Haven, CT

TU-PO-371 **Smoke Sense - a crowd sourced study of health impacts of wildland fire smoke exposures**
A. G. Rappold[1], K. rappazzo1, S. Stone[2], D. Diaz-Sanchez[1], B. Hubbell[3]; [1]US EPA, Durham, NC, [2]OAR/OAQPS, Durham, NC, [3]US EPA, Durham, NC

TU-PO-372 **Potential inhaled dose: a better metric of personal exposure to particulate air pollution**
S. N. Chillrud[1], P. Kinney[2], C. M. Smith[1], J. Thornburg[3], Q. Yang[1], D. W. Jack[1]; [1]Columbia University, New York, NY, [2]Boston University, Boston, MA, [3]RTI International, Triangle Research Park, NC

TU-PO-373 **Characterizing Aggregated Exposure to Fine Particulate Matter from Indoor and Outdoor Sources**
WITHDRAWN

TU-PO-374 **Linking Green Space Attributes and Mental Health: Understanding the Connection between Perceived Safety and Perceived Restorativeness Using Immersive Virtual Environments**
P. K. Baran, P. Tabrizian; NC State University, Raleigh, NC

TU-PO-375 **A Review of Stressors from the Built and Natural Environments Impacting American Indian Children's Health and Well-Being**
N. Barros[1], N. S. Tulve[2], D. Heggem[3], K. Bailey[4]; 1ORISE, United States Environmental Protection Agency, Research Triangle Park, NC, 2United States Environmental Protection Agency, Research Triangle Park, NC, [3]United States Environmental Protection Agency, Las Vegas, NV, [4]United States Environmental Protection Agency, Cincinnati, OH

TU-PO-376 **Study on personal exposure to fine particles for retired adults in Beijing**
Q. Wang, N. Li, C. Xu, D. Xu; National Institute of Environmental Health, Chinese Center for Disease Control and Prevention, Beijing, China

TU-PO-378 **Very high levels of individual exposure biomarkers: A void in guidance for study investigators**
S. M. Pinney; University of Cincinnati College of Medicine, Cincinnati, OH

TU-PO-379 **Community Driven University Partnerships to Assess Exposures and Risk Perceptions of Diné Communities following the Gold King Mine Spill**
P. I. Beamer[1], J. C. Ingram[3], K. Chief[2]; [1]University of Arizona, Tucson, AZ, [2]University of Arizona, Tucson, AZ, [3]Northern Arizona University, Flagstaff, AZ

Program - Tuesday, October 17

10:30 am - 11:00 am/3:00 pm - 3:30 pm

Empire Ballroom
TU-PO: Tuesday Poster Session [cont.]

TU-PO-380 **Use of satellite imagery to identify a target population for recruitment of households within a large rural tribal area**
C. Kelley[1], R. Harris[1], J. Tabor[1], M. K. O'Rourke[1], G. S. Honanie[2], L. Joshweseoma[2], S. Hadeed[1], M. A. Alshammari[1]; [1]University of Arizona, Tucson, AZ, [2]Hopi Tribe, Kykotsmovi, AZ

TU-PO-381 **Plasma Trans-Fatty Acid Levels in Fasting Adults from the National Health and Nutrition Examination Survey**
H. C. Kuiper, S. P. Caudill, H. Vesper; CDC, Atlanta, GA

TU-PO-382 **Urinary Arsenic and Dietary Components in the General U.S. Population**
R. Birch, J. Rogers, D. A. Marker, S. M. Viet; Westat, Rockville, MD

TU-PO-383 **The OH-PAHs in urine can make a dyslipidemia, but not by a oxidative stress pathway**
T. Wang[1], J. Xu[2], L. Zhang[1], B. Han[2], Z. Bai[2]; [1]Tianjin Medical University, Tianjin, China, [2]Chinese Research Academy of Environmental Sciences, Beijing, Chin

TU-PO-384 **Metallothioneins polymorphisms and blood/plasma trace elements in Slovenian mother-child pairs (CROME-LIFE+ study)**
A. Stajnko[1], J. Snoj Tratnik[1], A. Trdin[1], M. Jagodic[1], A. France Štiglic[2], M. Horvat[1], I. Falnoga[1]; [1]Jozef Stefan Insitute, Ljubjana, Slovenia, [2]University Medical Centre of Ljubljana, Ljubljana, Slovenia

TU-PO-385 **Apolipoprotein E polymorphisms and mercury concentrations in pregnant women from Croatian coastal region**
A. Trdin[1], I. Falnoga[1], J. Snoj Tratnik[1], A. Stajnko[1], D. Mazej[1], J. Marc[2], M. Krsnik[3], J. Osredkar[3], I. Prpic[4], O. Petrovic[4], Z. Spiric[5], M. Horvat[1]; 1Jozef Stefan Institute, Ljubljana, Slovenia, [2]Faculty of Pharmacy, University of Ljubljana, Ljubljana, Slovenia, [3]University Medical Centre Ljubljana, Ljubljana, Slovenia, 4University Hospital Centre Rijeka, Rijeka, Croatia, [5]Green infrastructure ltd, Zagreb, Croatia

TU-PO-386 **Results of the first National Human Biomonitoring in Slovenia: levels of trace metal(loid)s in lactating women and their partners and sources of exposure**
D. Mazej[1], J. Snoj Tratnik[1], Z. Slejkovec[1], M. Jagodic[1], V. Fajon[1], A. Stajnko[1], M. Krsnik[2], A. Sešek Briški[2], M. Skitek[2], D. Kocman[1], A. Kobal[1], L. kononenko[3], M. Horvat[1]; [1]Jozef Stefan Institute, Ljubljana, Slovenia, [2]University Medical Centre, Ljubljana, Slovenia, [3]Ministry of Health, Ljubljana, Slovenia

TU-PO-387 **Estimated Absorption of Permethrin and Pentachlorophenol and Body Mass Index of NC and OH Preschoolers**
WITHDRAWN

TU-PO-388 **Thought-Starter: The concept of human exposure-based toxicity testing for agrochemicals**
C. Terry[1], A. Whyte[2], D. Juberg[1]; [1]Dow AgroSciences, Oxon, United Kingdom, [2]Dow AgroSciences, Abingdon, United Kingdom

TU-PO-389 **Comparative Evaluation of Orchard Sprayer Technology Based on Pesticide Drift Exposure Potential**
E. J. Kasner[1], R. A. Fenske[1], G. A. Hoheisel[2], K. Galvin[1], M. G. Yost[1]; [1]University of Washington, Seattle, WA, [2]Washington State University, Prosser, WA

TU-PO-390 **Health Risk Assessment of Endocrine Disruptor Organophosphorus Pesticides Exposure through Dietary Intake of Fresh Vegetables for children in Tehran, Iran**
WITHDRAWN

TU-PO-391 **Assessment of Inorganic Bromide Concentrations in Crops following Soil Fumigation with Methyl Bromide**
N. Hodges[2], C. Curl[1], J. Marshall[2], M. Moll[2], M. Morra[2], J. Porter[1], C. Rogers[2], G. Shewmaker[2]; [1]Boise State University, Boise, ID, [2]University of Idaho, Idaho Falls, ID

TU-PO-392 **Method development for the detection of pyrethroid metabolites in saliva**
M. Wren, I. Yang, B. Buckley; Rutgers University, Piscataway, NJ

TU-PO-393 **A Pilot Study on Migrant Grape Workers Exposure to Pesticides in Sonora, Mexico**
N. I. Lopez-Galvez; University of Arizona, Tucson, AZ

TU-PO-394 **Construction of risk assessment system for chemicals in the agricultural environment**
S. Choi; KnA consulting Co., Ltd, Yongin, Korea (the Republic of)

TU-PO-395 **Use of AHETF Data Outside North America**
J. Holmsen; Agricultural Handler Exposure Task Force, Macon, MO

TU-PO-396 **The International Estimated Short-Term Intake: Conservatisms and Appropriateness for Estimating Acute Dietary Exposure to Pesticides**
C. R. Fleming[1], C. Cleveland[2]; [1]Dow AgroSciences, Indianapolis, IN, [2]BASF Corporation, Research Triangle Park, NC

Program - Tuesday, October 17

10:30 am - 11:00 am/3:00 pm - 3:30 pm

Empire Ballroom
TU-PO: Tuesday Poster Session [cont.]

TU-PO-397 **Characterization of Organophosphate Pesticides in Urine and Home Environment Dust in an Agricultural Community**
C. Tamaro[1], M. Smith[1], T. Workman[1], W. Griffith[1], B. Thompson[2], E. Faustman[1]; [1]University of Washington, Seattle, WA, [2]Cancer Prevention Program, Fred Hutchinson Cancer Research Center, Seattle, WA

TU-PO-398 **Left or Right: Where Should Personal Exposure Monitors Be Worn?**
J. Thornburg[1], R. Chartier[1], S. N. Chillrud[2], D. W. Jack[2], S. Cho[1]; [1]RTI International, Research Triangle Park, NC, [2]Columbia University, Palisades, NY

TU-PO-399 **Applications of Passive Silicone Wristband Samplers: Childhood Para-Occupational Exposures to Pesticide Mixtures**
C. Poutasse[1], T. Arcury[2], S. Quandt[3], P. Laurienti[4], K. A. Anderson[1]; [1]Oregon State University, Corvallis, OR, [2]Wake Forest School of Medicine, Winston-Salem, NC, [3]Wake Forest School of Medicine, Winston-Salem, NC, [4]Wake Forest School of Medicine, Winston-Salem, NC

TU-PO-400 **Mobile and passive sampler measurements to identify spatial distributions of air pollution and its sources in Los Angeles**
M. Tessum[1], T. Larson[2], S. Vedal[1]; [1]University of Washington, Seattle, WA, [2]University of Washington, Seattle, WA

TU-PO-401 **A Novel Method for Characterizing Resident Behaviors and Housing Attributes using Photo Survey**
P. Fabian, Z. Petropoulos, C. Scollaert, M. Scammell, J. I. Levy; Boston University School of Public Health, Boston, MA

TU-PO-402 **Equines used as sentinels for human health - leveraging passive sampling and unique equine population exposures to assess negative post-natal health outcomes**
L. G. Tidwell[1], C. E. Donald[1], K. R. Mullen[2], D. M. Ainsworth[2], K. A. Anderson[1]; [1]Oregon State University, Corvallis, OR, [2]Cornell University, Ithaca, NY

TU-PO-403 **Integrating Spatiotemporal Information System Approaches with Agent-Based Modeling for Studies of Human Exposures to Traffic Related Air Pollution (TRAP)**
Z. Mi, R. Laumbach, H. Kipen, P. Georgopoulos; Environmental and Occupational Health Sciences Institute, Rutgers University, Piscataway, NJ

TU-PO-404 **Spatial variation of secondary inorganic PM2.5 exposure: from exposure magnitude to exposure distance**
K. Stylianou, O. Jolliet; University of Michigan School of Public Health, Ann Arbor, MI

TU-PO-405 **Applicability of mobile monitoring to high-resolution air quality mapping in New Delhi, India**
A. Gurung, K. P. Messier, J. Apte; University of Texas at Austin, Austin, TX

TU-PO-406 **Meta-Analysis of Lead (Pb) in Multiple Environmental Media in the United States**
J. J. Frank[1], A. Poulakos[2], J. Xue[3]; [1]Oak Ridge Institute for Science and Education, Oak Ridge, TN, [2]ASRC Federal Vistronix, Boston, MA, [3]U.S. Environmental Protection Agency, Durham, NC

TU-PO-407 **Characterization of total chromium and chromium-6 in UCMR3 drinking water monitoring data**
C. L. Ring, F. Loko, M. A. Harris; ToxStrategies, Inc., Austin, TX

TU-PO-408 **Microbiomes of the Built Environment: From Research to Application—a National Academies Study**
E.B. Boyle[1], D. A. Butler1, K. Bowman[2]; [1]National Academies of Sciences, Engineering, and Medicine, Washington, DC, [2]National Academies of Sciences, Engineering, and Medicine, Washington, DC

TU-PO-409 **Potential health risks of Polycyclic Aromatic Hydrocarbons (PAHs) associated with sediment and selected sea foods from a Ramsar site**
D. S. Jyethi[1], P. Khillare[2]; [1]Indian Statistical Institute, Tezpur, India, [2]Jawaharlal Nehru University, New Delhi, India

TU-PO-410 **Wi-Fi radiation exposure to children in kindergartens and schools in Australia**
G. Benke[1], C. Bhatt[1], K. Karipidis[2], M. Abramson[1]; [1]Monash University, Melbourne, Australia, [2]Australian Radiation Protection and Nuclear Safety Agency, Yallambie, Australia

TU-PO-411 **Addressing Toxicity of Water using the Challenge Process**
E. Varughese, J. Garland; U.S. EPA, Cincinnati, OH

TU-PO-412 **A Double-Diffusion Model to Quantify the Sorption Effects of Indoor Surfaces on the Exposure to Chemicals Encapsulated in Products**
L. Huang, O. Jolliet; University of Michigan, Ann Arbor, MI

Program - Tuesday, October 17

10:30 am - 11:00 am/3:00 pm - 3:30 pm

Empire Ballroom
TU-PO: Tuesday Poster Session [cont.]

