

# SOT 2017 Honorary Membership



Honorary membership is awarded by the Society of Toxicology to individuals who are not members of the Society in recognition of outstanding and sustained contributions to advancing toxicology. George D. Leikauf, PhD, and Jonathan M. Samet, MD, are named Society of Toxicology Honorary Members for 2017.



**George D. Leikauf, PhD**

Dr. Leikauf is a professor of environmental and occupational health at the University of Pittsburgh Graduate School of Public Health. Dr. Leikauf's research interests include the role of gene-environment interactions in controlling pulmonary responses to inhaled toxicants.

Throughout his career, he has gained extensive expertise in inhalation toxicology and the integration of genetic, transcriptomic, and metabolomic data in mouse models of lung development, acute lung injury, and chronic obstructive pulmonary disease. He has developed several *in vitro* approaches to study pulmonary epithelial cell biology and cellular and molecular responses to toxins. These investigations have examined pulmonary gene expression and mainly have focused on the role of epithelial cells in mitigating lung pathogenesis. He also has experience in the interpretation of mega-data in disease pathogenesis that has enabled major contributions to the assessment of the functional significance and environmental relevance of his findings.

Since the completion of his postdoctoral fellowship in 1985, Dr. Leikauf has directed his research laboratory; trained high school students, undergraduates, graduate students, and postdoctoral fellows; and maintained continuous US National Institutes of Health (NIH) funding as a principal investigator. He has served on numerous advisory committees, including chairing NIH Study Sections and US Environmental Protection Agency (US EPA) Review Panels and serving on the US National Institute of Environmental Health Sciences (NIEHS) National Advisory Environmental Health Sciences Council.

Dr. Leikauf was an associate editor of the *American Journal of Respiratory Cell and Molecular Biology* and has served on several other editorial boards. He has published several book chapters, including "Toxic Response of the Respiratory System" in *Casarett & Doull's Toxicology: The Basic Science of Poisons* (edited by Curtis D. Klaassen) and reviews on hazardous chemicals and respiratory toxicology. He has published more than 100 peer-reviewed scientific manuscripts.

Dr. Leikauf earned his AB from the University of California, Berkeley and his PhD from New York University and conducted his postdoctoral training at the Cardiovascular Research Institute (CVRI) at the University of California, San Francisco.



**Jonathan M. Samet, MD**

Dr. Samet, a pulmonary physician and epidemiologist, is currently a distinguished professor and Flora L. Thornton Chair for the Department of Preventive Medicine at the Keck School of Medicine at the University of Southern California (USC) and is director of the USC Institute for Global Health.

Dr. Samet received a bachelor's degree in chemistry and physics from Harvard College, an MD degree from the University of Rochester School of Medicine and Dentistry, and a master of science degree in epidemiology from the Harvard School of Public Health.

His research has focused on the health risks of inhaled pollutants—particles and ozone in outdoor air and indoor pollutants, including secondhand smoke and radon. He also has investigated the occurrence and causes of cancer and respiratory diseases, emphasizing the risks of active and passive smoking. For several decades, he has been involved in global health, focusing on tobacco control, air pollution, and chronic disease prevention.

Dr. Samet has served on and chaired numerous committees of the US National Research Council and US Institute of Medicine (now known as the US National Academy of Medicine) and chaired the Clean Air Scientific Advisory Committee of the US Environmental Protection Agency (US EPA) and the Tobacco Products Scientific Advisory Committee of the US Food and Drug Administration (US FDA).

Dr. Samet has served as editor and author for Reports of the Surgeon General on Smoking and Health since 1984, receiving the Surgeon General's Medallion in 1990 and 2006 for these contributions. He was the senior scientific editor for the 50th Anniversary of the Report of the Surgeon General on Smoking and Health in 2014. In addition, Dr. Samet has received the 2004 Prince Mahidol Award for Global Health, awarded by the King of Thailand; the Alton Ochsner Award Relating Smoking and Health; the World Health Organization (WHO) World No Tobacco Day Award; the Edward Livingston Trudeau Medal from the American Thoracic Society/American Lung Association; and the Luther L. Terry Award for Distinguished Career from the American Cancer Society. He was elected to the National Academy of Medicine in 1997 and received the David M. Rall Medal for his contributions in 2015.

# SOT Award Recipients



## Awards Ceremony Music

**Sunday Afternoon, March 12, 4:45 PM to 5:15 PM**  
**CC Ballroom III**



### Performed by Luke Brindley

Luke Brindley is a critically acclaimed singer/songwriter and fingerstyle guitarist. He tours nationally and has a dynamic live show. Along with his brothers, he owns Jammin Java, a premier music venue in Virginia presenting the finest local, regional, and nationally touring acts.

## Awards Ceremony

**Sunday Afternoon, March 12, 5:15 PM to 6:30 PM**  
**CC Ballroom III**

Please join the Awards Committee, in conjunction with Council, the Board of Publications, and the Education Committee, as they honor distinguished scientists at the prestigious SOT Awards Ceremony. Also conferred at this ceremony are a number of grants, fellowships, and awards for cutting-edge and novel research. Please refer to the Awards and Funding section of the SOT website for complete details at [www.toxicology.org/awards](http://www.toxicology.org/awards).

## Endowment Fund 2016 Awards

The Endowment Fund Awards are conferred during the Annual Meeting. View the names of the recipients of the SOT Endowment 2016 Awards during the musical performance. SOT Endowment Funds have a mission of assisting in advancing toxicology by providing financial support for the Society's programs. The vision for the SOT Endowment Fund is to establish and increase in net worth a set of Endowment Funds that will provide significant, stable, long-term financial support to aid in achieving the Society's strategic objectives. To learn more visit [www.toxicology.org/endowment](http://www.toxicology.org/endowment).



## Achievement Award



**Jason R. Richardson**

### **Jason R. Richardson, PhD, DABT**

A graduate of Mississippi State University, Dr. Richardson received his PhD in environmental toxicology in 2002. He received his postdoctoral training in molecular neuroscience and neurotoxicology at Emory University. Dr. Richardson spent 10 years at Rutgers Robert Wood Johnson Medical School and the Environmental and Occupational Health Sciences Institute, where he served as deputy director and then director of the Joint Graduate Program in Toxicology. In 2015, Dr. Richardson was recruited to Northeast Ohio Medical University, where he serves as a professor of pharmaceutical sciences, acting associate dean for research for the College of Pharmacy, and the founding director of the neurodegenerative disease and aging research focus area.

Dr. Richardson's research focuses on the role of environmental exposures and their interactions with genetic susceptibility as contributors to neurological disease using translational approaches. He has recruited and led multidisciplinary teams of researchers to explore gene-environment interactions relevant to Parkinson's disease, Alzheimer's disease, and ADHD. Through the conduct of basic and epidemiological studies, he has contributed several significant findings that have broad implications for human health, individual susceptibility, and risk assessment as it relates to neurodegenerative disease and neurodevelopmental disorders. These efforts have been continuously funded by the US National Institute of Environmental Health Sciences (NIEHS) through multiple R01 grants.

Dr. Richardson has published more than 80 manuscripts and book chapters in the areas of developmental neurotoxicology, neurodegenerative disease, and pesticides and has given more than 60 invited lectures both nationally and internationally. Dr. Richardson is currently a member of several editorial boards and is an associate editor of *Neurotoxicology*. He has served as a reviewer for more than 50 national and international grant review panels and most recently was named chair of the Environmental Health Sciences Review Committee at NIEHS. Dr. Richardson also has served as a member of the Committee on Emerging Science for Environmental Health Decisions at the US National Academy of Sciences (NAS).

An SOT member since 2000, he served as secretary/treasurer for the Neurotoxicology Specialty Section. He received the Outstanding New Environmental Scientist Award from NIEHS and in 2015 was the inaugural recipient of the Young Investigator Award from the Toxicology Division of ASPET.