TU-PO-413 **Usage Patterns of Oral Care Products**
M. Chiter[1], M. Gomez-Berrada[1], I. Boudieres-Laffont[1], A. Rielland[2], S. Guillou[2], D. De Javel[2], P. Ferret[1]; [1]Pierre-Fabre Dermo-Cosmétique, Toulouse, France, [2]Eurosafe, Saint Grégoire, France

TU-PO-414 **An Overview of the NIEHS-EPA Pilot Study of Exposure to Chemicals in Consumer Products**
D. Stout[1], L. Alston[1], F. Chen[1], P. P. Egeghy[1], S. Prince[1], R. A. Silva[1], K. Taylor[2], R. Walker[1], T. J. Buckley[1]; [1]USEPA, Durham, NC, [2]NIEHS, Durham, NC

TU-PO-415 **Development of questionnaire and construct survey panels to obtain national exposure factors of children's goods in Korea**
M. Lim[1], J. Park[2], S. Park[3], K. Lee[1]; [1]Graduate School of Public Health, Seoul National University, Seoul, Korea (the Republic of), [2]Seoul National University, Seoul, Korea (the Republic of), [3]World Research Inc., Seoul, Korea (the Republic of)

TU-PO-416 **Finding the Biologically Important Exposures in the Exposome Through Circulating Antigen-antibody Complexes**
M. Chung, C. J. Patel; Harvard University, Boston, MA

TU-PO-417 ***In Silico* Prediction of Toxicokinetic Parameters for Environmentally Relevant Chemicals with Application to Risk-Based Prioritization**
B. Ingle[1], B. Veber[2], J. Nichols[3], J. Wambaugh[4], R. Tornero-Velez[1]; [1]Environmental Protection Agency, Research Triangle Park, NC [2]Oak Ridge Institute for Science and Education, Oak Ridge, TN, [3]Environmental Protection Agency, Duluth, MN, [4]Environmental Protection Agency, Research Triangle Park, NC

TU-PO-418 **Development of Pregnancy-PBPK models for bisphenol A and its metabolites**
V. Kumar, R. Prasad Sharma, M. Schuhmacher; Universitat Rovira i Virgili, Tarragona, Spain

TH-PL-B2-642 ***(moved from Thursday oral presentation)*** **Dietary and inhalation exposure to polycyclic aromatic hydrocarbons (PAHs) and monohydroxy metabolites in urine: A panel study for the elderly in Tianjin**
B. Han[1], P. Li[2], X. Qin[3], L. Zhang[3], T. Ni[4], J. Fan[3], N. Zhang[1], F. He[5], J. Xu[6], W. Yang[1], W. Zhang[1], X. Wang[1], Z. Bai[1]; [1]Chinese Research Academy of Environmental Sciences, Beijing, China, [2]Tianjin University of Technology, Tianjin, China, [3]Tianjin Medical University, Tianjin, China, [4]Tianjin University of Sport, Tianjin, China, [5]Hubei Meteorological Service Center, Wuhan, China, [6]University of Washington, Seattle, WA

WE-PL-A4-510 ***(moved from Wednesday oral presentation)*** **Exposure Assessment of $PM_{2.5}$ and Benzene in Bike Lanes in Taipei**
C. Wu, T. Wu, S. Ho, C. Chan; National Taiwan University, Taipei, Taiwan

Program - Wednesday, October 18

9:00 am - 10:30 am

Bull Durham A/B
WE-PL-A1: Traffic Related Air Pollution - Part 1
Chair: Lan Jin, Yale University, New Haven, CT

WE-PL-A1-418
Measurement of Transportation Air Pollutant Exposure Concentrations
H. Frey[1], S. Singh[1], D. Gadre[2]; [1]North Carolina State University, Raleigh, NC, [2]Trinity Consultants, Phoenix, AZ

WE-PL-A1-419
Exposure to Air Pollutants in Selected High-rise Buildings in High Density Urban Areas in Hong Kong
T. Li[1], W. Che[1], A. K. Lau[1], H. Frey[2]; [1]Hong Kong University of Science and Techonology, Hong Kong, Hong Kong, [2]North Carolina State University, Raleigh, CA

WE-PL-A1-420
Characterizing Air Pollution Exposures in Complex Urban Environments: Experiences and Lessons Learned in Hong Kong
W. Che[1], A. K. Lau[1], H. Frey[2], Z. Li[1]; [1]The Hong Kong University of Science and Technology, Hong Kong, Hong Kong, [2]North Carolina State University, Raleigh, NC

WE-PL-A1-421
Personal and occupational exposure to traffic-related fine particulate matter in Accra, Ghana
R. E. Arku[1], K. Dionosio[2], A. Hughes[3], J. Vallarino[4], J. Spengler[4], S. Agyei-Mensah[5], M. Ezzati[6]; [1]University of British Columbia, Vancouver, Canada, [2]United States Environmental Protection Agency, Washington, D.C., DC, [3]University of Ghana, Accra, Ghana, [4]Harvard T.H. Chan School of Public Health, Boston, MA, [5]University of Ghana, Accra, Ghana, [6]Imperial College London, London, United Kingdom

WE-PL-A1-422
Exposure to Short Lived Air Pollutants on Public Transit in Brazil
E. Patrick[1], J. F. Segura[2], A. C. Targino[2], M. Gibson[1]; [1]Dalhousie University, Halifax, Canada, [2]Universidade Tecnológica Federal do Paraná, Londrina, Brazil

Crown A/B
WE-SY-B1: 2,4-D - A Case Study Of Decades Of Exposure Science; A Discussion of Quality, Quantity, and Harmonization
Chairs: Judy LaKind, LaKind Associates, LLC, Catonsville, MD; Carol J. Burns, Burns Epidemiology Consulting, Sanford, MI

WE-SY-B1-423
Epidemiology and public health protection: the 2,4-D story
C. J. Burns; Burns Epidemiology Consulting, Sanford, MI

WE-SY-B1-424
Critical and systematic evaluation of 2,4-dichlorophenoxyacetic acid (2,4-D) exposure data: quality and generalizability for human assessments
J. LaKind[1], C. J. Burns[3], D. Q. Naiman[2], C. O' Mahony[5], G. Vilone[5], A. J. Burns[4], J. S. Naiman[6]; [1]LaKind Associates, LLC, Catonsville, MD, [2]Johns Hopkins University, Baltimore, MD, [3]Burns Epidemiology Consulting, LLC, Sanford, MI, [4]Alma College, Alma, MI, [5]Creme Global, Dublin, Ireland, [6]University of Pennsylvania, Philadelphia, PA

WE-SY-B1-425
2,4-D Human Exposure Data: Presentation of the results of a study on harmonisation of published Data
G. Vilone[1], C. O' Mahony[1], J. LaKind[3], C. J. Burns[2]; [1]Creme Global Ltd., Dublin, Ireland, [2]Burns Epidemiology Consulting, LLC, Sanford, MI, [3]LaKind Associates, LLC, Baltimore, MD

WE-SY-B1-426
Advances in Methodologies for Conducting Systemic Reviews within the Federal Government
K. Taylor[1], A. Boyles[2], A. Rooney[1]; [1]OHAT/NTP/NIEHS, Morrisville, NC, [2]DERT/NIEHS, Morrisville, NC

WE-SY-B1-427
Ensuring Harmonized And Comparable Laboratory Measurements To Improve Public Health Programs
H. W. Vesper; Centers for Disease Control and Prevention, Atlanta, GA

Program - Wednesday, October 18

9:00 am - 10:30 am

Royal A/B
WE-SY-C1: Synthetic Biology and Exposure Science: Integrating Chemistry, Genetic Engineering, and Risk Management

Chairs: Andrew J. R. Gillespie, U.S. Environmental Protection Agency, Research Triangle Park, NC; Mark Bagley, U.S. Environmental Protection Agency, Cincinnati, OH

WE-SY-C1-428
Synthetic biology: where we are, where we're going, and its impact on and need for exposure science
T. Kuiken; North Carolina State University, Raleigh, NC

WE-SY-C1-429
Genetically engineered microbial sensors for remote mapping of environmental hazards
S. Belkin; Hebrew University of Jerusalem, Jerusalem, Israel

WE-SY-C1-430
Biosensors for water monitoring
D. Lloyd; FREDsense Technologies, Calgary, Canada

WE-SY-C1-431
Synthetic Algae and Cyanobacteria: Great Potential but What Is the Exposure Risk?
M. Bagley[1], C. Penalva-Arana[2], A. Gillespie[3]; [1]US EPA, Cincinnati, OH, [2]US EPA, Washington, DC, [3]US EPA, Research Triangle Park, NC

WE-SY-C1-432
Facilitated Discussion on the Opportunities for Exposure Science to Inform Synthetic Biology Applications, and Vice Versa
A. Gillespie; US EPA ORD NERL, Research Triangle Park, NC

Crystal Ballroom
WE-SY-D1: Social Determinants of Health, Environmental Exposures, and Disproportionately Impacted Communities: What We Know and How We Tell Others- Part 1

Chairs: Nicolle Tulve, U.S. Environmental Protection Agency, Office of Research and Development, Research Triangle Park, NC; Lisa Baxter, U.S. Environmental Protection Agency, Office of Research and Development, Research Triangle Park, NC; Jon Levy, Boston University, School of Public Health, Boston, MA, Patricia Fabian, Boston University, School of Public Health, Boston, MA

WE-SY-D1-433
Review of Non-Chemical Stressors from the Social Environment
K. Hibbert, N. S. Tulve; U.S. Environmental Protection Agency, Research Triangle Park, NC

WE-SY-D1-434
The Role of Psychosocial Stressors in Mediating Socioeconomic Susceptibility to Air Pollution
J. E. Clougherty; Drexel University Dornsife School of Public Health, Philadelphia, PA

WE-SY-D1-435
Identifying Neighborhood, Social determinants and factors that impact cardiorespiratory diseases
D. Diaz-Sanchez[3], J. Mirowsky[1], R. Devlin[3], W. Cascio[3], A. Weaver[3], C. Haynes[2], C. Blach[2], E. Hauser[2], S. Shah[2], W. Kraus[2], K. Olden[3], L. Neas[3]; [1]SUNY College of Environmental Science and Forestry, Syracuse, NY, [2]Duke Molecular Physiology Institute, Durham, NC, [3]EPA, Chapel Hill, NC

WE-SY-D1-436
Working to Understand the Role of Social Determinants of Health for Minority and Vulnerable Communities in the United States
J. Lewis, J. Hoover; University of New Mexico, Albuquerque, NM

WE-SY-D1-437
Overview of Tribal Research in the Environmental Health Disparities Centers
M. Gonzales[1], C. Lefthand-Begay[2], C. DeVore[3]; [1]University of New Mexico, Albuquerque, NM, [2]University of Washington, Seattle, WA, [3]University of New Mexico, Albuquerque, NM

Imperial 1
WE-PL-E1: Climate Change

Chair: Elise Elliot, Yale School of Public Health, New Haven, CT

WE-PL-E1-438
Drought and the risk of hospital admissions and mortality in older adults in the western USA from 2000 to 2013: a retrospective study
J. D. Berman[1], K. Ebisu[5], R. D. Peng[4], F. Dominici[3], M. L. Bell[2]; [1]Johns Hopkins School of Public Health, Newington, CT, [2]Yale School of Forestry and Environmental Studies, New Haven, CT, [3]Harvard T.H. Chan School of Public Health, Boston, MA, [4]Johns Hopkins School of Public Health, Baltimore, MD, [5]California EPA, Oakland, CA

Program - Wednesday, October 18

9:00 am - 10:30 am

Imperial 1
WE-PL-E1: Climate Change [cont.]

WE-PL-E1-439
Assessing the potential impact of global warming on infiltration of outdoor air pollutants into residential indoor environments
D. Liang[1], K. Ono[1], W. Lee[2], J. Liao[1], J. Lawrence[3], S. E. Sarnat[1], J. A. Sarnat[1], P. Koutrakis[3]; [1]Emory University, Decatur, GA, [2]National Taiwan University, Taipei, Taiwan, [3]Harvard University, Boston, MA

WE-PL-E1-440
Modeling relationship between climate indicators and exposure to air pollutants for urban health
WITHDRAWN

WE-PL-E1-441
Accessing heat effects among migrant and seasonal farmworkers
K. Zhang, R. F. Arauz, S. Cooper; The University of Texas Health Science Center at Houston, Houston, TX

WE-PL-E1-442
Personal Monitoring of Individual Temperature Experience in Outdoor Workers Using Wearable Sensors
J. Runkle[3], M. Sugg[1], C. Fuhrmann[2]; [1]Appalachian State University, Boone, NC, [2]Mississippi State University, Starksville, MS, [3]North Carolina State University, Raleigh, NC

Imperial 2
WE-SY-F1: Merging Non-Targeted Analytical Methods, Informatics, and Predictive Modeling to Advance Next-Generation Exposure Science

Chair: Kristin Isaacs, Environmental Methods and Measurement Division, National Exposure Research Laboratory, Research Triangle Park, NC; Jon Sobus, Environmental Methods and Measurement Division, National Exposure Research Laboratory, Research Triangle Park, NC

WE-SY-F1-443
Non-targeted analysis of chemicals in environmental media: methods and challenges
L. Ferguson; Duke University, Durham, NC

WE-SY-F1-444
New Chemical Use Databases to Support Interpretation and Dissemination of Non-Targeted Analysis Exposure Data
K. Dionisio[1], K. Phillips[1], A. Williams[2], A. McEachran[2], J. R. Sobus[1], P. Price[1], J. Wambaugh[2], K. Isaacs[1]; [1]Environmental Protection Agency, Research Triangle Park, NC, [2]Environmental Protection Agency, Raleigh, NC

WE-SY-F1-445
Assessing Plausibility of Tentative Chemical Identifications from Suspect Screening Analyses via Chemical Function
K. Phillips[1], A. McEachran[2], K. Isaacs[1], J. R. Sobus[1], A. Williams[3], J. Wambaugh[3]; [1]U.S. Environmental Protection Agency, Research Triangle Park, NC, [2]US EPA / ORISE, Research Triangle Park, NC, [3]U.S. Environmental Protection Agency, Research Triangle Park, NC

WE-SY-F1-446
Development of Multi-Media Chemical Monitoring Database
A. Williams[2], C. Bevington[1], K. Isaacs[1], A. Williams[1], A. Pfahles-Hutchens[1], H. Hubbard[2], A. Varghese[2]; [1]Environmental Protection Agency, Washington, DC, DC, [2]ICF, RTP, NC

WE-SY-F1-447
Media-Specific Classification Models for Ranking Candidate Unknown Chemicals in Non-targeted Analyses
K. Isaacs[1], K. Phillips[1], A. McEachran[2], A. Williams[3], J. Wambaugh[3], J. R. Sobus[1]; [1]US Environmental Protection Agency, Durham, NC, [2]US EPA, Research Triangle Park, NC, [3]US EPA, Research Triangle Park, NC

Auditorium
WE-SY-G1: Exposure sciences from east Asian perspectives

Chair: Satoshi Nakai, Yokohama National University, Yokohama, Japan

WE-SY-G1-448
Study on Phthalates, BPA and Antibiotics Exposure Assessment of Chinese School Children Based on Biomarkers Monitoring
Y. ZHOU, Q. JIANG; Fudan University, Shanghai, China

WE-SY-G1-449
Development of LUR Model for NOx Exposure in Yokohama, Japan - A Case Study
S. Nakai, K. Hanaoka, A. Fukuo; Yokohama National University, Yokohama, Japan

Program - Wednesday, October 18

9:00 am - 10:30 am

Auditorium
WE-SY-G1: Exposure sciences from east Asian perspectives [cont.]