## Arnold J. Lehman Award



### Lorenz R. Rhomberg, PhD, ATS

Dr. Rhomberg received his PhD in biology from the State University of New York (SUNY). During his career, he has made many contributions to risk assessment and the regulation of chemicals, which he accomplished through the development of sound scientific concepts and approaches to risk assessment for individual chemicals and hazardous situations.

In his early days as a risk assessor for the US Environmental Protection Agency (US EPA), one of Dr. Rhomberg's first contributions was to suggest altering the parameters for a carcinogen dose-response model based on a set of equations and criteria including the Aikike Information Criterion (AIC). This led to an agency policy and software changes that became the standard for US EPA practices. He also provided leadership for conducting the agency's first quantitative risk assessment using physiologically based pharmacokinetic models (PBPK) to estimate target tissue doses at different exposure levels, for different routes of exposure, and for cross-species dose equivalence evaluation. As a result, Dr. Rhomberg led an Interagency Pharmacokinetics Group to review standard policies for cross-species extrapolation and addressed discordant assessments by establishing a common underlying rationale for cross-species extrapolation. Some years later, he was asked to apply the analysis to cross-species scaling of doses for non-cancer risk assessment, which became the policy on such methods.

While at the Harvard School of Public Health, Dr. Rhomberg's work focused more fully on quantitative risk assessment, a probabilistic evaluation of uncertainties in non-cancer risk assessment in particular through specification and propagation of probability distributions for sources of uncertainty and variability. A Presidential/Congressional Commission on Risk Assessment and Risk Management asked Dr. Rhomberg to review the quantitative risk assessment methods for chemicals across the US federal agencies.

Currently, Dr. Rhomberg is a principal at the environmental consulting firm Gradient, LLC. At Gradient, he has been widely influential, contributing novel analyses and methodological approaches that advance toxicological risk assessment methodology. He established a framework for judging how different combinations of air concentration and exposure duration lead to varying levels of acute toxicity. Most recently, "integration of evidence" (i.e., the problem of how rigorously, objectively, and transparently to combine inferences from sometimes contradictory information) has been Dr. Rhomberg's focus. He formulated an approach called "hypothesis-based weight of evidence," which stresses systematic evaluation of relevant studies seeking to bring to light hypothetical explanations for patterns found.

In addition, Dr. Rhomberg has advised European regulators as they develop evidence-integration methods, presenting his work to the French Agency for Food, Environmental and Occupational Health & Safety (ANSES) and to the European Food Safety Agency (EFSA). Dr. Rhomberg continues to actively develop and codify science-based approaches to risk assessments relevant to today's most important scientific issues.



## Best Postdoctoral Publication Awards

The Postdoctoral Assembly congratulates these three recipients for their accomplishments. These awards are presented during the Postdoctoral Assembly Luncheon on March 14, 2017.



### Fabian Grimm, PhD, Texas A&M University, College Station, TX

A Chemical-Biological Similarity-Based Grouping of Complex Substances As a Prototype Approach for Evaluating Chemical Alternatives

Grimm FA, Iwata Y, Sirenko O, Chappell GA, Wright FA, Reif DM, Braisted J, Gerhold DL, Yeakley JM, Shepard P, Seligmann B, Roy T, Boogaard PJ, Ketelslegers HB, Rohde AM, and Rusyn I.

*Green Chemistry*, 2016, 18:4407-4419.



### Sascha C.T. Nicklisch, PhD, University of California, San Diego, CA

Global Marine Pollutants Inhibit P-glycoprotein: Environmental Levels, Inhibitory Effects, and Cocrystal Structure

Nicklisch SCT, Rees SD, McGrath AP, Gökirmak T, Bonito LT, Vermeer LM, Cregger C, Loewen G, Sandin S, Chang G, and Hamdoun, A.

*Science Advances*, 2016, 2(4):e1600001.



### Mira Pavkovic, PhD, Harvard Medical School, Boston, MA

Detection of Drug-Induced Acute Kidney Injury in Humans Using Urinary KIM-1, miR-21, -200c, and -423

Pavkovic M, Robinson-Cohen C, Chua AS, Nicoara O, Cárdenas-González M, Bijol V, Ramachandran K, Hampson L, Pirmohamed M, Antoine DJ, Frenzl G, Himmelfarb J, Waikar SS, and Vaidya VS.

*Toxicological Sciences*, 2016, 152(1):205-213.



## Distinguished Toxicology Scholar Award



**Linda S. Birnbaum**

### *Linda S. Birnbaum, PhD, DABT, ATS*

Dr. Birnbaum received her PhD in microbiology from the University of Illinois at Urbana-Champaign. After several years in academia, she joined the US National Institutes of Health (NIH) as a senior staff fellow in the National Toxicology Program (NTP). While at NIH, she received tenure and led the National Institute of Environmental Health Sciences (NIEHS) Chemical Disposition Group. Dr. Birnbaum then moved to the US Environmental

Protection Agency (US EPA), where she worked for 19 years, mostly as the director of the Experimental Toxicology Division. Her career came full circle in 2009 when she became the director of NIEHS and NTP. She also serves as a senior investigator for the US National Cancer Institute.

Throughout her career, Dr. Birnbaum has made significant contributions in the area of the disposition and metabolism of environmental chemicals, including highly cited papers on dioxins, polychlorinated biphenyls, and brominated flame retardants. She was an early advocate of Toxic Equivalency Factors as a means to estimate the toxicity of mixtures and the use of body burdens as the dose metric. She also is a key international leader who helped drive an understanding of the risk of persistent environmental chemicals.

Dr. Birnbaum was an early proponent for considering the role life stages play in health outcomes. She has authored a broad number of papers related to life-stage susceptibility of subpopulations with a focus on women of childbearing age and children. Her paper titled "Cancer and development exposure to endocrine disruptors" was among the top cited manuscripts in the early 2000s. Due in part to her influence, NIEHS now promotes research related to windows of susceptibility.

Dr. Birnbaum has authored more than 430 publications, which have been cited more than 18,000 times in 11,000-plus articles. She is a member of the US National Academy of Medicine and has held leadership roles in the International Union of Toxicology (IUTOX), the Academy of Toxicological Sciences, and the American Aging Association.

Dr. Birnbaum has been an SOT member since 1982. She has been highly active within the Society, serving as president in 2004–2005. She has served on many SOT Committees, including the Awards, Nominating, Scientific Program, and Finance Committees.

Dr. Birnbaum is an adjunct professor at Duke University and the University of North Carolina at Chapel Hill and is active in her community. She was awarded the 2016 North Carolina Award for Science, the highest honor the governor of North Carolina can bestow, and was named an NIEHS Champion of Environmental Health Research. She also has received several honorary degrees and numerous other awards.

**FS Distinguished Toxicology Scholar Award Lecture: Dioxins and the Ah Receptor: Synergy of Discovery, Wednesday, March 15, 12:30 pm to 1:20 pm, Room 321.**



## Education Award



**Debra L. Laskin**

### *Debra L. Laskin, PhD*

Dr. Laskin has made outstanding contributions to toxicology education, significantly impacting the careers of many students, postdoctoral trainees, and junior faculty. She joined the faculty of the Rutgers University School of Pharmacy in 1982. In 2000, she achieved the status of distinguished professor and in 2007 was awarded the Roy Bowers Endowed Chair in Pharmacy because of her exceptional accomplishments.

At Rutgers, Dr. Laskin has played a key role in the development of the highly successful Joint Graduate Program in Toxicology, which has graduated more than 100 doctoral students, and she was instrumental in the program obtaining one of the first US National Institute of Environmental Health Sciences (NIEHS) T32 training grants at Rutgers, which is now in its 30th year of funding.

Dr. Laskin has mentored 23 doctoral students and 13 postdoctoral trainees in her laboratory, as well as numerous undergraduates, honors students, and PharmD students. Her trainees consistently receive research awards from SOT and other societies, and most have gone on to successful careers in academia, government, and industry. Dr. Laskin is an enthusiastic and passionate teacher both in the classroom and in the laboratory, instilling in her students an excitement and curiosity about research and the desire to learn more and succeed.