WE-SY-G1-450
Overview of VOC Monitoring in Taiwan - New Technology and Field Application Studies
L. Wang[1], P. Chung[1], C. Hsiao[1], S. Tsai[1], S. Lee[2], T. A. Chou[1]; [1]TricornTech Corporation, Taipei, Taiwan, [2]Hong Kong Polytechnic University, Hung Hom, Hong Kong

WE-SY-G1-451
Recommendation of suitable sample size for exposure factors of consumer products
K. Lee, H. Ban; Seoul National University, Seoul, Korea (the Republic of)

WE-SY-G1-452
Panel Discussion
S. Nakai; Yokohama National University, Yokohama, Japan

11:00 am - 12:00 pm

Bull Durham A/B
WE-PL-A2: Semi-Volatiles in Dust/Air in Homes
Chair: Robin Dodson, Silent Spring Institute, Newton, MA

WE-PL-A2-453
Assessment of the Oral Bioaccessibility of Semi-Volatile Organic Compounds in Indoor Settled Dust
WITHDRAWN

TH-PL-A2-638 ***(being presented in place of WE-PL-A2-453)***
Diesel exposure in urban environment: evidence based approach to understand health risks
A. Rashid[1], A. Naseem[2], A. Kamal[1]; [1]PMAS Arid Agriculture University, Rawalpindi, Pakistan, [2]National University of Sciences and Technology, Islamabad, Pakistan

WE-PL-A2-454
Estimating Particle/Air Partition Coefficients for SVOCs on Airborne Particles
Y. Wu, C. Eichler, J. Little, L. Marr; Virginia Tech, Blacksburg, VA

WE-PL-A2-455
Characterization of water-soluble organic gases in 13 real homes
S. Duncan[1], B. Turpin[2]; [1]Rutgers University, New Brunswick, NJ, [2]University of North Carolina, Chapel Hill, NC

Crown A/B
WE-SY-B2: Total Exposure Health - Advances in Exposure Sciences for Diverse Communities
Chair: Richard Hartman, Synoptos Inc., Washington, DC

WE-SY-B2-456
One Common Goal - Integrating Exposure Sciences through Total Exposure Health
K. Phillips, R. T. Hartman; Department of Defense, Falls Church, VA

WE-SY-B2-457
We Are All Unique - Rethinking Risk Management'
S. Lacey[2], R. T. Hartman[1]; [1]Department of Defense, Falls Church, VA, [2]Indiana University, Indianapolis, IN

WE-SY-B2-458
Bringing It All Together - Noise, a Common Exposure
K. Montgomery[2], R. T. Hartman[1]; [1]Department of Defense, Falls Church, VA, 2Intelesense Technologies, Milpitas, CA

Royal A/B
WE-SY-C2: Exposure science - from research to report back: Working with your communities to communicate results appropriately
Chair: Liam O'Fallon, National Institute of Environmental Health Sciences, Research Triangle Park, NC

WE-SY-C2-459
Know Your Audience: Academic-Community Partnerships to Develop Data Disclosure Strategies
E. Haynes; University of Cincinnati, Cincinnati, OH

Program - Wednesday, October 18

11:00 am - 12:00 pm

Royal A/B
WE-SY-C2: Exposure science - from research to report back: Working with your communities to communicate results appropriately [cont.]

WE-SY-C2-460
Improving Environmental Health Literacy and Justice Through Data Report Back and Free-Choice Learning
M. Ramirez-Andreotta; University of Arizona, Tucson, AZ

WE-SY-C2-461
DERBI: A digital framework for personalizing exposure reports at the individual and community levels
J. G. Brody, H. Susmann, K. Boronow, J. Ohayon; Silent Spring Institute, Newton, MA

Crystal Ballroom
WE-SY-D2: Social Determinants of Health, Environmental Exposures, and Disproportionately Impacted Communities: What We Know and How We Tell Others- Part 2

Chairs: Nicolle Tulve, U.S. Environmental Protection Agency, Office of Research and Development, Research Triangle Park, NC; Lisa Baxter, U.S. Environmental Protection Agency, Office of Research and Development, Research Triangle Park, NC; Jon Levy, Boston University, School of Public Health, Boston, MA, Patricia Fabian, Boston University, School of Public Health, Boston, MA

WE-SY-D2-462
Strategies for Community Engagement Related to Environmental Health Disparities
N. Teufel-Shone[1], M. Gonzales[4], J. Johnston[2], C. Scollaert[3]; [1]University of Arizona, Tucson, AZ, [2]University of Southern California, Los Angeles, CA, [3]Boston University, Boston, MA, [4]University of New Mexico, Albuquerque, NM

WE-SY-D2-463
Communicating environmental risks with African-American communities: A Cognitive Psychology perspective
L. Rivers, D. McGregor; North Carolina State University, Raleigh, NC

WE-SY-D2-464
Translation of EPA Research: Data Interpretation and Communication Strategies
A. G. Rappold[1], K. Benedict[2], D. Lobdell[1]; [1]US EPA, Durham, NC, [2]US EPA, Durham, NC

Imperial 1
WE-SY-E2: The NTA Fractal: Metabolome, Exposome, and Biome

Chairs: Sarah Laughlin-Toth, ORISE Research Participant, Research Triangle Park, NC; Seth Newton, U.S. Environmental Protection Agency, Research Triangle Park, NC

WE-SY-E2-465
Connecting genes to molecules: Identifying novel small molecules in microbe-plant interactions
E. M. O'Neill; University of North Carolina at Chapel Hill, Carrboro, NC

WE-SY-E2-466
Exploring host-associated microbiota as mediators of neurobehavioral toxicity in zebrafish larvae developmentally exposed to triclosan
T. Tal[1], D. Phelps[2], A. Swank[3], T. Catron[2], C. Wood[1], M. Stryar[4], N. Brinkman[5], S. Keely[5]; [1]U.S. EPA, RTP, NC, [2]ORISE/U.S. EPA, RTP, NC, [3]U.S. EPA, RTP, NC, [4]U.S. EPA, RTP, NC, [5]U.S. EPA, RTP, NC

WE-SY-E2-467
Exploring human exposure to organic micropollutants in the indoor environment by non-targeted analysis
L. Ferguson[1], B. Vogler[2], J. Cooper[2], H. M. Stapleton[1]; [1]Duke University, Durham, NC, [2]Duke University, Durham, NC

WE-SY-E2-468
Non-Targeted Screening and Identification of Chlorination Products in Reclaimed Water
J. McCord, M. Stryar; Oak Ridge Institute for Science and Education, Research Triangle Park, NC

Imperial 2
WE-SY-F2: Chemical Prioritization via Computational Exposure and Hazard Screening

Chairs: Harvey Clewell, ScitoVation, Research Triangle Park, NC; Chantel Nicolas, ScitoVation, Research Triangle Park, NC

WE-SY-F2-469
Predicting Exposure Pathways with Machine Learning
J. Wambaugh[1], C. L. Ring[1], K. Isaacs[2], K. Phillips[2], P. P. Egeghy[2], R. W. Setzer[1]; [1]U.S. Environmental Protection Agency, Research Triangle Park, NC, [2]U.S. Environmental Protection Agency, Research Triangle Park, NC

Program - Wednesday, October 18

11:00 am - 12:00 pm

Imperial 2
WE-SY-F2: Chemical Prioritization via Computational Exposure and Hazard Screening [cont.]

WE-SY-F2-470
Using Chemical Space Analysis to Identify the Chemical Domain of Applicability for In Vitro Assays
C. Nicolas[1], K. Mansouri[1], S. Haider[1], P. McMullen[1], M. Yoon[1], J. Wambaugh[3], A. Tropsha[2], H. Clewell[1]; [1]ScitoVation, Research Triangle Park, NC, [2]University of North Carolina at Chapel Hill, Chapel Hill, NC, [3]USEPA, Research Triangle Park, NC

WE-SY-F2-471
QSAR-based Methods and Tools to Support HTP Risk Assessment
A. Tropsha; UNC-Chapel Hill, Chapel Hill, NC

Auditorium
WE-SY-G2: Exposure to Environmental Contaminants in Diverse Communities
Chair: Darpa Jyethi, Indian Statistical Institute, Tezpur, India

WE-SY-G2-472
Quantification of Diné activity patterns with the San Juan River in the wake of the Gold King Mine Spill
P. I. Beamer[1], Y. Ornelas Van Horne1, K. Chief[2], M. Begay[3], N. Lothrop[1], N. Teufel-Shone[4], M. Begay[5]; [1]The University of Arizona, Tucson, AZ, [2]The University of Arizona, Tucson, AZ, [3]Navajo Nation Department of Health, Windowrock, AZ, [4]The University of Arizona, Tucson, AZ, [5]Northern Arizona University, Flagstaff, AZ

WE-SY-G2-473
Exposure from solid fuel use: Case study of women in rural households of North India
D. S. Jyethi; Indian Statistical Institute, Tezpur, India

WE-SY-G2-474
A Pilot Study on Migrant Grape Workers Exposure to Pesticides in Sonora, Mexico
N. I. Lopez-Galvez[1], R. Wagoner[1], P. I. Beamer[1], J. de Zapien[1], C. Rosales[1], I. Ortega[2], P. Aranda[3]; [1]University of Arizona, Tucson, AZ, [2]Centro de Investigacion en Alimentacion y Desarollo, Hermosillo, Mexico, [3]Collegio de Sonora, Hermosillo, Mexico

1:30 pm - 3:00 pm

Bull Durham A/B
WE-PL-A3: Air Pollution Geospatial Models
Chair: Nicole Deziel, Yale School of Public Health, New Haven, CT

WE-PL-A3-475
Evaluation Of The Transferability Of Resolved Vs Unresolved Land Use Regression Models For Traffic-Related Air Pollutants
K. K. Shairsingh, C. Jeong, G. Evans; University of Tornto, Toronto, Canada

WE-PL-A3-476
Improving ambient ultrafine particle concentration predictions at residences by adding central-site monitoring to a mobile monitoring campaign
M. C. Simon[1], A. P. Patton[2], D. Brugge[3], J. L. Durant[1]; [1]Tufts University, Medford, MA, 2Health Effects Institute, Boston, MA, [3]Tufts University, Boston, MA

WE-PL-A3-477
Errors associated with the use of roadside monitoring to study traffic pollutant-related health effects
D. Liang[1], J. L. Moutinho[2], H. Chang[3], R. Golan[4], D. Gao[5], S. E. Sarnat[1], R. Greenwald[6], R. Weber[5], A. Russell[2], J. A. Sarnat[1]; [1]Emory University, Atlanta, GA, [2]Georgia Institute of Technology, Atlanta, GA, [3]Emory University, Atlanta, GA, [4]Ben Gurion University of the Negev, Beer Sheva, Israel, [5]Georgia Institute of Technology, Atlanta, GA, [6]Georgia State University, Atlanta, GA

WE-PL-A3-478
Satellite Predictions of $PM_{10-2.5}$ in Chicago
M. Pedde[1], I. Kloog[3], T. V. Larson[2], S. Adar[1]; [1]University of Michigan, Ann Arbor, MI, [2]University of Washington, Seattle, WA, [3]Ben Gurion University, Be'er Sheva, Israel

WE-PL-A3-479
Exploring the Spatial Representativeness of NAAQS and Near Roadway Sites Using High-Spatial Resolution Air Pollution Maps Produced by A Mobile Mapping Platform
P. A. Solomon[1], A. K. Singh[2], A. Whitehill[3], S. Kaushik[3], M. M. Lunden[4], B. LaFranchi[4], D. Herzl[4]; [1]US Environmental Protection Agency, Las Vegas, NV, [2]University of Nevada Las Vegas, Las Vegas, NV, [3]US Environmental Protection Agency, Research Triangle Park, NC, [4]Acima, Inc., San Francisco, CA

Program - Wednesday, October 18

1:30 pm - 3:00 pm

Crown A/B
WE-SY-B3: The Pyrethroids: Triangulating Exposure, Toxicology, and Epidemiology Part I

Chair: Larry Sheets Bayer CropScience, Research Triangle Park, NC

WE-SY-B3-480
Toxicology of the Pyrethroid Insecticides
T. P. Pastoor; Pastoor Science Communications, LLC, Greensboro, NC

WE-SY-B3-481
Species and Age-Dependent Differences
T. G. Osimitz[1], L. Sheets[2], M. Creek[3]; [1]Science Strategies, LLC, Charlottesville, VA, [2]Bayer CropScience, Research Triangle Park, NC, [3]Valent U.S.A. LLC, Walnut Creek, CA

WE-SY-B3-482
Predicting Pyrethroid Internal Exposure in Different Populations Using Physiologically Based Pharmacokinetic Modeling
M. Yoon, G. Song, M. Moreau, P. Mallick, A. Efremenko, H. Clewell; ScitoVation, Research Triangle Park, NC

WE-SY-B3-483
Epidemiology and Pyrethroid Insecticides: We Can Do Better
C. J. Burns; Burns Epidemiology Consulting, Sanford, MI

Royal A/B
WE-SY-C3: Biomonitoring in Action - Identifying and Remedying Harmful Chemical Exposures with Innovative Laboratory Tests, Surveillance, and Effective Communication

Chair: Kristin Dortch, Centers for Disease Control and Prevention, Atlanta, GA

WE-SY-C3-484
National Trends in Exposure to Environmental Chemicals - An Update
L. Romanoff, K. A. Dortch, M. E. Mortensen; Centers for Disease Control and Prevention, Atlanta, GA

WE-SY-C3-485
Developing a Critical Laboratory Method for Assessing Arsenic Exposure from Private Wells
J. Schneider, C. Bean; New Hampshire Public Health Laboratories, Concord, NH

WE-SY-C3-486
Utilizing Existing Public Health Capacities to Target Biomonitoring Investigations
S. Chaudhuri; Utah Public Health Laboratory, Taylorsville, UT

WE-SY-C3-487
Communicating Biomonitoring Results to Promote Environmental Health Interventions
M. Nascarella; Commonwealth of Massachusetts, Boston, MA

WE-SY-C3-488
Implementing Biomonitoring Studies to Assess Chemical Exposures in New York Communities
K. M. Aldous; Wadsworth Center, Albany, NY

Crystal Ballroom
WE-SY-D3: Social Determinants of Health, Environmental Exposures, and Disproportionately Impacted Communities: What We Know and How We Tell Others- Part 3

Chairs: Nicolle Tulve, U.S. Environmental Protection Agency, Office of Research and Development, Research Triangle Park, NC; Lisa Baxter, U.S. Environmental Protection Agency, Office of Research and Development, Research Triangle Park, NC; Jon Levy, Boston University, School of Public Health, Boston, MA, Patricia Fabian, Boston University, School of Public Health, Boston, MA

WE-SY-D3-489
Modeling disparities in ambient air pollution exposure and residential air exchange rates across Massachusetts using publicly-available data
A. Rosofsky[1], J. I. Levy[1], A. Zanobetti[2], P. Fabian[1]; [1]Boston University School of Public Health, Boston, MA, [2]Harvard T.H. Chan School of Public Health, Boston, MA

WE-SY-D3-490
Community-Level Characteristics and Environmental Factors of Child Respiratory Illnesses in Southern Arizona
N. Lothrop, K. Hussaini, D. Billheimer, P. I. Beamer; University of Arizona, Tucson, AZ

WE-SY-D3-491
Environmental Toxic Metals Exposures Across Disproportionately Impacted Communities
S. F. Farzan; University of Southern California, Los Angeles, CA

Program - Wednesday, October 18

1:30 pm - 3:00 pm

Crystal Ballroom
WE-SY-D3: Social Determinants of Health, Environmental Exposures, and Disproportionately Impacted Communities: What We Know and How We Tell Others- Part 3 [cont.]