Dr. Laskin's commitment to strengthening the science education pipeline is evident through her development and participation in highly successful summer programs for the scientific training of high school and college students. These hands-on programs, including the Rutgers Toxicology Health and Environmental Disease Program and the Partners in Science Program at Liberty Science Center in New Jersey, provide students with an opportunity to conduct full-time research in toxicology and related areas, as well as participate in career development workshops and give oral presentations about their research.

Dr. Laskin's contributions to education go beyond Rutgers, as she has served on the SOT Continuing Education Committee and has presented talks and posters at SOT and ASPET and other meetings about educating students and young scientists.

In addition to her role as an educator, Dr. Laskin is very active in research and service. As a researcher, she has contributed to the understanding of the role of inflammation in chemically-induced tissue injury. Her work has been funded continuously for more than 30 years through multiple NIH awards. Her laboratory has a reputation for exceptionally high scientific standards, as well as a nurturing environment, which encourages trainees to grow and develop a personal responsibility towards their research. She also is active in ASPET, serving as the recent chair of the Toxicology Division, and is a permanent member of the NIH Systemic Injury by Environmental Exposures Review Panel.

Dr. Laskin is considered a role model for young scientists and a champion for women in science. She received the 2014 Mentoring Award from the SOT Women in Toxicology Special Interest Group, and at Rutgers, she serves as an advisor to the Office for the Promotion of Women in Science and the Douglas Project for Women in STEM. She also is the director of career development for the Rutgers P30 NIEHS Center of Excellence and the director of the education and training core for the University of Medicine and Dentistry of New Jersey–Rutgers University CounterACT Research Center of Excellence funded by the NIH.

Dr. Laskin has been an active member of SOT during her career, serving on SOT Council, the Awards Committee, and Nominating Committee and as secretary/treasurer of the Mechanisms Specialty Section, Dermal Toxicology Specialty Section councilor and, currently, vice president-elect of the Inhalation and Respiratory Specialty Section. She was the recipient of the SOT Frank R. Blood Publications Award in 1988, the SOT Achievement Award in 1991, the Burroughs Wellcome Toxicology Scholar Award in 1993, and the 2015 Career Investigator Award from the SOT Inhalation and Respiratory Specialty Section.



### Enhancement of Animal Welfare Award



**David G. Allen, PhD**

Dr. Allen received an MS in biological sciences from the University of North Carolina Wilmington and a PhD in cell biology from North Carolina State University. He currently serves as a vice president at Integrated Laboratory Systems Inc. (ILS), a multidisciplinary contract toxicological research and testing organization that provides support to government and commercial customers focused on environmental and human health safety testing. He is responsible for providing scientific leadership, management, and direction to ILS scientific and technical staff. As the principal investigator of the ILS support contract with the National Toxicology Program (NTP) Interagency Center for the Evaluation of Alternative Toxicological Methods (NICEATM), Dr. Allen has assembled a team of scientists who are considered to be global leaders in the evaluation and validation of alternative approaches that replace, reduce, and refine the use of animals in toxicology testing. He participates in local, national, and international meetings in support of NICEATM and the Interagency Coordinating Committee on the Validation of Alternative Methods (ICCVAM) and has been involved in supporting NICEATM and ICCVAM for more than 15 years.

Dr. Allen routinely collaborates with international scientists to organize workshops and collaborate on projects spanning a wide variety of topics relevant to alternative toxicology test methods. He has been integrally involved in reviews that resulted in internationally harmonized test guidelines for alternative methods for skin sensitization and eye and skin irritation testing. Dr. Allen is involved in coordinating efforts to bring together stakeholders from government and industry to develop strategies to replace animal use in regulatory safety testing. He has co-organized workshops directed towards alternatives for acute systemic toxicity and vaccine potency and safety testing and has served on international peer review panels

and validation management teams for non-animal testing approaches. His publications describe research, development, and validation activities associated with alternative approaches for the most commonly used regulatory safety tests for skin and eye irritation, skin sensitization, and acute systemic toxicity testing. He also has co-authored publications describing alternative approaches to endocrine disruptor screening, databases of curated bioactivity data, and applying adverse outcome pathways to better understand toxicity while reducing animal use.

An SOT member since 1999, Dr. Allen has been an invited speaker for numerous workshops and satellite meetings and has chaired sessions on alternative toxicological test methods. He has co-authored numerous poster presentations at the SOT Annual Meeting and served as the *In Vitro* and Alternative Methods Specialty Section president in 2009–2010. Beyond SOT, he is the current president of the American Society of Cellular and Computational Toxicology.



### Founders Award



**Meryl H. Karol, PhD, ATS**

Dr. Karol received her PhD in immunochemistry from Columbia University and she completed her postdoctoral fellowship in the Department of Biochemistry at the State University of New York at Stony Brook. In 1974, she joined the faculty of the Department of Epidemiology at the University of Pittsburgh Graduate School of Public Health as a research associate. She became a tenured professor in 1985 and served

in other capacities until her retirement in 2006, when she was associate dean for academic affairs and research. She is currently a professor emerita for the University of Pittsburgh.

In a career spanning almost four decades, Dr. Karol has been actively engaged in research that has advanced the role of toxicology in safety decision-making. She has published extensively on chemically-induced allergy and asthma and individual susceptibility to allergic diseases (holding patents related to this research) and is published widely on improving indoor air quality to sustain public health.

Dr. Karol gained international renown for her work in environmental epidemiology and immunotoxicology, particularly on the mechanisms of chemical toxicity. In 1984, Dr. Karol was sent by the US State Department to Bhopal, India, to investigate the thousands of deaths associated with methyl isocyanate and similar chemicals used in the production of polyurethane foams, paints, lacquer, and electrical insulation. In conjunction with laboratories in India, she worked to assess the immunologic effects of the chemicals by using serum samples. Her work prepared her to consult with multinational companies on ways to safely handle the chemicals to protect employees and the public health. She later developed a method to detect isocyanates and a test procedure to detect the development of adverse immune hypersensitivity response to isocyanates. Dr. Karol's research on isocyanates was instrumental in the establishment of safe occupational exposure levels that are cited by many international regulators.

Another area of Dr. Karol's expertise is allergic sensitization from skin and pulmonary exposure to formaldehyde. Her research in this area resulted in the development of an animal model of formaldehyde sensitization. A recognized expert in this field, she provided testimony before the US Congress on formaldehyde levels in US Federal Emergency Management Agency (FEMA) trailers.

Dr. Karol has published more than 177 publications in peer-reviewed journals and 22 book chapters. She has mentored 28 graduate students who have completed master's degrees or theses, in addition to six doctoral students. Highly respected in her field, Dr. Karol has served on several important national scientific advisory committees and panels and worked with many government agencies, including the US Congress Office of Technology Assessment, National Research Council (NRC) Committee on Toxicology, US Environmental Protection Agency (US EPA), and US Food and Drug Administration (US FDA) Center for Drug Evaluation and Research (CDER).

Dr. Karol has been an SOT member since 1981. In addition to serving on all of the major SOT Committees, she holds the distinction of being the first woman to be elected president of the Society (1994–1995). Additionally, she was the first woman to serve as secretary-general for the International Union of Toxicology (IUTOX) and served with distinction on the board of the Academy of Toxicological Sciences (ATS).



### Global Senior Scholar Exchange Program



**Olufunke Eunice  
Ola-Davies**

**Olufunke Eunice Ola-Davies, DVM, PhD,**  
*University of Ibadan, Ibadan, Nigeria*

Dr. Olufunke Eunice Ola-Davies is senior lecturer in the Department of Veterinary Physiology, Biochemistry and Pharmacology, University of Ibadan, Ibadan, Nigeria. Dr. Ola-Davies pursues investigations of the genotoxicity inhibitory activity of *Spondias mombin* as well as the components of the plant that may provide drugs for either prophylactic or chemotherapeutic use. Other topics

of interest are related to arsenic, a metal increasingly present in the environment in Nigeria due to industrialization; cancer is also on the rise. Through the Global Senior Scholar Program (GSSEP), Dr. Ola-Davies is anticipating developing a healthy research collaboration and increasing the research output and the visibility of her department and institution. In addition, Dr. Ola-Davies plans to further develop skills for mentoring trainees among the faculty members and postgraduate students as well as increase student awareness about toxicology at her institution and also at other schools in the region.