WE-SY-D3-492
Health and Well-being Impact of Contamination on Traditional Food on Navajo
J. C. Ingram[1], T. C. Rock[1], A. C. Lister[1], M. C. Lerma[2]; [1]Northern Arizona University, Flagstaff, AZ, [2]Northern Arizona University, Flagstaff, AZ

Imperial 1
WE-SY-E3: Per- and polyfluorinated substances (PFAS) in drinking water: Where exposure assessment, epidemiology, and communities meet
Chair: Lynn Wilder, NCEH/ATSDR, Atlanta, GA

WE-SY-E3-494
PFAS in serum: national trends and interpretation
M. Mortensen; NCEH, Atlanta, GA

WE-SY-E3-495
Per- and Polyfluoroalkyl Substance (Pfas) Site Categorization and Recommendations
S. Moore, R. R. Worley, B. A. Anderson; ATSDR, Atlanta, GA

WE-SY-E3-496
Pharmacokinetic modeling--exploring PFOA drinking water data and serum PFOA levels
R. R. Worley2, X. Yang1, J. Fisher1; 1FDA/NCTR, Jefferson, AR, 2ATSDR/DCHI, Atlanta, GA

WE-SY-E3-497
Working with a community to assess the feasibility of a PFAS health study-an approach for incorporating community input
F. Bove, J. Stephens; ATSDR, Atlanta, GA

WE-SY-E3-498
Tools for assessing community exposures to PFAS
J. Schier; NCEH, Atlanta, GA

Imperial 2
WE-SY-F3: The Tox21 Triangle: Toxicity Testing, Translation, and the Environment
Chairs: John F. Wambaugh, U.S. Environmental Protection Agency, Research Triangle Park, NC; Nisha S. Sipes, National Institute of Environmental Health Sciences/National Toxicology Program Division, Research Triangle Park, NC

WE-SY-F3-499
Integrative bioinformatics approaches for Tox21 data
D. Reif, M. Kosnik, A. Planchart, C. Mattingly; North Carolina State University, Raleigh, NC

WE-SY-F3-500
Using ToxCast™ data to prioritize chemicals that impact biological processes related to obesity
S. Auerbach; National Toxicology Program at NIEHS, Durham, NC

WE-SY-F3-501
Opportunities and Challenges in Employing In Vitro-In Vivo Extrapolation (IVIVE) to the Tox21 Dataset
B. A. Wetmore; US EPA, Research Triangle Park, NC

WE-SY-F3-502
Using High-throughput Screening Data to Guide Exposome Research
J. R. Sobus[1], A. Williams[2], A. McEachran[3], J. Grossman[5], L. Sarah[3], A. Marcotte[3], M. Russell[4], J. McCord[3], D. Mills[5], S. Newton[1], E. M. Ulrich[1], M. Stryar[1], J. Wambaugh[2], K. Isaacs[1], K. Phillips[1], G. Patlewicz[2], K. Mansouri[3], A. Richard[2], C. Grulke[2]; [1]US EPA, Research Triangle Park, NC, [2]US EPA, Research Triangle Park, NC, [3]US EPA, Research Triangle Park, NC, [4]US EPA, Research Triangle Park, NC, [5]US EPA, Research Triangle Park, NC

WE-SY-F3-503
Translating Tox21 Data to Risk Prioritization and Risk Assessment
C. L. Ring[1], J. Rager[1], C. Thompson[1], M. A. Harris[1], R. Pearce[2], R. W. Setzer[2], B. A. Wetmore[3], J. Wambaugh[2]; [1]ToxStrategies, Inc., Austin, TX, [2]US Environmental Protection Agency, Research Triangle Park, NC, [3]US Environmental Protection Agency, Research Triangle Park, NC

Program - Wednesday, October 18

1:30 pm - 3:00 pm

Auditorium
WE-SY-G3: Zika Virus Secondary Exposures, Impacts, and Guidance
Chair: Jean Kim, RTI International, Research Triangle Park, NC

WE-SY-G3-504
Zika Virus Secondary Exposures, Impacts, and Guidance
F. Gould; NC State University, Raleigh, NC

WE-SY-G3-505
Congenital Zika syndrome in humans and non-human primate models
S. Permar; Duke University School of Medicine, Durham, NC

WE-SY-G3-506
Implications of Congenital Zika Syndrome for Families
D. Bailey; RTI International, Research Triangle Park, NC

WE-SY-G3-507
Title: Non-vertical transmission of Zika virus: exposure pathways and outcomes
J. Lebov, P. MacDonald; RTI International, Research Triangle Park, NC

WE-SY-G3-508
U.S. Government Roles in the Zika Response
L. A. Colf, L. Walsh; U.S. Department of Health and Human Services, Washington, DC

3:30 pm - 5:00 pm

Bull Durham A/B
WE-PL-A4: Traffic Related Air Pollution - Part 2
Chair: Yoshira Ornelas Van Horne, University of Arizona, Marana, AZ

WE-PL-A4-509
Characterizing trends in particulate matter concentration and size fraction distribution across a moderately populated metropolitan area on the coast: A pilot study in Charleston, SC
J. L. Pearce[1], A. Commodore[1], B. Neelon[1], R. Boaz[1], M. Bozigar[1], S. Wilson[2], E. Svendsen[1]; [1]Medical University of South Carolina, Charleston, SC, [2]University of Maryland, Baltimore, MD

WE-PL-A4-510
Exposure Assessment of PM2.5 and Benzene in Bike Lanes in Taipei
MOVED TO TUESDAY POSTER SESSION

WE-PL-A4-511
Incorporating Time Spent at Schools into Estimates of Traffic-Related Air Pollution Exposure
C. Wolfe[1], C. Brokamp[1], J. Burkle[2], G. LeMasters[2], P. Ryan[1]; [1]Cincinnati Children's Hospital Medical Center, Cincinnati, OH, [2]University of Cincinnati, Cincinnati, OH

WE-PL-A4-512
How much does ambient air pollution concentration increase because of private vehicle drop-offs at schools
M. Adams[1], W. Requia[2]; [1]University of Toronto, Mississauga, Canada, [2]McMaster University, Hamilton, Canada

WE-PL-A4-513
Assessment of health effects of particulate pollution among traffic police in Kathmandu, Nepal using biomarkers
K. M. Shakya[2], R. E. Peltier[1]; [1]University of Massachusetts, Amherst, Amherst, MA, [2]Villanova University, Villanova, PA

Crown A/B
WE-SY-B4: The Pyrethroids: Triangulating Exposure, Toxicology, and Epidemiology Part II
Chair: Curt Lunchick, Bayer CropScience, Research Triangle Park, NC

WE-SY-B4-514
Residential Exposure to Cyfluthrin and Deltamethrin
J. Thomasen; Bayer, RTP, NC

Program - Wednesday, October 18

3:30 pm - 5:00 pm

Crown A/B
WE-SY-B4: The Pyrethroids: Triangulating Exposure, Toxicology, and Epidemiology Part II [cont.]

WE-SY-B4-515
Aggregate Dietary Exposure to Cyfluthrin and Deltamethrin Using CARES NG
B. M. Young; Bayer CropScience, RTP, NC

WE-SY-B4-516
Cyfluthrin and Deltamethrin Dose Reconstruction Based on Biological Monitoring Studies
J. H. Driver[1], J. Ross[1], C. Lunchick[2]; [1]risksciences.net, LLC, Manassas, VA, [2]Bayer Cropscience, Research Triangle Park, NC

WE-SY-B4-517
Aggregate and Cumulative Exposure Source Attribution for Pyrethroids: Consideration of Modeling and Biological Monitoring
R. Reiss[2], J. H. Driver[1], J. Ross[1], B. M. Young[3]; [1]risksciences.net, LLC, Manassas, VA, [2]Exponent, Arlington, VA, [3]Bayer Cropscience, Research Triangle Park, NC

WE-SY-B4-518
Importance of Considering Non-Chemical Stressors in Interpreting Pesticide Exposures in Children
N. S. Tulve[1], J. D. Ruiz[2], K. Hibbert[1]; [1]United States Environmental Protection Agency, Research Triangle Park, NC, [2]ORISE, Research Triangle Park, NC

Royal A/B
WE-PL-C4: Environmental Epidemiology - Birth Cohorts
Chair: Paloma Beamer, University of Arizona, Tucson, AZ

WE-PL-C4-519
Evidence of Urine Glyphosate Exposure in Pregnant Women: A Prospective Midwest Birth Cohort
S. Parvez[1], R. R. Gerona[3], C. Proctor[2], J. Reiter[4], P. Winchester[2]; [1]Indiana University Fairbanks School of Public Health, Indianapolis, IN, [2]St. Francis Hospital, Indianapolis, IN, [3]University of California San Francisco, San Francisco, CA, [4]Indiana University School of Medicine, Indianapolis, IN

WE-PL-C4-520
Investigation of Association between Environmental and Socioeconomic Factors and Preterm Birth in California
H. Huang[1], D. Woodruff[1], R. Baer[2], K. Bangia[3], L. August[3], L. Jelliffe-Pawlowski[2], A. Padula[1], M. Sirota[4]; [1]UCSF, San Francisco, CA, [2]UCSF, San Francisco, CA, [3]California Environmental Protection Agency, Oakland, CA, [4]UCSF, San Francisco, CA

WE-PL-C4-521
Prenatal Air Pollution Exposure and the Development of Allergic Sensitization in Early Life: A Randomized Controlled Trial
R. W. Allen[1], C. L. Bartolomeu[1], E. Gombojav[3], B. Boldbaatar[3], N. Gerel[3], C. Ochir[3], T. Byambaa[2], P. K. Barn[1], B. Lanphear[1], T. Takaro[1], S. A. Venners[1], G. M. Webster[1], W. Yuchi[1]; [1]Simon Fraser University, Surrey, Canada, [2]National Institute of Public Health, Ulaanbaatar, Mongolia, [3]Mongolian National University of Medical Sciences, Ulaanbaatar, Mongolia

WE-PL-C4-522
Mixtures of Early Pregnancy Environmental Exposures and Birth Size
L. B. Rokoff[1], S. Rifas-Shiman[1], B. A. Coull[2], A. Cardenas[1], A. M. Calafat[3], X. Ye[3], S. Sagiv[4], D. R. Gold[5], E. Oken[1], A. F. Fleisch[6]; [1]Harvard Medical School and Harvard Pilgrim Health Care Institute, Boston, MA, [2]Harvard T.H. Chan School of Public Health, Boston, MA, [3]Centers for Disease Control and Prevention, Atlanta, GA, [4]University of California, Berkeley School of Public Health, Berkeley, CA, [5]Harvard T.H. Chan School of Public Health, Boston, MA, [6]Maine Medical Center, Portland, ME

WE-PL-C4-523
Patterns and Predictors of Environmental Chemical Mixtures Among Pregnant Women: The HOME Study
G. Kalloo[1], A. M. Calafat[2], A. Sjodin[2], A. Chen[3], K. Yolton[4], B. Lanphear[5], J. M. Braun[1]; [1]Brown University School of Public Health, Providence, RI, [2]Centers for Disease Control and Prevention, Atlanta, GA, [3]University of Cincinnati, Cincinnati, OH, [4]Cincinnati Children's Hospital Medical Center, Cincinnati, OH, [5]Simon Fraser University, Burnaby, Canada

Program - Wednesday, October 18

3:30 pm - 5:00 pm

Crystal Ballroom
WE-PL-D4: Indoor Cooking Exposure

Chair: Laura Kwong, Stanford University, Stanford, CA

WE-PL-D4-524
Exposure to cooking emitted PM- Reveiw of previous research and future needs

M. Amouei Torkmahalleh[1], S. Gorjinezhad[1], P. Hopke[2]; [1]Nazarbayev University, Astana, Kazakhstan, [2]University of Rochester, Rochester, NY

WE-PL-D4-525
Impact of wearing compliance on CO-$PM_{2.5}$ relationships for personal exposure in cookstove studies

K. Burkart[2], S. N. Chillrud[1], E. Boamah-Kaali[3], Z. Zhou[2], K. Ayuurebobi Ae-Ngibis[3], M. Mujtaba[3], A. Quinn[2], P. Kinney[4], D. W. Jack[2], K. Asante[3]; [1]LDEO of Columbia University, Palisades, NY, [2]Mailman School of Public Health of Columbia University, New York, NY, [3]Kintampo Health Research Centre, Kintampo, Ghana, [4]Boston University School of Public Health, Boston, MA

WE-PL-D4-526
Exploring emission and concentration linkages across multiple seasons during a cookstove intervention trial in rural India

T. W. Aung[3], A. Grieshop[1], M. Kelp[2], J. Marshall[2]; [1]North Carolina State University, Raleigh, NC, [2]University of Washington, Seattle, WA, [3]University of North Carolina at Chapel Hill, Chapel Hill, NC

WE-PL-D4-527
Household air pollution exposure and nasopharyngeal carriage of streptococcus pneumoniae in Malawian infants

R. Chartier[1], M. Dherani[2], T. Tafatatha[3], S. Cho[1]; [1]RTI International, Research Triangle Park, NC, [2]University of Liverpool, Liverpool, United Kingdom, [3]The Karonga Prevention Study, Chilumba, Malawi