**Augustine  
Arukwe**

**Host:**

**Augustine Arukwe, BS, DSc,** Norwegian  
*University of Science and Technology, Trondheim,  
Norway*

Dr. Arukwe is professor and molecular biologist/toxicologist at the Department of Biology, Norwegian University of Science and Technology (NTNU), Trondheim. His research and collaborative international work evaluates the environmental impact and risk assessment, development and validation of sensitive biomarkers of endocrine and chemical exposure in organisms (fish, marine birds, amphibians, and marine mammals). Dr. Arukwe has extensive international experience including serving as a consultant for the United Nations University–International Network on Water, Environment and Health, hosting several Nigerian scholars, and being involved in capacity building projects in Nigeria, Tanzania, South Africa, and Vietnam. Dr. Arukwe has shown a strong desire to help Dr. Ola-Davies and her institution in building capacity for sustainable environmental and human health management.



**Ansam F.  
Sawalha**

**Ansam F. Sawalha, PhD,** An-Najah National  
*University, Nablus, Palestine*

Dr. Ansam F. Sawalha is a professor of toxicology at An-Najah National University in the Department of Physiology, Pharmacology, and Toxicology, in Nablus, Palestine. She is currently conducting research related to exposure to toxic materials in the environment, including lead and aflatoxin, and analyses of cases of poisoning reported to the Poison Control Center. The Poison Control

Center is the only such center in Palestine and was founded by Dr. Sawalha in 2006. In 2011 she was named to the Women in Science Hall of Fame by the US State Department Environment, Science, Technology, and Health Hub for the Middle East and North Africa.

Through the GSSEP program, Dr. Sawalha intends to acquire knowledge and ideas on how to start a world-class toxicology program in Palestine, which would be the first in the country. Her previous collaboration with Dr. Gilbert on translating his book *A Small Dose of Toxicology* into Arabic will provide a solid foundation for a successful experience. She also hopes to expand her understanding of subareas of toxicology, including risk assessment and poisoning prevention.



**Hosts:**  
**Steven G. Gilbert, PhD, DABT**, University of Washington, Seattle, Washington, WA

**David L. Eaton, PhD, ATS**, University of Washington, Seattle, Washington, WA

**Elaine Faustman, PhD, DABT**, University of Washington, Seattle, Washington, WA

Drs. Gilbert, Eaton, and Faustman are all professors in the University of Washington (UW) Department of Environmental and Occupational Health Sciences (DEOHS).



Dr. Gilbert is the director and founder of the Institute of Neurotoxicology and Neurological Disorders and is well known for his initiatives in the science communication area—including the development of the wiki-based website “Toxipedia” and the book *A Small Dose of Toxicology*, which has been translated into numerous languages.

Dr. Eaton is a past president of SOT and is currently the dean of the Graduate School at UW. He has served on numerous science- and toxicology-related boards and is an Elected Fellow of the American Association for the Advancement of Science and the Academy of Toxicological Sciences.



Dr. Faustman has been involved with a number of international training efforts in the toxicology field through IUTOX Risk Assessment Summer School and served as General Secretary from 2013 to 2016. She has held more than 15 positions in SOT

and is also the past-president of the Teratology Society.

Together, Drs. Gilbert, Eaton, and Faustman believe the wide range of faculty in other environmental and occupational health disciplines in their department who are available to mentor Dr. Sawalha will support her in identifying and developing toxicology and risk assessment curricula, lesson plans, and research questions. They also are able to support her interest in childhood exposures to hazardous chemicals, poison control, and clinical effects of chemical exposures through the DEOHS Pediatric Environmental Health Specialty Unit and the Occupational and Environmental Medicine fellowship program.



## Merit Award



**Samuel M. Cohen, MD, PhD, ATS**

Dr. Cohen currently serves as professor with the University of Nebraska Medical Center Department of Pathology and Microbiology, as well as the Eppley Institute for Research in Cancer. He also is staff pathologist with Nebraska Medicine, the Nebraska Orthopedics Hospital in Omaha, and the Bellevue Medical Center. Additionally, he serves as an adjunct professor to the Program on Toxicologic Pathology at Sao Paulo State University

Medical School in Botucatu, Brazil.

Throughout his distinguished career, Dr. Cohen has made exemplary contributions to toxicology as a practicing pathologist, researcher, teacher and mentor, scientific writer, and scientific advisor on important issues at the intersection of science and public policy. The primary research focus has been on the mechanisms of toxicity and carcinogenesis related to human exposure to environmental chemicals and pharmaceuticals and the importance of that understanding for prediction of human risk of cancer from chemical exposure.

In a landmark proposal in 1981, Dr. Cohen established the role of cell proliferation in carcinogenesis as an alternative to DNA reactivity. Then in 1990, his seminal publication describing the role of cell proliferation for DNA-reactive and non-DNA-reactive carcinogens was published in *Science*. Dr. Cohen used this theoretical approach to demonstrate that interaction of direct DNA damage and cell proliferation changes results in a complex dose response seen for liver and urinary bladder carcinogenesis by 2-acetylaminofluorene (2-AAF) in the US Food and Drug Administration (US FDA) National Center for Toxicological Research (NCTR) ED01 Study. The role of cell proliferation has subsequently been demonstrated for many other classes of chemicals and is now routinely used by regulatory agencies in evaluating mode of action and human relevance.

Dr. Cohen may be best known for his work on various aspects of urinary bladder carcinogenesis by establishing the first rodent two-stage bladder carcinogen model in rats. He and colleagues demonstrated that saccharin was a rat-specific carcinogen, leading to saccharin being the first chemical to be delisted from the US National Toxicology Program (NTP) List of Carcinogens and also the first chemical down classified from 2B to 3 based on mechanistic understanding by the International Agency for Research on Cancer (IARC).

During his career, Dr. Cohen has published more than 350 papers based on original research in peer-reviewed journals and has written nearly 50 book chapters with a focus on chemical carcinogenesis and interspecies extrapolations. A well-respected and accomplished scientific speaker, he has given hundreds of presentations both nationally and internationally.

Since joining SOT in 1986, he has served on the Awards Committee (2012–2014) and as president of the Central States Regional Chapter (2004–2005) and the Carcinogenesis Specialty Section (2002–2003). He received the John Doull Medal from

the Central States Regional Chapter in 1996, the SOT Arnold J. Lehman Award in 2001, and the 2016 Ambassador Award from the Mid-Atlantic Regional Chapter.

Outside of SOT, Dr. Cohen received the 2015 Lifetime Achievement Award from the Society of Toxicologic Pathology (STP) and the 2016 Distinguished Scientist Award from the American College of Toxicology (ACT). He currently serves as a member of the Academy of Toxicological Sciences (ATS) Board of Directors.

**FS Merit Award Lecture: Cell Proliferation and Carcinogenesis: Bad Luck and the Environment, Monday, March 13, 12:30 pm to 1:20 pm, Room 316.**



**Perry J. Gehring**

**Diversity Student Travel Award**

This award is presented during the CDI Reunion.