WE-PL-D4-528
Wood-smoke Inhalation Exposures from Traditional Hunting Practices in a First Nations Community

R. E. Peltier[1], P. Pant[1], R. J. Moriarty[2], M. Wilton[2], E. Liberda[3], L. Tsuji[2]; [1]University of Massachusetts, Amherst, MA, [2]University of Toronto Scarborough, Scarborough, Canada, [3]Ryerson University, Toronto, Canada

Imperial 1
WE-SY-E4: Improving Our Understanding of Exposures to Tire Crumb Rubber Used on Playing Fields and Playgrounds

Chairs: Kent Thomas, U.S. Environmental Protection Agency, Research Triangle Park, NC; Angela Ragin-Wilson, Centers for Disease Control and Prevention/Agency for Toxic Substances and Disease Registry, Atlanta, GA

WE-SY-E4-529
The Federal Research Action Plan on Recycled Tire Crumb Used on Playing Fields and Playgrounds - Background and Exposure Research Goals

A. Guiseppi-Elie[1], A. D. Ragin[2], E. Hooker[3], K. Thomas[1], E. A. Irvin-Barnwell[2], J. L. Zambrana[1]; [1]United States Environmental Protection Agency, Los Angeles, CA, [2]Centers for Disease Control and Prevention, Atlanta, GA, [3]United States Consumer Product Safety Commission, Rockville, MD

WE-SY-E4-530
Characterizing Tire Crumb Rubber for Exposure Assessment

K. Thomas[1], E. A. Irvin-Barnwell[2], A. Guiseppi-Elie[1], A. Ragin-Wilson[2]; [1]U.S. EPA, Research Triangle Park, NC, [2]Centers for Disease Control and Prevention/Agency for Toxic Substances and Disease Registry, Atlanta, GA

WE-SY-E4-531
Characterization of Exposure Potential during Activities on Synthetic Turf Fields with Recycled Tire Crumb Rubber Infill

E. A. Irvin-Barnwell[1], K. Thomas[2], K. Benson1, Z. Li[1], A. D. Ragin[1]; [1]Centers for Disease Control and Prevention, Atlanta, GA, [2]U.S. EPA, Research Triangle Park, NC

WE-SY-E4-532
Characterizing Children's Exposure to Recycled Tire Rubber Used in Playground Surfacing

E. Hooker, K. Philips, K. Talcott, H. Nesteruk, R. Balci-Sinha; United States Consumer Product Safety Commission, Rockville, MD

WE-SY-E4-533
Improving our understanding of exposures at synthetic turf fields and playgrounds using recycled tire materials

K. Thomas[1], A. D. Ragin[2]; [1]United States Environmental Protection Agency, Research Triangle Park, GA, [2]Agency for Toxic Substances and Disease Registry, Atlanta, GA

Program - Wednesday, October 18

3:30 pm - 5:00 pm

Imperial 2
WE-SY-F4: Integrating exposure and hazard in risk assessment using computational tools

Chairs: MiYoung Yoon, Scitovation, Research Triangle Park, NC; Alicia Paini, Joint Research Centre, Ispra, Italy

WE-SY-F4-534
Frameworks for organizing exposure and toxicity data - the Aggregate Exposure Pathway (AEP) and the Adverse Outcome Pathway (AOP)
C. Tan; US EPA, Durham, NC

WE-SY-F4-535
Quantitative in vitro to in vivo extrapolation (QIVIVE) and physiologically based modelling of human toxicokinetics for AOP-based risk assessment
M. Yoon[1], P. McMullen[2], H. Clewell[1]; [1]ScitoVation, Research Triangle Park, NC, [2]ScitoVation, Research Triangle Park, NC

WE-SY-F4-536
The influence of a surfactant's polar head group on its in vitro distribution and cytotoxic potency
N. Kramer[1], S. T. Droge[2]; [1]Utrecht University, Utrecht, Netherlands, [2]University of Amsterdam, Amsterdam, Netherlands

WE-SY-F4-537
Biologically Based Dose Response modeling and its application in risk assessment: A case study of thyroid-active compounds
A. Lumen; National Center for Toxicological Research, Jefferson, AR

Auditorium
WE-SY-G4: Global harmonization of exposure science data

Chairs: Jessica L. Reiner, National Institute of Standards and Technology, Charleston, VA; Shoji F. Nakayama, National Institute for Environmental Studies, Tsukuba, Japan

WE-SY-G4-538
Harmonization of Exposure Science through Reference Materials and Datal
C. A. Gonzalez; National Institute of Standards and Technology, Gaithersburg, MD

WE-SY-G4-539
Integrative Mass Spectrometry to Sequence the Human Exposome
D. I. Walker[1], Y. Liang[1], J. Fernandes[1], A. Esper[1], G. Martin[1], G. Miller[2], D. P. Jones[1]; [1]Emory University, Atlanta, GA, [2]Emory University, Atlanta, GA

WE-SY-G4-540
The European Human Biomonitoring Initiative - HBM4EU
M. Kolossa-Gehring, U. Doyle, U. Fiddicke, A. Conrad, K. Pack, L. Reiber; German Environment Agency (UBA), Berlin, Germany

WE-SY-G4-541
Quality control, SOPs and data harmonization in metabolomics: the good, the bad, and the ludicrous
C. E. Wheelock[1], I. Meister[2], R. Chaleckis[2]; [1]Karolinska Institute, Stockholm, Sweden, [2]Gunma University, Maebashi, Japan

WE-SY-G4-542
Data users view: What data quality is required?
R. C. Vermeulen; Utrecht University, Utrecht, Netherlands

Program - Wednesday, October 18

10:30 am - 11:00 am/3:00 pm - 3:30 pm

Empire Ballroom
WE-PO: Wednesday Poster Session

WE-PO-543 **Linking aviation emissions to residential and personal ultrafine particle exposures**
N. Hudda, M. C. Simon, W. Zamore, D. Brugge, J. L. Durant; Tufts University, Medford, MA

WE-PO-544 **A Field Study to Validate Inhalation Exposure Factors Used to Create the Particle Inhalation Rate Metric**
L. Corlin[1], H. Amaravadi[2], N. Henderson[1], J. Cordova[2], S. Ball[2], M. Woodin[1], J. L. Durant1, D. Gute[1], D. Brugge[2]; [1]Tufts University, Boston, MA, [2]Tufts University, Boston, MA

WE-PO-545 **Comparison of Bioaerosol Samplers and Media for the Collection of Aerosolized Norovirus**
C. L. Boles, M. W. Nonnenmann; University of Iowa, Iowa City, IA

WE-PO-546 **Investigation and modelling the residential infiltration of fine particulate matter in Beijing**
C. Xu, N. Li, Q. Wang, D. Xu; National Institute of Environmental Health, Chinese Center for Disease Control and Prevention, Beijing, China

WE-PO-547 **Controlled Dermal Exposure to Thirdhand Cigarette Smoke**
S. F. Schick; University of California, San Francisco, San Francisco, CA

WE-PO-548 **Potential Inhaled dose and cardiovascular indicators - initial pilot results**
D. W. Jack[1], P. Kinney[2], X. Lui[1], D. Shimbo[1], R. Sloan[1], C. M. Smith[1], J. Thornburg[3], Q. Yang[1], S. N. Chillrud[1]; [1]Columbia University, New York, NY, 2Boston University, Boston, MA, [3]RTI International, Triangle Research Park, NC

WE-PO-549 **Impact of High-Efficiency Air Filtration on Indoor Particle Levels: The AIRE Study**
D. Bennett[1], P. Krakowiak[2], D. Tancredi[1], N. Kenyon[1], R. Moran1, K. Roudneva[1]; [1]University of California, Davis, Davis, CA, [2]University of California, Davis, Davis, CA

WE-PO-550 **Fluorescent Biological Aerosol Particle Exposure in a Northern California Residence**
Y. Tian[1], Y. Liu[2], P. K. Misztal2, J. Xiong[2], C. M. Arata[3], A. Goldstein[2], N. W. William[1]; [1]UC Berkeley, Berkeley, CA, [2]UC Berkeley, Berkeley, CA, [3]University of California, Berkeley, CA

WE-PO-551 **High-Throughput, Simultaneous Quantitation of Hemoglobin Adducts of Acrylamide, Glycidamide, and Ethylene Oxide Using UPLC-MS/MS**
C. Tse[1], M. Yang[2], T. Frame[1], H. Vesper[1]; [1]Centers for Disease Control and Prevention, Atlanta, GA, [2]Battelle Memorial Institute, Atlanta, GA

WE-PO-552 **New, Highly Specific UPLC-MS/MS Method for Analyzing Steroid Hormones and their Conjugates in Human Serum**
L. F. Duke[1], P. Kim[2], J. Botelho[1], H. Vesper[1]; [1]CDC Atlanta, Atlanta, GA, [2]Battelle Memorial Institute, Atlanta, GA

WE-PO-553 **Electrochemical Sensing of Nitrite, a Biomarker of Oxidative Stress, in Exhaled Breath Condensate**
C. P. Weisel[1], A. Gholizadeh[2], M. Javanmard[2], D. Voiry[3], A. Gow[1], M. Chhowalla[3], R. Laumbach[1]; [1]Rutgers University, Piscataway, NJ, [2]Rutgers University, Piscataway, NJ, [3]Rutgers University, Piscataway, NJ

WE-PO-554 **Does subcooled solubility play any role in dermal absorption?**
R. Tibaldi[1], W. ten Berge3, D. Drolet[2], A. Redman[1]; [1]ExxonMobil Biomedical Sciences, Annandale, NJ, [2]volunteer EASC, Longueuil, Canada, [3]Santoxar, Westervoort, Netherlands

WE-PO-555 **Bioavailability of POPs: method development for physiologically based in vitro extractions**
X. Cui; Nanjing University, Nanjing, China

WE-PO-556 **Quantification of formaldehyde hemoglobin adducts in blood with protein calibrators**
M. Yang[1], C. Tse[2], K. Omri[2], D. Wirtz[2], T. Nabors[2], A. Gostilean[2], H. W. Vesper[2]; [1]Battelle, Atlanta, GA, [2]Centers for Disease Control and Prevention, Atlanta, GA

WE-PO-557 **Susceptibility to xenobiotics toxication is dictated by the time of the day that exposures occur**
P. Charisiadis[1], S. Gaengler[1], R. Seth[2], S. Chatterjee[2], K. C. Makris[1]; [1]Cyprus University of Technology, LImassol, Cyprus, [2]University of South Carolina, Columbia, SC

WE-PO-558 **Crowdsourced and Crowdfunded Biomonitoring**
R. Dodson, H. Susmann, K. M. Rodgers, J. G. Brody, R. A. Rudel; Silent Spring Institute, Newton, MA

WE-PO-559 **Exposure data for sunscreen products**
M. Gomez-Berrada[1], S. Rakotomalala[1], M. Bellec[2], S. Guillou[2], D. De Javel[2], P. Ferret[1]; [1]Safety Assessment Department, Pierre Fabre Dermo-cosmétique, Toulouse, France, [2]Eurosafe, Saint Grégoire, France

Program - Wednesday, October 18

10:30 am - 11:00 am/3:00 pm - 3:30 pm

Empire Ballroom
WE-PO: Wednesday Poster Session

WE-PO-560 **Usage patterns of sunscreen products: a key point for safety assessment**
M. Gomez-Berrada[1], S. Rakotomalala[1], M. Bellec[2], S. Guillou[2], D. De Javel[2], P. Ferret[1]; [1]Pierre Fabre Dermo-cosmétique, Toulouse, France, [2]Eurosafe, Saint Grégoire, France

WE-PO-561 **Trace chemicals in consumer goods: differentiating analytical presence from human health risk**
D. Schowanek[1], K. D. Acuff[3], S. A. Tozer[4], K. L. Krivos[2], S. P. Felter[3]; [1]Procter & Gamble, Brussels, Belgium, [2]Procter & Gamble, Cincinnati, OH, [3]Procter & Gamble, Cincinnati, OH, [4]Procter & Gamble, Egham, United Kingdom

WE-PO-562 **Modeling use phase chemical releases, fate, and disposal for modeling longitudinal human exposures to consumer products**
G. Glen[1], R. Avanasi[1], J. Levasseur[1], H. Hubbard1, P. Price[2], K. Isaacs[3]; [1]ICF, Durham, NC, [2]US EPA, Durham, NC, [3]US EPA, Durham, NC

WE-PO-563 **Understanding the endocrine disruption potential of hazardous chemicals in children's products and their proposed alternatives using in vitro data**
M. N. Smith[1], R. M. Shaffer[1], E. Cohen Hubal[2], E. Faustman[1]; [1]University of Washington, Seattle, WA, 2Environmental Protection Agency, Research Triangle Park, NC

WE-PO-564 **Systematic Review and Meta-Analysis of Occupational Styrene-Induced Dyschromatopsia**
A. R. Choi[1], J. M. Braun[2], G. D. Papandonatos[3], P. B. Greenberg[1]; [1]The Warren Alpert Medical School of Brown University, Providence, RI, [2]Brown University School of Public Health, Providence, RI, [3]Brown University School of Public Health, Providence, RI

WE-PO-565 **Exposure to Organophosphate Flame Retardants and Thyroid Cancer Risk in Women**
N. Deziel[1], H. Yi[1], H. M. Stapleton[2], H. Huang[1], N. Zhao[1], Y. Zhang[1]; [1]Yale School of Public Health, New Haven, CT, [2]Duke University, Durham, NC

WE-PO-566 **Mixtures of PBDEs and thyroid hormones: Critical importance of exposure correlations, novel methods and causal assumptions**
T. F. Webster; Boston University School of Public Health, Boston, MA

WE-PO-567 **Association between Pollen Risk Indexes, Air Pollutants, and Allergic Diseases in Korea**
H. KIM[1], Y. Park[1], K. Park[2], B. Yoo[1]; [1]Soonchunhyang University, Cheonan, Korea (the Democratic People's Republic of), [2]Ewha Womans University Mokdong Hospital, Seoul, Korea (the Democratic People's Republic of)

WE-PO-568 **Assessing the Role of Caregiver Stress and Cockroach Allergen in Asthma Related Healthcare Utilization**
WITHDRAWN

WE-PO-569 **Early-life exposure to household chemical products with relation to patterns of whistling and wheezing in children up to 5 years old and their association to asthma in school age**
O. Mikes[1], M. Klugova[1], J. Klanova[1], P. Cupr[1], J. Svancara[1], H. Pikhart[2]; [1]Masaryk university, Brno, Czech Republic, [2]University College London, London, United Kingdom

WE-PO-570 **Evaluation of the impact of exposure to air pollution change on variation of lung function among refractory asthmatics in urban areas of South Korea**
S. Kim[1], S. Yu[1], C. Park[2]; [1]Soonchunhyang University, Asan, Korea (the Republic of), [2]Soonchunhyang Bocheon Hospital, Bucheon, Korea (the Republic of)

WE-PO-571 **Improving the Accuracy and Usability of Residential Histories for Exposure Assessment**
H. Minor, F. W. Lurmann, B. Penfold; Sonoma Technology, Inc., Petaluma, CA

WE-PO-572 **Health Risk Ranking Assessment of Human Exposure to Multiple Air Pollutants Emitted from Municipal Solid Waste Incineration in China**
Q. Zhou, M. Liu, J. Bi; Nanjing University, Nanjing, China

WE-PO-573 **Applying the Source to Outcome Approach for Refining Inhalation Risk Assessment**
S. Flack[1], P. Hinderliter[1], M. T. Ledson[1], A. Szarka[1], A. Charlton[2], B. Parr-Dobrzanski[2], T. Ramanarayanan[1], D. Wolf[1]; [1]Syngenta, Greensboro, NC, [2]Syngenta, Bracknell, United Kingdom

WE-PO-574 **Introduction of the Environmental Exposure Related Activity Patterns Research for the Chinese population (Children)**
X. Duan; University of Science and Technology Beijing, Beijing, China

WE-PO-575 **Canada's Exposure Toolbox: Resources and Tools Used to Characterize Consumer Exposure in Human Health Risk Assessments Conducted under Canada's Chemicals Management Program**
Y. Zhang, A. Zidek, L. MacKinnon, V. Bergeron; Existing Substances Risk Assessment Bureau, Ottawa, Canada

Program - Wednesday, October 18

10:30 am - 11:00 am/3:00 pm - 3:30 pm

Empire Ballroom
WE-PO: Wednesday Poster Session [cont.]