**Kaylin Marie White**

**Kaylin Marie White, Spelman College, Atlanta, GA**

**Abstract Number:** 1933  
**Poster Board Number:** P559

**Abstract Title:** Investigating the Effects of Berry-Flavored Electronic Cigarette Liquids on Airway Epithelial Cells

**Institution Where Research Was Conducted:** University of North Carolina at Chapel Hill



**Pfizer SOT Undergraduate Student Travel Awards**



**Katrina Borofski**

**Katrina Borofski, University of Massachusetts Amherst, Amherst, MA**

**Abstract Number:** 1216  
**Poster Board Number:** P340

**Abstract Title:** Redox Modulations Alter Development of the Exocrine Pancreas in the Zebrafish Embryo (*Danio rerio*)



**Jelijah Clark**

**Jelijah Clark, University of North Carolina at Chapel Hill, Chapel Hill, NC**

**Abstract Number:** 1785  
**Poster Board Number:** P323

**Abstract Title:** Prenatal Arsenic Exposure and Sexual Epigenetic Dimorphism: Sexual Dimorphism of 5-methylcytosine Alterations in Newborn Cord Blood from the Bear Cohort



**Itaevia M. Curry-Chisolm**

**Itaevia M. Curry-Chisolm, North Carolina Central University, Durham, NC**

**Abstract Number:** 1413  
**Poster Board Number:** P218

**Abstract Title:** Loperamide Inhibits the Spontaneous Activity of Neural Networks

**Institution Where Research Was Conducted:** US Environmental Protection Agency



**Chantel Veniece Duscent**

**Chantel Veniece Duscent, Claflin University, Orangeburg, SC**

**Abstract Number:** 2114  
**Poster Board Number:** P322

**Abstract Title:** Characterization of Chromium Reducing Bacteria from a Wastewater Treatment Plant





**Jellisa Ewan**, Claflin University, Orangeburg, SC

**Abstract Number:** 2110  
**Poster Board Number:** P328

**Abstract Title:** Bioremediation-Reduction of Hexavalent Chromium

**Jellisa Ewan**



**Lauren Kristen Heine**, University of New Mexico, Albuquerque, NM

**Abstract Number:** 2773  
**Poster Board Number:** P141

**Abstract Title:** Impact of PAHs on Barrier Function Toxicity in 3D Lung Model

**Institution Where Research Was Conducted:** Oregon State University

**Lauren Kristen Heine**



**Alexandra M. Folcik**, Florida Institute of Technology, Melbourne, FL

**Abstract Number:** 2011  
**Poster Board Number:** P117

**Abstract Title:** Differential Gene Expression as a Possible Predictor of Susceptibility to Tyrosine Kinase Inhibitors Organ-Specific Toxicities

**Institution Where Research Was Conducted:** National Center for Toxicological Research

**Alexandra M. Folcik**



**Jessica Reggan Hoffman**, University of North Carolina at Chapel Hill, Chapel Hill, NC

**Abstract Number:** 2436  
**Poster Board Number:** P161

**Abstract Title:** The Small Molecule Antipsychotic Aripiprazole/Abilify Potentiates Ozone-Induced Inflammation in Airway Epithelial Cells

**Jessica Reggan Hoffman**



**Julian M. Freedland**, University at Albany, Albany, NY

**Abstract Number:** 1482  
**Poster Board Number:** P411

**Abstract Title:** Phenotypic Characterization of Human Cytochrome P450 Polymorphisms in Budding Yeast

**Julian M. Freedland**



**Keegan S. Krick**, University of Massachusetts Boston, Boston, MA

**Abstract Number:** 1213  
**Poster Board Number:** P337

**Abstract Title:** Developmental Exposure to PCB153 Alters Genes Related to Circadian Rhythm and Metabolism in Zebrafish (*Danio rerio*)

**Institution Where Research Was Conducted:** Woods Hole Oceanographic Institution

**Keegan S. Krick**



**Danielle La Mae Germundson**, University of North Dakota, Grand Forks, ND

**Abstract Number:** 1756  
**Poster Board Number:** P241

**Abstract Title:** Food Allergen-Induced Behavioral Abnormality Is Correlated with Mast Cell Accumulation and Glial Cell Activation in the Murine Central Nervous System

**Danielle La Mae Germundson**



**Jesse A. Leissa**, The Ohio State University, Columbus, OH

**Abstract Number:** 2154  
**Poster Board Number:** P418

**Abstract Title:** Evaluation of the Skin Irritation Potential of Silver Nanoparticles Using the EpiDerm™ Skin Irritation Test

**Institution Where Research Was Conducted:** US Food and Drug Administration-White Oak Campus

**Jesse A. Leissa**



**Alondra Harris**, University of Arizona, Tucson, AZ

**Abstract Number:** 3050  
**Poster Board Number:** P638

**Abstract Title:** The Transcription Factor HNF4a Is a Central Target of Trichloroethylene Toxicity in the Developing Chick Heart

**Alondra Harris**



**Michael T. McLawhorn**, Mars Hill University, Marshall, NC

**Abstract Number:** 2968  
**Poster Board Number:** P519

**Abstract Title:** Evaluating Cytokine and ROS Production by Macrophages Exposed to Arizona and Libby Amphibole

**Michael T. McLawhorn**

(continued on next page)



**Mariella A. Mestres-Villanueva**

**Mariella A. Mestres-Villanueva**, University of Puerto Rico Rio Piedras, Rio Piedras, PR

**Abstract Number:** 2875  
**Poster Board Number:** P335

**Abstract Title:** Optineurin Distribution in Extranigral Nuclei: Altered Expression in Parkinson's Disease

**Institution Where Research Was Conducted:** Purdue University



**Hannah Josephine Smith**

**Hannah Josephine Smith**, University of North Carolina at Chapel Hill, Chapel Hill, NC

**Abstract Number:** 1060  
**Platform Abstract Number:** 1060

**Abstract Title:** Basal Expression Predicts Ozone-Induced Pro-Inflammatory Response in GSTM-Null Individuals



**Isabella M. Reichardt**

**Isabella M. Reichardt**, University of Wisconsin-Madison, Madison, WI

**Abstract Number:** 1142  
**Poster Board Number:** P212

**Abstract Title:** mRNA Expression Profile of Nrf2-ARE Pathway and Excitatory Amino Acid Transporter 3 During Methylmercury Exposure in NSC34 Motor Neurons

**Institution Where Research Was Conducted:** Michigan State University



**Mary F. Stofan**

**Mary Frances Stofan**, New Mexico State University, Las Cruces, NM

**Abstract Number:** 2495  
**Poster Board Number:** P302

**Abstract Title:** Analysis of the Bile Acid Synthetic Pathway in the Absence of Enzymes CYP7A1 and CYP27A1

**Institution Where Research Was Conducted:** Rutgers, The State University of New Jersey



**Rachel Saunders**

**Rachel Saunders**, Virginia Commonwealth University, Richmond, VA

**Abstract Number:** 2725  
**Poster Board Number:** P653

**Abstract Title:** Effects of Occupational Nanomaterial Exposure on the Blood Brain Barrier



**Kaylin Marie White**

**Kaylin Marie White**, Spelman College, Atlanta, GA

**Abstract Number:** 1933  
**Poster Board Number:** P559

**Abstract Title:** Investigating the Effects of Berry-Flavored Electronic Cigarette Liquids on Airway Epithelial Cells

**Institution Where Research Was Conducted:** University of North Carolina at Chapel Hill



**Rachel Elisabeth Schafer**

**Rachel Elisabeth Schafer**, Kenyon College, Gambier, OH

**Abstract Number:** 1174  
**Poster Board Number:** P244

**Abstract Title:** Dioxin Exposure Induces the Thyroid Hormone-Responsive Gene *klf9* but Inhibits Metamorphic Changes in *Xenopus laevis* Tadpoles



**Veronika Yakovishina**

**Veronika Yakovishina**, John Jay College of Criminal Justice, Brooklyn, NY

**Abstract Number:** 2650  
**Poster Board Number:** P543

**Abstract Title:** Involvement of p53 and p21 in Maneb and Mancozeb Induced Senescence



**Stacy Schkoda**

**Stacy Schkoda**, California State University Fullerton, Fullerton, CA

**Abstract Number:** 2674  
**Poster Board Number:** P602

**Abstract Title:** Evaluating the Developmental Toxicity of PAHs in Embryonic Zebrafish

**Institution Where Research Was Conducted:** Oregon State University



## Public Communications Award



**Bernard D. Goldstein**

### **Bernard D. Goldstein, MD**

Dr. Goldstein's public communications work began in the early 1980s at Rutgers Medical School as chair of the Department of Environmental and Community Medicine and as the founding director of the Rutgers Environmental and Occupational Health Sciences Institute (EOHSI). Working with colleagues, a multidisciplinary program was developed which included a specific division devoted to environmental health

education and outreach. EOHSI activities included curriculum for K-12 education and other efforts aimed at enhancing the environmental knowledge and course content of high school science teachers. EOHSI faculty also developed a speaker's bureau to respond to requests from public groups for experts on New Jersey's well-documented environmental issues and developed lectures and materials to specifically educate newspaper reporters. Due to his passion and conviction that the public deserves to understand the risks and real-life impacts of toxic exposures, he published many op-ed pieces on subjects ranging from the importance of animal research to how to avoid summertime ozone. As a center director for the US National Institute of Environmental Health Sciences (NIEHS) and head of the organization of center directors, Dr. Goldstein lobbied for inclusion of outreach programs and created a template for communications components in future NIEHS centers.