WE-PO-576 **A Systems Framework for Exposure Science to Inform Environmental and Public Health Decision-Making**
WITHDRAWN

WE-PO-577 **Health Benefits of GHG policies in Suzhou, China, and Kuopio, Finland**
M. J. Jantunen[1], M. Liu[2], A. Asikainen[1], Y. Huang[2], E. Pärjälä[3], Z. Jin[2], J. Tuomisto[1], J. Bi[2], C. Sabel[4]; [1]National Institute for Health and Welfare, Kuopio, Finland, [2]Nanjing University, Nanjing, China, [3]City of Kuopio, Kuopio, Finland, [4]Aarhus University, Aarhus, Denmark

WE-PO-578 **The Role of Refined Exposure Modeling in Risk Communication: Balancing Efficiency with Accuracy**
C. R. Fleming; Dow AgroSciences, Indianapolis, IN

WE-PO-579 **Harmonizing Life Cycle Human Exposure and Toxicity Assessment: A Roadmap**
WITHDRAWN

WE-PO-580 **Assessing human exposure to flame retardants in the indoor environment**
C. F. Chaisson[2], J. Patterson[3], K. Diskin[2], A. Parker[3], M. Babich[1], M. Biggs[1]; [1]Consumer Product Safety Commission, Rockville, MD, [2]The LifeLine Group, Annandale, VA, [3]University of Cincinnati, formally Toxicology Excellence for Risk Assessment, Cincinnati, OH

WE-PO-581 **Quantitative Property-Property Relationships for Estimating Diffusion Coefficients in Solid Materials and Solid Material-Air Partition Coefficients of Organic Compounds**
L. Huang, O. Jolliet; University of Michigan, Ann Arbor, MI

WE-PO-582 **Indoor dust ingestion rate for Japanese children**
M. TAKAGI, T. Isobe, M. IWAI-SHIMADA, S. F. Nakayama; National Institute for Environmental Studies, Japan, Tsukuba, Japan

WE-PO-583 **Indicators of human indoor exposure: thyroid hormone disruptors identified in cat blood and house dust by Effect-Directed Analysisa**
M. Lamoree[1], L. Lucattini[1], N. Zwart[1], P. Cenijn[1], J. Weiss[2], T. Hamers[1]; [1]Vrije Universiteit Amsterdam, Amsterdam, Netherlands, [2]Swedish University of Agricultural Sciences, Uppsala, Sweden

WE-PO-584 **Persistent Organic Pollutants in Dust Collected from Elderly Care Facilities in Portugal and the United States**
A. Salamova[1], K. Arnold[1], J. Teixeira[2]; [1]Indiana University, Bloomington, IN, [2]National Institute of Health, Porto, Portugal

WE-PO-585 **Using SHEDS-S/D to Estimate Soil and Dust Ingestion Rates for Children**
H. Hubbard[1], G. Glen[1], H. Ozkaynak[1], N. S. Tulve[2], L. Phillips[2], J. Cohen[1], K. Thomas[2], J. Moya[2]; [1]ICF, Durham, NC, [2]US EPA, Durham, NC

WE-PO-586 **Estimating Surface/Air Partition Coefficients for SVOCs on Interior Surfaces**
C. Eichler, Y. Wu, L. Marr, J. Little; Virginia Tech, Blacksburg, VA

WE-PO-587 **Sex Differences in the Impact of Sire Exposure to BPA on Weight Gain, Glucose Tolerance, and Metabolic Endpoints in Offspring**
S. J. Sumner[1], T. Fennell[2], S. McRitchie[1], H. Allardice[3], A. Mason[3], E. Rissman[3]; [1]University of North Carolina at Chapel Hill, Chapel Hill, NC, [2]RTI International, RTP, NC, [3]North Carolina State University, Raleigh, NC

WE-PO-588 **Health effect of different gaseous formaldehyde fluctuation forms on mice: a preliminary study**
X. Zhang[1], Y. Zhao[2], X. Yang[2], Y. Zhang[1], R. Li[2]; [1]Tsinghua University, Beijing, China, [2]Central China Normal University, Wuhan, China

WE-PO-589 **Expression of genes involved in stress, toxicity, inflammation, and autoimmunity, and levels of heavy metals in human blood**
R. Monastero[1], C. Vacchi-Suzzi[1], C. Marsit[2], B. Demple[1], J. Meliker[1]; [1]Stony Brook University, Stony Brook, NY, [2]Emory University, Atlanta, GA

WE-PO-590 **Comparison of Genetic and Environmental Mechanisms of Motor Neuron Death by Contemporary Proteomics**
J. Beri[1], T. Nash[2], M. Bereman[3]; [1]NC State University, Raleigh, NC, [2]NC State University, Raleigh, NC, [3]NC State University, Raleigh, NC

WE-PO-591 **Differences in biological activity among household dust samples detected by changes in expression of biomarker genes in zebrafish Danio rerio**
T. Henry[2], C. Papageorgakopoulou[2], M. Loh[1]; [1]Institute of Occupational Medicine, Edinburgh, United Kingdom, [2]Heriot-Watt University, Edinburgh, United Kingdom

WE-PO-592 **Evaluating the synergistic effects of cyanotoxic mixtures on the ALS pathway using targeted proteomics and statistical design of experiments**
R. Martin, M. Bereman; NCSU, Raleigh, NC

WE-PO-593 **Aldehyde dehydrogenase 2 (ALDH2) polymorphism and metabolism of aldehydes**
T. Kawamoto, M. Tsuji, R. Tanaka; University of Occupational and Environmental Health, Kitakyushu, Japan

Program - Wednesday, October 18

10:30 am - 11:00 am/3:00 pm - 3:30 pm

Empire Ballroom
WE-PO: Wednesday Poster Session [cont.]

WE-PO-594 **Proteomic analysis of cerebrospinal fluid and plasma in patients with Amyotrophic Lateral Sclerosis**
T. Nash[1], J. Ber[3], M. Bereman[2]; [1]North Carolina State University, Raleigh, NC, [2]North Carolina State University, Raleigh, NC, [3]North Carolina State University, Raleigh, NC

WE-PO-595 **Optimizing a Sensor Network with Data from Hazard Mapping Demonstrated in a Heavy-Vehicle Manufacturing Facility**
J. D. Berman[1], T. M. Peters[2], K. Koehler[3]; [1]Johns Hopkins School of Public Health, Newington, CT, [2]University of Iowa School of Public Health, Iowa City, IA, [3]Johns Hopkins School of Public Health, Baltimore, MD

WE-PO-596 **Historical Population Exposure to Fine Particulate Matter Extracted by Spatiotemporal Interpolation from 2005 to 2015 across the Contiguous U.S.**
X. Zhou[1], L. Li[2], W. Tong[2], G. Besenyi[3]; [1]Georgia Southern University, Statesboro, GA, [2]Georgia Southern University, Statesboro, GA, [3]Augusta University, Augusta, GA

WE-PO-597 **Spatial point pattern analysis of congenital heart defects in Lanzhou, China**
L. Jin[1], J. Reuning-Scherer[1], J. Qiu[2], Q. Liu[2], Y. Zhang1, M. L. Bell[1]; [1]Yale University, New Haven, CT, [2]Gansu Provincial Maternity and Child Care Hospital, Lanzhou, China

WE-PO-598 **3-Dimensional Paper Microfluidic Devices for the Detection of Toxins in Environmental Matrices by Paper Spray MS**
R. Carter[1], M. Bereman[2]; [1]NC State University, Raleigh, NC, [2]NC State University, Raleigh, NC

Program - Thursday, October 19

8:30 am - 10:00 am

Bull Durham A/B
TH-PL-A1: Behavioral & Policy Interventions for Traffic Related Air Pollution

Chair: Amruta Nori-Sarma, Yale University School of Forestry and Environmental Studies, New Haven, CT

TH-PL-A1-599
Study on Environmental Health Effects of Public Bicycles
M. Liu, Z. Jin, X. Liu, Y. Huang, J. Bi; Nanjing University, Nanjing, China

TH-PL-A1-600
The effectiveness of facemasks used to protect Beijing residents against particulate air pollution
M. Loh[1], J. W. Cherrie[2], A. Apsley[1], H. Cowie[3], W. Mueller[3], A. Sleeuwenhoek[1], S. Steinle[1]; [1]Institute of Occupational Medicine, Edinburgh, United Kingdom, [2]Heriot-Watt University, Edinburgh, United Kingdom, [3]Institute of Occupational Medicine, Edinburgh, United Kingdom

TH-PL-A1-601
Public's Risk Perception and Willingness-to-Pay for Air Pollution
D. Bi[2], S. Pu[1], J. Liu[2], S. Wu[2], J. Ding[2], M. Fang[1], X. Lu[2], M. Liu[1]; [1]Nanjing University, Nanjing, China, [2]Nanjing foreign language school, Nanjing, China

TH-PL-A1-602
A randomized, blinded, crossover intervention study of traffic-related air pollution (TRAP) and heart rate variability in healthy adults
B. Han[1], R. Zhao[1], N. Zhang[1], L. Zhang[2], J. Xu[3], Z. Bai[1], S. Vedal[3]; [1]Chinese Research Academy of Environmental Sciences, Beijing, China, [2]Tianjin Medical University, Tianjin, China, [3]University of Washington, Seattle, WA

TH-PL-A1-603
Modeling Air Pollution Exposure Metrics for the Coronary Artery Disease and Environmental Exposure (CADEE) Health Study
M. Breen[1], S. Chang[2], S. Arunachalam[2], V. Isakov[1], R. Devlin[1]; [1]US Environmental Protection Agency, Durham, NC, [2]University of North Carolina, Chapel Hill, NC

Crown A/B
TH-SY-B1: Environmental, Occupational, and Community Exposures to Livestock Agriculture

Chair: Ana Rule, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD

TH-SY-B1-604
Use of source-tracking methods to understand antimicrobial-resistant S. aureus exposure pathways among industrial hog operation workers and community residents
C. Heaney; Johns Hopkins University, Baltimore, MD

TH-SY-B1-605
Bioaerosol emissions, transport, deposition and risk downwind of CAFO (dairy) manure application areas
S. Rogers; Clarkson University, Potsdam, NY

TH-SY-B1-606
Inhalable bioaerosols, bacterial microbiome, and inflammation: A day in the life of a dairy workerh
J. Schaeffer, S. Reynolds; Colorado State University, Fort Collins, CO

TH-SY-B1-607
Characterization of Personal Inhalation Exposure to Bioaerosols using Metagenomic DNA Sequencing Tools in Broiler Chicken Production
M. W. Nonnenmann[1], K. O'Brien[1], M. Farnell[2], T. Tabler[3], J. Bray[4]; [1]University of Iowa, Iowa City, IA, [2]Texas A&M University, College Station, TX, [3]Mississippi State University, Mississippi State, MS, [4]Stephen F. Austin, Nacogdoches, TX

TH-SY-B1-608
A One Health Approach to Agricultural Exposures
M. Davis[1], S. C. Rankin[2], N. Pisanic[1], A. Brown[1], S. Cole[3], S. Rhodes[3], J. Schurer[4], A. M. Rule[1], L. Conti[5], C. Heaney[1], P. Rabinowitz[4]; [1]Johns Hopkins University, Baltimore, MD, [2]University of Pennsylvania, Philadelphia, PA, [3]University of North Carolina at Chapel Hill, Chapel Hill, NC, [4]University of Washington, Seattle, WA, [5]Florida Department of Agriculture and Consumer Services, Tallahassee, FL

Program - Thursday, October 19

8:30 am - 10:00 am

Royal A/B
TH-PL-C1: Temporal Trends from Biomonitoring
Chair: Susan Viet, Westat, Rockville, MD

TH-PL-C1-609
Trends in Human Exposure to Bisphenol A and other Bisphenols
A. M. Calafat, L. Wong, P. Dwivedi, X. Zhou, T. Powell, T. Jia, X. Ye; Centers for Disease Control and Prevention, Atlanta, GA

TH-PL-C1-610
Trends in Cumulative Exposures of Six Phthalates in the United States from 2005 to 2014
J. Reyes[1], P. Price[2]; [1]ORISE at US EPA, Research Triangle Park, NC, [2]US EPA, Research Triangle Park, NC