While assistant administrator for research and development for the US Environmental Protection Agency (US EPA), Dr. Goldstein developed proactive programs to explain the US EPA's science to the public and to Congress. In addition to a multitude of testimonies before the US Congress, Dr. Goldstein made appearances on *Good Morning America* and *60 Minutes*, as well as other local television and radio shows.

Throughout his career, Dr. Goldstein has nurtured a rapport with the legal and judicial communities, including co-authoring the chapter on toxicology of all three editions of the *Federal Judicial Center's Reference Manual on Scientific Evidence*. He has presented at numerous meetings of judiciary or attorney groups on topics ranging from understanding toxicology to agent-specific issues, such as the toxicology of benzene. His publications in classic law journals explain topics such as dose-response and risk assessment, as well as the role of the precautionary principle versus risk assessment in regulating hazardous chemicals. He has published papers and presented locally, nationally, and internationally on the importance of scientific research.

Dr. Goldstein has co-written peer-reviewed publications and book chapters on risk communications. He has chaired numerous committees for the US National Research Council (NRC), the Health and Medicine Division (HMD) of the National Academies of Sciences, Engineering, and Medicine, and many other national and international organizations. He has been a member of numerous SOT committees, including the Public Communication Committee and Communication Committee Working Groups, and served as chair of the Communications Strategy Committee.

Dr. Goldstein is a professor emeritus of environmental and occupational health for the Graduate School of Public Health at the University of Pittsburgh. He recently served as a visiting professor at the University of Cologne Department of Political Science and European Affairs, where he compared US and European Union approaches to unconventional shale gas drilling, including public communications issues. Similarly, his ongoing activities with the Gulf Region Health Outreach Program and the US National Academy of Sciences have included a focus on communications issues related to the 2010 Deepwater Horizon Oil Spill.



## SOT/SOT Endowment Fund/IUTOX Travel Awards



**Flora Ruth Aigbe**

**Flora Ruth Aigbe, PhD**, University of Lagos, Lagos, Nigeria



**Sweta Bhardwaj**

**Sweta Bhardwaj, PhD**, Rayat Bahara University, Mohali, India



**Hossein Hassanian-Moghaddam**

**Hossein Hassanian-Moghaddam, PhD**, Loghman-Hakim Hospital, Tehran, Iran

(continued on next page)



**Chiagoziem Otuechere, PhD,**  
Redeemer's University, Ede Town,  
Nigeria



**Oluwakemi Rotimi, PhD,** Covenant  
University, Ota, Nigeria



**Nitin Verma, PhD,** Baddi University of  
Emerging Sciences and Technology,  
Baddi, India



## **Toxicological Sciences Paper of the Year Award**



Each year the Board of Publications recognizes the outstanding research published in *Toxicological Sciences* by selecting the paper deemed to be of the highest quality and impact during the past year. Papers published in the print edition from July to June of the preceding year are eligible.

In the past, the Associate Editors nominated a number of papers that were forwarded to the Board of Publications for consideration along with member nominations made directly to the Society. After thorough discussion and debate, the Board Members then selected the paper to receive the award. This year the entire process has been moved to the Board of Publications, such that Board Members nominated papers and then chose the recipients.

The Board of Publications is pleased to announce that the 2017 *Toxicological Sciences* Paper of the Year Award is awarded to:

**Ethanol Attenuates Histiotrophic Nutrition Pathways and Alters the Intracellular Redox Environment and Thiol Proteome during Rat Organogenesis.** Joseph L. Jilek, Karilyn E. Sant, Katherine H. Cho, Matthew S. Reed, Jan Pohl, Jason M. Hansen, and Craig Harris. *Toxicological Sciences*, 147(2), 2015, 475–489

This paper was highlighted in the October 2015 issue of the journal. The work focuses on the mechanism by which alcohol (ethanol) exerts its teratogenicity. Alcohol can cause a variety of cognitive and behavioral disturbances, as well as craniofacial malformations as that seen in fetal alcohol syndrome. Alcohol has long been recognized as a developmental toxicant, but relatively little is known about the toxicological process. The Harris group has previously demonstrated that alcohol disrupted the redox environment in the developing organism. They employed a variety of models and techniques ranging from whole rat embryo culture to thiol proteomics. The team exposed embryos to defined concentrations of alcohol and evaluated morphology and levels of glutathione and cysteine (oxidized and reduced) in distinct tissue compartments (yolk sac, amniotic fluid, embryonic tissue). Thiol proteomics was performed on the visceral yolk sac and the embryo. Disruption in the redox state of the visceral yolk sac decreased nutrient uptake in the exposure embryos leading to growth deficiency and retardation. This appears to be critical for the altered organogenesis. The demonstration that alcohol disrupts the compartmentalized redox balance within the rat conceptus provides key toxicological insight to this ongoing public health concern.



## Translational Impact Award



**Laura P. James, MD**

Dr. James received her MD from the University of South Carolina. Currently, She is the director of the Translational Research Institute and associate vice chancellor for Clinical and Translational Research at the University of Arkansas for Medical Sciences (UAMS). She also is a professor of pediatrics at UAMS and a faculty member in the Section of Clinical Pharmacology and Toxicology at Arkansas Children's Hospital. Her research

has included cellular and animal models of acetaminophen toxicity, as well as clinical studies in children and adults with acetaminophen-related liver injury. Her work across the translational research spectrum has led to new diagnostic approaches for acetaminophen liver injury.

Her work with the US National Institutes of Health (NIH)-funded Acute Liver Failure Study Group demonstrated the diagnostic potential of blood-based measurements of acetaminophen protein adducts in patients with acute liver failure. In 2006, Dr. James helped establish Acetaminophen Toxicity Diagnostics LLC and serves as the chief medical officer of the company. The company developed a rapid assay for detection of acetaminophen protein adducts through the support of Small Business Technology Transfer funding from the National Institute of Diabetes, Digestive, and Kidney Disease (NIDDK).

Dr. James also serves as the co-principal investigator for Arkansas Children's Hospital for the IDeA States Pediatric Clinical Trials Network (ISPCTN), a component of the Environmental Influences of Child Health Outcomes (ECHO) Program. The ISPCTN, a 17-site consortium, will provide medically underserved and rural populations with access to state-of-the-art clinical trials, apply findings from relevant pediatric cohort studies to children, and build pediatric research capacity at a national level. Focus areas for the network include upper and lower airway disease; obesity; pre-, peri-, and postnatal outcomes; and neurodevelopment.

Dr. James also has collaborated with other scientists in studies of designer drugs, such as synthetic marijuana and bath salts, and is currently a co-investigator of an NIH-funded grant. As an internationally recognized expert in clinical pharmacology and toxicology, her work has directly impacted the practice of medicine.

Dr. James has been a member of SOT since 2005.

**FS Translational Impact Award Lecture: Development of a Clinical Diagnostic Test for Acetaminophen Liver Injury, Wednesday, March 15, 5:00 pm to 5:50 pm, Room 316.**



## Translational/Bridging Travel Award



**Jayanta K. Das, PhD**

Dr. Das obtained his PhD in zoology from the University of Kalyani, India, in 2003 and served as a postdoctoral scholar in molecular cancer biology in 2007. He then took a postdoctoral position at Chittaranjan National Cancer Institute in India before coming to the United States, where he completed two additional postdoctoral positions at the Wayne State University John D. Dingell VA Medical Center and Florida International

University (FIU). He currently is a research assistant professor in the FIU Department of Environmental and Occupational Health.

With a strong cancer research background, Dr. Das has focused on molecular signaling pathways of cancer stem cells, anti-cancerous drug development, signaling pathway detection for cancer treatment, apoptosis, antioxidant, and free radical research. He has made many contributions to science, including research connected to ways to prevent and treat colon cancer and effective therapeutic strategies for breast cancer. His work on apoptosis is cited by many experts in the field and is important in the treatment of patients with leukemia in the United States. Dr. Das plans to expand upon his previous research using anticancer drugs against cancer stem cells by developing and using an *in vitro* 3D model instead of animal models.

Dr. Das plans to use the Translational/Bridging Travel Award to increase his knowledge base in translational cancer research by attending sessions on the cutting-edge translational cancer research and *in vitro* studies at the SOT Annual Meeting.

A member of the Society since 2013, Dr. Das was a recipient of the 2013 Stem Cells Specialty Section Postdoctoral Excellence in Research Award, and in 2015, he received an *In Vitro* and Alternative Methods Specialty Section Postdoctoral Award.



## Undergraduate Educator Award



**Karen E. Stine**

### **Karen E. Stine, PhD**

Dr. Stine received her PhD in toxicology from the University of North Carolina at Chapel Hill in 1985, and she has spent the majority of her career educating undergraduate students in toxicology.

She began her teaching career at Clemson University, where, as an assistant professor, she co-developed and co-taught the first general graduate/advanced undergraduate toxicology course at the university.

She also developed a number of other courses with toxicology content, such as "Toxic Substance Management" for business majors and "Industry and the Environment" for other disciplines.

After a brief stint as a visiting assistant professor in the Department of Biology at Radford University, Dr. Stine joined the Ashland University Department of Biology and Toxicology as an associate professor and director of the toxicology program—one of the few BS in toxicology degree programs in the country—where she became a full professor and the chair of the department. More recently, Dr. Stine served as the dean of the School of Sciences at Auburn University at Montgomery and is currently a professor of biology in the Department of Biology. In her time at Auburn University at Montgomery, she has helped develop a new major in environmental science with a concentration in environmental health and toxicology and has developed and taught the university's first toxicology course.

During her distinguished career, Dr. Stine has taught hundreds of students in a variety of toxicology courses, many of which she developed, including courses titled "Introduction to Toxicology," "Principles of Toxicology," "Methods in Toxicology," and "Pharmacology and Toxicology." She also has directed 28 students in research projects ranging from inhibition of enzymes by neurotoxins to the study of the role of stress proteins in cellular dysfunction. Sixteen of these students co-authored presentations or papers on their research. As a way to engage high school students, Dr. Stine developed a summer enrichment course in toxicology as part of the Ohio Summer Honors Program and taught in the program for eight years. Over the years, she also has served as an academic advisor to more than 200 students majoring in toxicology and related fields.

Outside of her teaching roles, Dr. Stine has co-authored three editions of an undergraduate-level textbook, *Principles of Toxicology*, which was recently named as a "highly commended" book by the British Medical Association.

A longtime member of SOT, Dr. Stine has been very active within the Society's undergraduate community. In 1993, she was co-chairperson and presenter for the first SOT poster/discussion session as part of the Undergraduate Toxicology Education program and a participant in the 2nd Forum on Undergraduate Education in Toxicology. She has given multiple presentations on innovation and practice in undergraduate education and currently serves on the SOT Undergraduate Education Subcommittee.



# SOT | Society of Toxicology

*Do you know a toxicologist who deserves to be recognized? Submit a nomination by October 9, 2017!*

**SOT recognizes distinguished toxicologists and students with prestigious awards each year.**

**Award recipients are honored during the Annual Meeting Awards Ceremony and recognized in SOT publications.**

***Applications for 2018 SOT Awards are due October 9, 2017.***

***Regional Chapter Awards, Special Interest Group Awards, and Specialty Section Awards have various deadlines throughout the year.***

**Visit the Awards and Funding section of the SOT website to view award details and to make nominations.**

**[www.toxicology.org](http://www.toxicology.org)**

# Supported Award Recipients

## Colgate-Palmolive Grants for Alternative Research



**Hao Zhu**

**Hao Zhu, PhD**, Rutgers University, Camden, NJ

**Project Title:** Support Read-Across Study of Animal Acute Toxicity Using Public Biological Data



**Almudena Veiga-Lopez**

**Almudena Veiga-Lopez, DVM, PhD**, Michigan State University, East Lansing, MI

**Project Title:** Novel 3D Microfluidic Chip for Placental Toxscreening

## Colgate-Palmolive Awards for Student Research Training in Alternative Methods



**Emily Martell**

**Emily Martell, BS**, University of Rhode Island, Ashaway, RI

**Project Title:** Use of ExVive 3D Bio-Printing Technology to Evaluate Hepatic Steatosis Induced by PFAS Exposure.

**Host Institution:** Organovo, Inc.

## Colgate-Palmolive Postdoctoral Fellowship Award in In Vitro Toxicology



**Peer Karmaus**

**Peer Karmaus, PhD**, St. Jude Children's Research Hospital, Memphis, TN

**Project Title:** Assessing Xenobiotic Perturbation of Immunity at the Single Cell Level Using Human CD4+ Naïve T Cells

## Syngenta Fellowship Award in Human Health Applications of New Technologies



**Fabian Grimm**

**Fabian Grimm, PhD**, Texas A&M University, College Station, TX

**Project Title:** A Population-Based Organo-Typic Human *In Vitro* Model for Cardiotoxicity Testing

# SOT Endowment Fund 2016 Award Recipients



## Mary Amdur Student Award Fund



**Parker Duffney, MS,**  
University of Rochester,  
Rochester, NY



**Matthew Marshall, BS,**  
New York University, New  
York City, NY

## Edward W. Carney Trainee Award Fund



**Kristin Bircsak, BS,**  
Rutgers University,  
Piscataway, NJ



**Deirdre Tucker, BS,**  
University of North  
Carolina at Chapel Hill,  
Chapel Hill, NC

## Young Soo Choi Student Scholarship Award Fund



**Yoonjeong Jang, DVM,  
BS,** Seoul National  
University, Seoul, Seoul,  
South Korea

## Laxman S. Desai Association of Scientists of Indian Origin Student Award Fund



**Prachi Borude, MTech  
BPT,** University of Kansas  
Medical Center, Kansas  
City, KS



**Kshama Doshi, MS,**  
University of Maryland  
Baltimore, Baltimore, MD

## John Doull Student Award Fund



**Julia Tobacyk, BS,**  
University of Arkansas for  
Medical Sciences, Little  
Rock, AR

## Education Fund: Undergraduate Educator Award



**Antonio T. Baines,  
BS, PhD,** North Carolina  
Central University,  
Durham, NC

## Founders Award



**Richard Adamson, PhD,**  
TPN Associates LLC,  
Walpole, MA

## Angelo Furgiuele Young Investigator Technology Award



**Janet Sangodele, BSc,  
MSc,** Federal University of  
Technology Akure Nigeria,  
Karu, Nasarawa, Nigeria

## Donald E. Gardner Inhalation Toxicology Education Award Fund



**Katherine Zychowski,  
PhD,** University of New  
Mexico, Albuquerque, NM

## Perry J. Gehring Biological Modeling Student Award Fund



**Rachel Worley, BS, MA,**  
CDC/ATSDR, University of  
Georgia, Atlanta, GA

## Perry J. Gehring Diversity Student Travel Award Fund



**Lizbeth Perez-Castro,  
Undergraduate Student,**  
University of Puerto Rico at  
Cayey, Gurabo, PR



**Perry J. Gehring Risk Assessment Best Postdoctoral Fellow Abstract Award Fund**



**Marjory Moreau, PhD,**  
*Health Canada, Ottawa, ON, Canada*

**Frank C. Lu Food Safety Student Award Fund**



**Gopi Gadupudi, BS, MS,**  
*University of Iowa, Iowa City, IA*

**Harihara Mehendale Association of Scientists of Indian Origin Student Award Fund**



**Bharat Bhushan, PhD,**  
*University of Kansas Medical Center, Kansas City, KS*

**Perry J. Gehring Risk Assessment Student Award Fund**



**Brittany Weldon, BS,**  
*University of Washington School of Public Health, Seattle, WA*

**Jean Lu Student Scholarship Award Fund**



**Xiao Xiao, BS,** *University of Massachusetts Amherst, Amherst, MA*



**Gopi Gadupudi, BS, MS,**  
*University of Iowa, Iowa City, IA*

**Vera W. Hudson and Elizabeth K. Weisburger Scholarship Fund**



**Logeswari Ponnusamy, DVM, MVSc,** *The Institute of Environmental and Human Health, Texas Tech University, Lubbock, TX*