TH-PL-C1-611
Time Trend of the Internal Exposure to Lead in Young Adults: 35 Years of Human Biomonitoring with Data from the German Environmental Specimen Bank (ESB)
D. Lermen[2], T. Göen[3], M. Bartel-Steinbach[2], A. Conrad[1], T. Weber[1], M. Rüther[1], H. von Briesen[2], M. Kolossa-Gehring[1]; [1]German Environment Agency (UBA), Berlin, Germany, [2]Fraunhofer Institute for Biomedical Engineering (IBMT), Sulzbach, Germany, [3]Institute and Outpatient Clinic of Occupational, Social and Environmental Medicine Friedrich-Alexander-Universität, Erlangen, Germany

TH-PL-C1-612
Time and Age-Based Trends of Chemical Exposure Biomarkers in the United States from 1999-2014
V. K. Nguyen[1], J. Colacino[2], J. Arnot[3], O. Jolliet[2]; [1]University of Michigan, Ann Arbor, MI, [2]University of Michigan, Ann Arbor, MI, [3]Arnot Research & Consulting Inc., Toronto, Canada

TH-PL-C1-613
German Environmental Specimen Bank (ESB): Time Trend of the Internal Exposure to Glyphosate
A. Conrad[1], M. Rüther[1], H. Hoppe[2], S. Pieper[3], T. Weber[1], D. Lermen[4], M. Kolossa-Gehring[1]; [1]German Environment Agency (UBA), Berlin, Germany, [2]Medical Laboratory Bremen, Bremen, Germany, [3]German Environment Agency (UBA), Dessau-Roßlau, Germany, [4]Fraunhofer Institute for Biomedical Engineering (IBMT), Sulzbach, Germany

Crystal Ballroom
TH-PL-D1: Consumer Product Exposure
Chair: Cian O' Mahony, Creme Global, Dublin, Ireland

TH-PL-D1-614
Health Risks from Chemicals during the Use Phase of Consumer Products - Current Knowledge and Information Gaps
D. Li, S. Suh; University of California Santa Barbara, Santa Barbara, CA

TH-PL-D1-615
Exposure to Preservatives in Personal Care Products: Case Study Comparing Biomonitoring Data to Model Predictions
L. Aylward[1], G. Vilone[2], C. Cowan-Ellsberry[3], S. Hays[4], C. O' Mahony[2]; [1]Summit Toxicology, LLP, Falls Church, VA, [2]Creme Global, Dublin, Ireland, [3]CE2 Consulting, LLC, Cincinnati, OH, [4]Summit Toxicology, LLP, Bozeman, MT

TH-PL-D1-616
Consumer Product Use and Suspect Screening of Phthalate/Phthalate Metabolites and Environmental Phenols in Maternal Serum
A. Wang[1], J. M. Schwartz[2], R. R. Gerona[3], T. Lin[3], R. Morello-Frosch[4], M. Sirota[5], D. Woodruff[2]; [1]University of California, San Francisco, San Francisco, CA, [2]University of California, San Francisco, San Francisco, CA, [3]University of California, San Francisco, San Francisco, CA, [4]University of California, Berkeley, Berkeley, CA, [5]University of California, San Francisco, San Francisco, CA

TH-PL-D1-617
Assessment of Aggregate Consumer Exposure to Isothiazolinones via Cosmetics and Detergents Using the Newly Developed model PACEM-KD
E. Garcia Hidalgo, N. von Goetz, K. Hungerbuehler; ETH Zurich, Zurich, Switzerland

TH-PL-D1-618
Study Design using Video Ethnography to Assess Role of Risk Perception in Use of Consumer Products
R. A. Silva[1], S. Prince[3], K. Taylor[2], D. Stout[3], L. Alston[3], P. P. Egeghy[3], T. J. Buckley[3]; [1]U.S. Environmental Protection Agency, Research Triangle Park, NC, [2]NIEHS, Research Triangle Park, NC, [3]U.S. EPA, Research Triangle Park, NC

Program - Thursday, October 19

8:30 am - 10:00 am

Imperial 1
TH-PL-E1: Metals - Human Health

Chair: Jaymie Meliker, Program in Public Health, Department of Family, Population, and Preventive Medicine, Stony Brook University, Stony Brook, NY

TH-PL-E1-619
Hopi Environmental Health Project: Initial development and implementation.
G. S. Honanie[2], L. Joshweseoma[2], M. K. O'Rourke[1], R. Harris[1], M. Brian[1], J. L. Burgess[1]; [1]University of Arizona, Tucson, AZ, [2]Hopi Tribe, Kykotsmovi, AZ

TH-PL-E1-620
The Pregnancy Exposome: Multiple Environmental Exposures in the Iranian Environment and Neurodevelopmental Disorders (TEND) Birth Cohort
WITHDRAWN

TH-PL-E1-621
Early-life Manganese Exposure and Intrinsic Functional Connectivity of the Developing Brain
E. de Water[1], E. Proal[3], V. Wang[2], S. Martínez Medina[3], L. Schnaas[3], M. M. Téllez-Rojo[4], R. O. Wright[1], C. Y. Tang[2], M. K. Horton[1]; [1]Icahn School of Medicine at Mount Sinai, New York, NY, [2]Icahn School of Medicine at Mount Sinai, New York, NY, [3]National Institute of Perinatology (INPer), Mexico City, Mexico, [4]National Institute of Public Health (INSP), Mexico City, Mexico

TH-PL-E1-622
The joint effects of metals on general cognitive ability in adolescents living near ferromanganese industry
J. A. Bauer[1], B. Coull[2], J. Bobb[3], S. Guazzetti[4], S. Zoni[5], C. Fedrighi[5], D. Placidi[5], G. Cagna[5], R. White[1], M. Arora[6], R. O. Wright[6], D. R. Smith[7], R. G. Lucchini[6], B. Claus Henn[1]; [1]Boston University School of Public Health, Boston, MA, [2]Harvard T.H. Chan School of Public Health, Boston, MA, [3]University of Washington, Seattle, WA, [4]Azienda Unita Sanitaria Locale, Reggio Emilia, Italy, [5]University of Brescia, Brescia, Italy, [6]Icahn School of Medicine at Mount Sinai, New York, NY, [7]University of California, Santa Cruz, CA

TH-PL-E1-623
Working Memory and the Delayed Spatial Alternation Test in a Population of Children from Mexico City
L. Zheng[1], A. Williams[2], J. Doucette[1], K. Svensson[1], D. Cory-Slechta[3], C. Gennings[1], M. Tomayo Y Ortiz[5], M. Torres Calapiz[4], M. M. Téllez-Rojo[5], L. Schnaas[4], R. O. Wright[1], H. Megan[1]; [1]Icahn School of Medicine at Mount Sinai, New York, NY, [2]Augusta University, Augusta, GA, [3]University of Rochester, Rochester, NY, [4]National Institute of Perinatology, Mexico City, Mexico, [5]National Institute of Public Health, Cuernavaca, Mexico

Imperial 2
TH-SY-F1: Modeling Longitudinal Patterns of Exposure Using Agent Based Modeling and Related Techniques

Chair: Paul Price, U.S. Environmental Protection Agency, Research Triangle Park, NC

TH-SY-F1-624
Characterizing Exposure-Related Behaviors Using Agent-Based Models Embedded with Needs-Based Artificial Intelligence
N. Brandon, P. Price, K. Dionisio, K. Isaacs, D. Kapraun, R. W. Setzer, R. Tornero-Velez; US Environmental Protection Agency, Durham, NC

TH-SY-F1-625
High-resolution scheduling model of consumer product use by individuals and households
T. Hong[1], J. Levasseur[1], A. Varghese[1], H. Hubbard[1], K. Dionosio[2], N. Brandon[2], P. Price[2]; [1]ICF, Durham, NC, [2]EPA, Research Triangle Park, NC

TH-SY-F1-626
The CARES NG Temporal Residential Model
G. Vilone; Creme Global Ltd., Dublin, Ireland

TH-SY-F1-627
Integrated use of Agent Based Modelling with sensor webs for personal exposure assessment
D. Chapizanis, S. Karakitsios, D. Sarigiannis; Aristotle University of Thessaloniki, Thessaloniki, Greece

TH-SY-F1-628
APEX5: The Latest Refinements and Added Features of U.S. EPA's Air Pollutants Exposure Model
C. Holder[1], G. Glen[1], J. Levasseur[1], J. Cohen[4], J. Hader[1], H. Hubbard[1], J. Langstaff[2], S. Graham[2], K. Isaacs[3]; [1]ICF, Durham, NC, [2]U.S. Environmental Protection Agency, Research Triangle Park, NC, [3]U.S. Environmental Protection Agency, Research Triangle Park, NC, [4]ICF, Rohnert Park, CA

Program - Thursday, October 19

8:30 am - 10:00 am

Auditorium
TH-PL-G1: Sensor Validation
Chair: Yuxia Cui, National Institute of Environmental Health Sciences, Research Triangle Park, NC

TH-PL-G1-629
Quality Assurance and Quality Control of Portable Devices using a Standard Reference Material
J. L. Reiner; NIST, Charleston, SC

TH-PL-G1-630
Performance of Consumer-Grade Air Pollution Measurement Devices in Residential Environments
G. Mainelis, S. N. Manibusan; Rutgers University, Edison, NJ

TH-PL-G1-631
Using low-cost temperature sensors to monitor the use of domestic woodstoves and their potential for indoor smoke emission
WITHDRAWN

TH-PL-G1-632
Evaluating Real-time Air Quality Monitors Prior to Deployment as Community-level Monitors
A. Commodore, R. Boaz, J. L. Pearce; Medical University of South Carolina, Charleston, SC

TH-PL-G1-633
Validation of Hexoskin Biometric Shirt at Rest, Submaximal Exercise, and Maximal Exercise
C. M. Smith[1], S. N. Chillrud[1], D. W. Jack[1], P. Kinney[2], Q. Yang[1], A. M. Layton[1]; [1]Columbia University, New York, NY, [2]Boston University, Boston, MA

10:30 am - 12:00 pm

Bull Durham A/B
TH-PL-A2: Traffic Related Air Pollution - Part 3
Chair: Nathan Lothrop, University of Arizona, Tucson, AZ

TH-PL-A2-634
Development and evaluation of hybrid LUR-CTM models in Canada
WITHDRAWN

TH-PL-A2-635
NO2 Air Pollution Exposure Assessment in Urban Mysore, India
A. A. Nori-Sarma[1], R. K. Thimulappa[2], V. G. Venkatareddy[3], A. K. Fauzie[3], S. K. Dey[2], M. L. Bell[1]; [1]Yale University, New Haven, CT, [2]JSS Medical College, Mysore, India, [3]University of Mysore, Mysore, India

TH-PL-A2-636
Seasonal trend of fine particulate matter in indoor and outdoor environments of urban residential homes in Nanjing, China
Z. SHAO, Z. Ma, J. Bi; Nanjing University, Nanjing, China

TH-PL-A2-637
Impacts of community design and commute behavior on exposures to traffic-related air pollution
A. L. Stuart, S. Gurram, H. Yu, R. Michael, A. Marroquin, M. Resto; University of South Florida, Tampa, FL

TH-PL-A2-638
Diesel exposure in urban environment: evidence based approach to understand health risks
Being presented on Wednesday in place of WE-PL-A2-453

Crown A/B
TH-PL-B2: Environmental Exposure and Health
Chair: Kathleen Hibbert, U.S. Environmental Protection Agency, Cary, NC

TH-PL-B2-639
Urinary Concentrations of Organophosphate Flame Retardants and Fertility Outcomes among Couples Undergoing in Vitro Fertilization
C. Carignan[1], L. Mínguez-Alarcón[1], J. Meeker[2], P. Williams[3], H. M. Stapleton[4], C. Butt[4], T. Toth[5], J. Ford[1], R. Hauser[1]; [1]Harvard T.H. Chan School of Public Health, Boston, MA, [2]University of Michigan, Ann Arbor, MI, [3]Harvard T.H. Chan School of Public Health, Boston, MA, [4]Duke University, Durham, NC, [5]Massachusetts General Hospital, Boston, MA

Program - Thursday, October 19

10:30 am - 12:00 pm

Crown A/B
TH-PL-B2: Environmental Exposure and Health [cont.]

TH-PL-B2-640
Phthalates and organophosphate flame retardants in house dust and their relation to asllergies and oxidative stress marker 8-OHdG: the Hokkaido Study
A. Araki[1], Y. Ait Bamai[1], C. Miyashita[1], T. Kawai[2], T. Tsuboi[2], R. Kishi[1]; [1]Hokkaido University, Sapporo, Japan, [2]Japan Industrial Safety and Health Association, Osaka, Japan

TH-PL-B2-641
Association between urinary metabolites of pesticides and biomarkers of oxidative stress/inflammation in children consuming an organic diet: preliminary findings
C. Konstantinou, S. Ioannou, K. C. Makris; Cyprus University of Technology, LImassol, Cyprus

TH-PL-B2-642
Dietary and inhalation exposure to polycyclic aromatic hydrocarbons (PAHs) and monohydroxy metabolites in urine: A panel study for the elderly in Tianjin
Moved to Tuesday Poster Sessions

TH-PL-B2-643
Combining the exposome with the metabolome reveals associations between environmental chemicals and endogenous molecules involved in critical metabolic processes
V. Bessonneau[1], R. R. Gerona[2], R. Grashow[1], A. Wang[3], J. Trowbridge[4], T. Lin[2], R. Morello-Frosch[4], R. A. Rudel[1]; [1]Silent Spring Institute, Newton, MA, [2]University of California, San Francisco, San Francisco, CA, [3]University of California, San Francisco, San Francisco, CA, [4]University of California, Berkeley, Berkeley, CA

Royal A/B
TH-PL-C2: Exposure & Health Effects to Perfluorinated Compounds
Chair: Jennifer Lantz, Bayer Crop Science, RTP, NC

TH-PL-C2-644
Characterizing persistent EDC mixtures in a diverse pregnancy cohort
S. Mehta[1], K. Coleman-Phox[2], N. E. Adler[3], B. Laraia[4], E. Epel[3], A. R. Zota[1]; [1]The George Washington University, Washington, DC, [2]University of California, San Francisco, San Francisco, CA, [3]University of California, San Francisco, San Francisco, CA, [4]University of California, Berkeley, Berkeley, CA

TH-PL-C2-645
Fluorinated compounds are common in U.S. fast food packaging and potentially contribute to population-wide PFAS exposure
L. A. Schaider[1], S. Balan[2], A. Blum[3], H. Susmann[1], D. Andrews[4], M. Stryar[5], R. A. Rudel[1], R. Dodson[1], G. Peaslee[6]; [1]Silent Spring Institute, Newton, MA, [2]California Department of Toxic Substances Control, Sacramento, CA, [3]Green Science Policy Institute, Berkeley, CA, [4]Environmental Working Group, Washington, DC, [5]U.S. Environmental Protection Agency, Research Triangle Park, NC, [6]University of Notre Dame, Notre Dame, IN