**Roger O. McClellan Student Award Fund**



**Manushree Bharadwaj, BVSc,** *Oklahoma State University, Stillwater, OK*



**Alok Ranjan, BS,** *Texas Tech University Health Sciences Center, Amarillo, TX*

**Molecular Biology Specialty Section Postdoctoral Fellow Research Award**



**Jenna Currier, PhD,**  
*ORISE at US EPA, Research Triangle Park, NC*



**Kyla Walter, BA,**  
*University of California Davis, Davis, CA*



**Anna Kopec, PhD,**  
*Michigan State University, East Lansing, MI*



**Priyanka Trivedi, PhD,**  
*Harvard Medical School, Boston, MA*



**SOT Endowment Fund—Helping the Society Fulfill Its Mission to Build for the Future**

The SOT Endowment Fund is a family of funds comprised of the Education Fund, Global Activities Fund, SOT Priorities Fund, and the Named Funds. These funds contribute to SOT initiatives that address one or more of the Society's strategic objectives.

**Molecular Biology Student Award Fund**



**Vivekkumar Dadhania, MS (Pharm),** University of Louisiana at Monroe (ULM), Monroe, LA



**Gloria Garcia, BS,** Oregon State University, Corvallis, OR



**Rance Nault, BSc, MSc,** Michigan State University, East Lansing, MI



**Jeffrey Willy, BS, BM, MS,** Indiana University School of Medicine, Indianapolis, IN



Please refer to the Mobile Event App or Online Planner or these sections of this Program—Daily Calendar, Event Listing, or Program Schedule—for date, time, and location of the Committee on Diversity Initiatives, Regional Chapter, Special Interest Group, and Specialty Section receptions, where the Endowment Fund Awards are conferred.



Previous recipients can be viewed on the SOT website.

**Sheldon D. Murphy Award Fund**



**Aram Cholanians, BS,** University of Arizona, Tucson, AZ



**Mary Francis, BA,** Rutgers University, Piscataway, NJ



**Ludwik Gorczyca, BA,** Rutgers University, Piscataway, NJ



**Natalie Holman, BS Biology,** University of North Carolina at Chapel Hill, Chapel Hill, NC



**Leah Norona, BS,** University of North Carolina at Chapel Hill, Chapel Hill, NC

**Toshio Narahashi Neurotoxicology Fellowship Award Fund**



**Jasmine Brown, BS,** US EPA, Research Triangle Park, NC



**Miles Bryan, BS Marine Biology,** Vanderbilt University, Nashville, TN

**Toshio Narahashi Neurotoxicology Fellowship Award Fund (continued)**



**Briana De Miranda, PhD,** University of Pittsburgh, Pittsburgh, PA



**Marshall Edwards, BS Microbiology,** The University of Texas Health Science Center at San Antonio, San Antonio, TX



**Shivani Ghaisas, BS, MS,** Iowa State University, Ames, IA



**Kimberly Keil, PhD,** University of California Davis, Davis, CA



**Dana Lauterstein, MS, PhD Candidate,** New York University, Tuxedo, NY



**Katriana Popichak, BS,** Colorado State University, Fort Collins, CO



**Marissa Sobolewski, PhD,** University of Rochester, Rochester, NY

**Gabriel L. Plaa Education Award Fund**



**Sridhar Jaligama, PhD,**  
University of Tennessee  
Health Science Center,  
Memphis, TN



**Nicole Olgun, BS,  
MS, PhD, CDC/NIOSH,**  
Morgantown, WV



**Karilyn Sant, PhD,  
MPH, University of  
Massachusetts Amherst,  
Amherst, MA**

**Regulatory and Safety Evaluation  
Specialty Section Student Award Fund**



**Jasmine Brown, BS,**  
US EPA, Research Triangle  
Park, NC



**Brittany Weldon, BS,**  
University of Washington  
School of Public Health,  
Seattle, WA

**Renal Toxicology Fellowship Award Fund**



**Ramya Kolli, MS,**  
University of Georgia,  
Athens, GA



**Mira Pavkovic, PhD,**  
Harvard Medical School -  
LSP, Boston, MA



**Priyanka Trivedi, PhD,**  
Harvard Medical School,  
Boston, MA

**Robert J. Rubin Student  
Travel Award Fund**



**Kristin Bircsak, BS,**  
Rutgers University,  
Piscataway, NJ



**Dana Lauterstein, MS,  
PhD Candidate, New York  
University, Tuxedo, NY**

**Dharm V. Singh Association of Scientists  
of Indian Origin Student Award Fund**



**Ratanesh Seth, PhD,**  
University of South  
Carolina, Columbia, SC



**Priyanka Trivedi, PhD,**  
Harvard Medical School,  
Boston, MA

**Dharm V. Singh Carcinogenesis  
Award Fund**



**Alisa Suen, BS, NIEHS/  
UNC Chapel Hill, Research  
Triangle Park, NC**

**Carl C. Smith Student Mechanisms  
Award Fund**



**Bharat Bhushan, PhD,**  
University of Kansas  
Medical Center, Kansas  
City, KS



**Nikita Joshi, MS,  
MSc, Michigan State  
University, East Lansing,  
MI**



**Rance Nault, BSc,  
MSc, Michigan State  
University, East Lansing,  
MI**



Thank you to all of the contributors, SOT Regional Chapters, Special Interest Groups, and Specialty Sections for making these awards possible.

**Ronald G. Thurman Student Travel Award Fund**



**Bharat Bhushan, PhD,**  
University of Kansas  
Medical Center, Kansas  
City, KS



**Suvarthi Das, MS,**  
University of South  
Carolina, Columbia, SC



**Hui Li, MS,** University of  
Arizona, Tucson, AZ

**Toxicologists of African Origin Endowment Fund**



**Salmon Adebayo, PhD,**  
Tshwane University of  
Technology, Pretoria,  
Gauteng, South Africa



**Motunrayo Akande,  
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University of Abuja,  
Abuja, Federal Capital  
Territory, Nigeria



**Ashley Jordan, BS  
Chemistry,** New York  
University Sackler  
Institute, New York, NY



**Olalekan Ogunsakin,  
MD, MPH, PhD,** Tulane  
University, New Orleans,  
LA



**Chiagoziem  
Otuechere, MSc,**  
Redeemer's University,  
Ede Town, Osun State,  
Nigeria



**Gbedolo Honesty  
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Montreal, QC, Canada

**Toxikon, a Preclinical Tox Organization, and Dr. Dharm Singh ASIO Award Fund**



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Pilani, Hyderabad  
Campus, India,  
Hyderabad, India



**Indarchand Gupta,  
MSc,** Government  
Institute of Science,  
Aurangabad,  
Maharashtra, India

**Women in Toxicology SIG Celebrating Women in Toxicology Award**



**Kimberly Keil, PhD,**  
University of California  
Davis, Davis, CA



**Dana Lauterstein, MS,  
PhD Candidate,** New York  
University, Tuxedo, NY



**Kristin Licko, BS,** Water  
Quality Association, Lisle,  
IL



**Samantha Snow, BS,  
PhD,** US EPA, Durham, NC



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