TH-PL-C2-646
Polyfluoroalkyl substance exposure in the Mid-Ohio River Valley, 1991-2012
R. L. Herrick[1], J. M. Buckholz[1], F. M. Biro[2], A. M. Calafat[3], X. Ye[3], C. Xie[1], S. M. Pinney[1]; 1University of Cincinnati College of Medicine, Cincinnati, OH, [2]Cincinnati Children's Hospital Medical Center, Cincinnati, OH, [3]CDC, Atlanta, GA

TH-PL-C2-647
Exposure and risk assessment of perfluorooctanoic acid in drinking water and ambient air for residents living close to a production plant in the Netherlands
B. Bokkers, P. Janssen, E. Jansen, M. Zeilmaker; National Institute of Public Health and the Environment (RIVM), Bilthoven, Netherlands

TH-PL-C2-648
Perfluorooctanoate and Body Mass Index, Waist:Hip and Waist:Height Ratio in Young Girls in the Greater Cincinnati and San Francisco Bay Area
S. M. Pinney[1], G. C. Windham[2], R. L. Herrick[1], K. L. McWhorter[6], C. Xie[1], C. S. Fassler[1], R. A. Hiatt[3], L. Kushi[4], F. M. Biro[5]; [1]University of Cincinnati College of Medicine, Cincinnati, OH, [2]California Department of Public Health, Richmond, CA, [3]UCSF, San Francisco, CA, [4]Kaiser Permanente, Oakland, CA, [5]Cincinnati Children's Hospital Medical Center, Cincinnati, OH, [6]NIEHS, Research Triangle Park, NC

Program - Thursday, October 19

10:30 am - 12:00 pm

Crystal Ballroom
TH-PL-D2: Tobacco Smoke Exposure

Chair: Ana Rule, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD

TH-PL-D2-649
Assessing dermal exposure to nicotine - an interdisciplinary approach
T. Salthammer[1], G. Bekö[2], G. Claussen[2], H. M. Koch[3], G. Morrison[4], T. Schripp[1], J. Toftum[2], C. Weschler[2]; [1]Fraunhofer WKI, Braunschweig, Germany, [2]Technical University of Denmark, Lyngby, Denmark, [3]Institute for Prevention and Occupational Medicine of the German Social Accident Insurance, Institute of the Ruhr-Universität Bochum (IPA), Bochum, Germany, [4]Missouri University of Science and Technology, Rolla, MO

TH-PL-D2-650
Kinetics of dermal uptake of nicotine from air
G. Morrison[4], G. Bekö[1], G. Claussen[1], H. M. Koch[3], C. Paelmke[3], T. Salthammer[2], T. Schripp[2], J. Toftum[1], C. Weschler[1]; [1]Technical University of Denmark, Lyngby, Denmark, [2]Fraunhofer WKI, Braunschweig, Germany, [3]Institut der Ruhr-Universität Bochum (IPA), Bochum, Germany, [4]Missouri University of Science and Technology, Rolla, MO

TH-PL-D2-651
Occupational exposures in e-cigarette vape shops
K. Attfield[1], M. Zalay[3], E. Glassford[2], B. Materna[1], L. Zwack[2]; [1]California Department of Public Health, Richmond, CA, [2]National Institute of Occupational Safety and Health, Cincinnati, OH, [3]Public Health Institute, Oakland, CA

TH-PL-D2-652
Chemical characteristic of source emission and inhalational carcinogenic risk of environmental tobacco smoking under real condition, China
N. Zhang, B. Han, Z. Bai, W. Yang, X. Wang, W. Zhang; Chinese Research Academy of Environmental Sciences, Beijing 100012, China, Beijing, China

TH-PL-D2-653
Acrylonitrile in the US Population and Exposures From Tobacco Smoke and Diet: NHANES 2005 - 2006, 2011 - 2012
R. deCastro, N. Geldner, U. Alwis, D. M. Chambers, B. Blount; CDC National Center for Environmental Health, Atlanta, GA

Imperial 1
TH-PL-E2: Metal Exposures

Chair: Hua Qian, ExxonMobil Biomedical Sciences, Inc., Annandale, NJ

TH-PL-E2-654
Investigation of Arsenic and co-occurring metals near abandoned mine wastes in Cheyenne River, South Dakota (CRST)
WITHDRAWN

TH-PL-E2-655
Health and safety awareness training on lead exposure for Artisanal and Small-Scale gold miners in Anka and Bukkuyum Local Government Areas of Zamfara state, Nigeria
S. Kadiri; Zub Chord Tech ventures, Lagos, Nigeria

TH-PL-E2-656
Health risks of heavy metals from drinking water exposure near a typical river basin area in China, after pollution control measurement
X. Zhao[1], S. Cao[1], X. Duan[2], B. Zheng[1], Y. Ma[1]; [1]Chinese Research Academy of Environmental Sciences, Beijing, China, [2]University of Science and Technology Beijing, Beijing, China

TH-PL-E2-657
Risk Assessment of Polluted Soils in Relation to Transfer of Metals to Human Food Chain
D. Golui, S. Datta, B. Dwivedi, M. Meena; ICAR-Indian Agricultural Research Institute, New Delhi, India

TH-PL-E2-658
Relating Soil Geochemical Properties to Arsenic Bioaccessibility Through Hierarchical Modeling
C. M. Nelson[1], K. Li[2], D. Obenour[2], J. Misenheimer[1], K. Scheckel[3], A. Betts[4], A. Juhasz[5], D. Thomas[6], K. Bradham[1]; [1]US EPA, Research Triangle Park, NC, [2]NC State University, Raleigh, NC, [3]US EPA, Cincinnati, OH, [4]University of Delaware, Newark, DE, [5]University of South Australia, Mawson Lakes, Australia, [6]US EPA, Research Triangle Park, NC

Program - Thursday, October 19

10:30 am - 12:00 pm

Imperial 2
TH-PL-F2: Water Contaminants
Chair: David Hines, ORISE, U.S. Environmental Protection Agency, NC

TH-PL-F2-659
Disparities in exposures to nitrate in U.S. public drinking water supplies
L. A. Schaider[1], L. Swetschinski[1], C. Campbell[2], R. A. Rudel[1]; [1]Silent Spring Institute, Newton, MA, [2]Environmental Working Group, Washington, DC

TH-PL-F2-660
Inferring Instream Loading Rates of Organic Chemicals in United States Watersheds from Their Downstream Concentrations
WITHDRAWN

TH-PL-F2-661
Carbon Nanotube Electrochemical Sensors for Quantifying Heavy Metal Exposure
N. Alvarez[1], D. Zhao[2], W. Heineman[2], E. N. Haynes[2], V. Shanov[2]; [1]University of Cincinnati, Cincinnati, OH, [2]University Cincinnati, Cincinnati, OH

TH-PL-F2-662
Suspect screening analysis of drinking water using point-of-use filters
S. Newton[1], R. McMahen[2], J. R. Sobus[1], A. Williams[3], A. McEachran[2], M. Stryar[1]; [1]Environmental Protection Agency, Durham, NC, [2]Oak Ridge Institute for Science and Education, Raleigh, NC, [3]National Center for Computational Toxicology, Raleigh, NC

TH-PL-F2-663
Influence of Hydrogeological Factors on Exposure to Emerging Contaminant in Karst Environments
I. Y. Padilla[1], N. I. Torres[1], V. L. Rivera[1], R. Macchiavelli[2], D. J. Vesper[3], J. Meeker[4], A. N. Alshawabkeh[5]; [1]University of Puerto Rico, Mayagüez, Mayagüez, PR, [2]University of Puerto Rico, Mayaguez, Mayagüez, PR, [3]West Virginia University, Morgantown, WV, [4]University of Michigan, Ann Arbor, MI, [5]Northeastern University, Boston, MA

Auditorium
TH-PL-G2: Data Sharing and the Exposome
Chair: David Balshaw, National Institute of Environmental Health Sciences, Research Triangle Park, NC

TH-PL-G2-664
Decentralized and HIPAA Compliant Geocoding to Characterize Community and Environmental Exposures for Multi-Site Studies
C. Brokamp, C. Wolfe, P. Ryan; Cincinnati Children's Hospital Medical Center, Cincinnati, OH

TH-PL-G2-665
Modeling the contribution of chemicals in building materials to population exposome
O. Jolliet, L. Huang; University of Michigan, Ann Arbor, MI

TH-PL-G2-666
Promoting integration across diverse studies of environmental health: Development of a children's health and exposure ontology
S. L. Teitelbaum[1], J. A. Stingone[1], J. P. McCusker[2], P. Pinheiro[2], S. M. Rashid[2], Y. Liu[2], Z. Liang[2], D. L. McGuinness[2]; [1]Icahn School of Medicine at Mount Sinai, New York, NY, [2]Rensselaer Polytechnic Institute, Troy, NY

TH-PL-G2-667
Creating a Pilot Web Portal to Facilitate Access to Consumer Exposure Science Methods, Databases, and Projects
R. Becker; American Chemistry Council, Washington, DC

TH-PL-G2-668
Harmonization of Sensor Metadata and Measurements to Support Exposomic Research
N. Burnett[1], R. Gouripeddi[2], J. Wen[2], P. Mo[3], R. Madsen[3], R. Butcher[3], K. A. Sward[4], J. Facelli[2]; [1]University of Utah, Salt Lake City, UT, [2]University of Utah, Salt Lake City, UT, [3]University of Utah, Salt Lake City, UT, [4]University of Utah, Salt Lake City, UT


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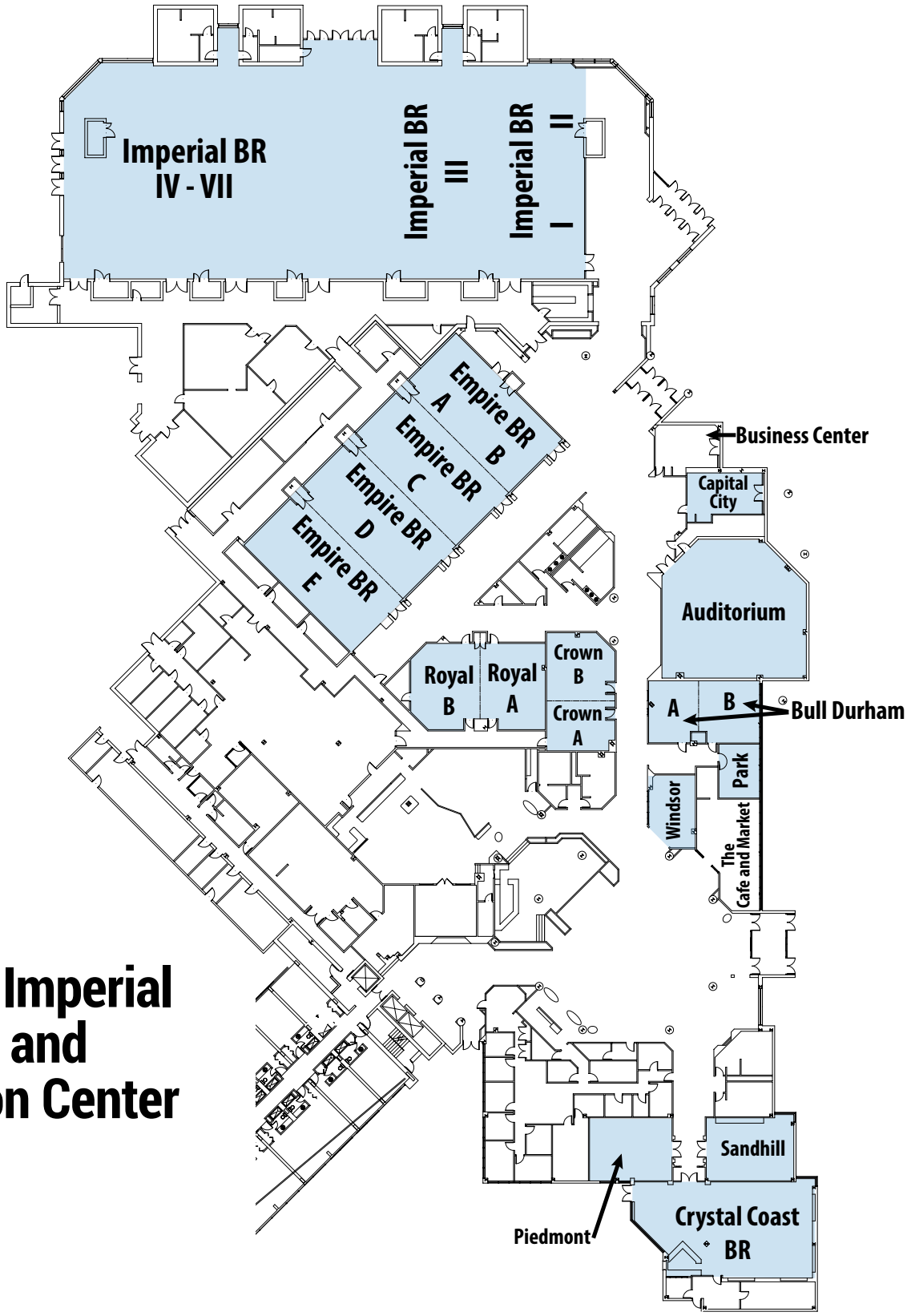

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19	U.S. EPA
20	U.S. EPA
30	Silent Spring
31	University of Illinois at Chicago
32	MyExposome, Inc. and Oregon State University
33	U.S. EPA
34	NC State University
35	U.S. EPA
36	Statera Environmental, Inc.; NC State University
37	University of Utah
38	OpenAQ
39	Environmental Monitoring Technology (Enmont) and the University of Cincinnati
40	Carnegie Mellon University
41	University of Washington
42	Aerodyne Research, Inc.
43 and 44	U.S. EPA

Join us immediately following the ISES Technology Fair on **Tuesday, October 17th, 6:45 –9:00 pm** in the parking lot of the Sheraton Imperial Hotel & Convention Center.

ICF organized the food truck rodeo with:

- **Bull City Street Food**
- **Cousins Maine Lobster**
- **Locopops**
- **So Good Pupusas**
- **The Wandering Moose**

Food and beverages will be available for purchase.

For more details, visit the ISES conference app.

Please join us for this opportunity to network, socialize, and support local businesses!

For more information, contact:

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