

# 59th Annual Meeting & TOXEXPO

March 15–19



Anaheim, California

## SOT Awards

### 2020 AWARDS CEREMONY

Sunday, March 15, 2020  
5:15 PM to 6:30 PM  
Music Starting at 4:45 PM  
CC Ballroom A

Dear Colleagues,

The SOT Awards program recognizes the accomplishments of outstanding toxicologists whose influence in the field is manifested through breakthrough research, excellence in mentoring, and more. SOT award recipients represent leaders in toxicology and related sciences, from promising undergraduates and innovative postdoctoral scholars to preeminent senior scientists. We are honored to announce the 2020 SOT awardees and express our gratitude for their influence in creating a safer and healthier world by advancing the science and increasing the impact of toxicology.

This year's award recipients are on the forefront of such diverse areas as risk assessment, disease etiology, endocrine disruption, and alternative methods. They are academics, federal employees, and industry leaders, and many have contributed groundbreaking research that has set the stage for modern toxicological thought. Their commitment to the Society is matched by their dedication to supporting the younger generation of toxicologists. In addition, scholars at the undergraduate, graduate, and postdoctoral levels who have already made contributions to toxicology are being recognized this awards season.

We invite you to honor this year's awardees by attending the 2020 SOT Awards Ceremony on Sunday, March 15, 2020, during the SOT 59th Annual Meeting and ToxExpo in Anaheim, California. We also encourage you to attend the 2020 SOT Award Lectures, which will be presented by Merit Award recipient Dr. Norbert E. Kaminski on Monday, March 16, from 3:00 pm to 4:00 pm; Distinguished Toxicology Scholar Award recipient Dr. Shuk-mei Ho on Tuesday, March 17, from 11:00 am to 12:00 noon; and Leading Edge in Basic Science Award recipient Dr. Wen-Xing Ding on Wednesday, March 18, from 1:30 pm to 2:30 pm. Additionally, all are welcome to attend the EUROTOX Bo Holmstedt Memorial Award Lecture, which will be delivered by Dr. Wout Slob on Wednesday, March 18, from 11:00 am to 12:00 noon. SOT Regional Chapters, Special Interest Groups, Specialty Sections, and Committees also will confer hundreds of additional awards during various events throughout the meeting.

The Awards Committee and other groups have worked hard to review and select candidates deserving of the Society's most prestigious honors. We appreciate their service and offer our sincere congratulations to the 2020 SOT award recipients.

Sincerely,



**Ronald N. Hines, MS, PhD, ATS**  
2019–2020 SOT President



**J. Eric McDuffie, MBA, PhD**  
2019–2020 Awards Committee Chair

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# SOT Awards



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Each year, the SOT Awards program honors and supports the accomplishments of distinguished toxicologists across career stages, as well as the merits of students representing various academic levels. The Society bestows more than 20 awards that recognize achievement, facilitate travel for early career and senior scientists, and advance toxicological research. In addition, the SOT Endowment Fund, Specialty Sections, Regional Chapters, and Special Interest Groups, as well as various Committees, present hundreds of awards each year to honor outstanding research and to support travel to the SOT Annual Meeting and ToxExpo.

The recipients of the 2020 SOT awards have demonstrated excellence in toxicology, and the Society is pleased to honor them for their contributions to the field.



## Awards Ceremony Music

Sunday, March 15, 4:45 PM to 5:15 PM

**Performed by:** Gregg Young

Award-winning Gregg Young is a solo guitarist who also tends to play with beats, loops, and tracks that include bass, drums, percussion, and some keyboards to sound like a full band. Writing and making his own music, he is known for playing funk, rock 'n' roll, reggae, blues, and groove jazz.

## Awards Ceremony

Sunday, March 15, 5:15 PM to 6:30 PM

Please join the Awards Committee, in conjunction with SOT Council, the Board of Publications, and the Education Committee, as distinguished scientists are honored during the prestigious SOT Awards Ceremony. During the ceremony, SOT awards are presented, as well as a number of grants, fellowships, and other honors for cutting-edge and novel research.

## SOT Honors and Awards



### Achievement Award

**James P. Luyendyk, PhD**

Michigan State University, East Lansing, MI

*This award recognizes an SOT member who has made significant contributions to toxicology within 15 years of obtaining the highest earned degree.*

For his paradigm-shifting research on the role of the coagulation cascade in homeostasis of the liver and other organs, Dr. Luyendyk has received the 2020 SOT Achievement Award.

After earning his PhD in the joint Pharmacology and Toxicology—Environmental Toxicology graduate program from Michigan State University in 2004, Dr. Luyendyk conducted his postdoctoral training at the Scripps Research Institute in La Jolla, California, studying immunology and hemostasis. He then began his career in academia, first at the University of Kansas Medical Center as an Assistant Professor and thereafter joining the Michigan State University faculty as an Associate Professor. Dr. Luyendyk currently serves as a Professor in the Department of Pathobiology and Diagnostic Investigation and as a member of the Institute for Integrative Toxicology at Michigan State University.

Dr. Luyendyk is a leader in the fields of toxicology, hepatology, and hematology, evidenced not only by the more than 100 peer-reviewed publications and multiple book chapters that compose his publication repertoire, but also by his numerous regional, national, and international speaking engagements. His research, involving both drug and environmental exposures, explores the mechanisms by which blood-clotting factors contribute to liver disease, which has challenged assumptions in multiple fields, including toxicology, and has inverted perceptions on the role coagulation factors play in the liver's response to toxicants.

A member since 2002, Dr. Luyendyk has been an active participant in SOT since the first Annual Meeting he attended. In addition to receiving the 2016 Women in Toxicology Mentoring Award, Dr. Luyendyk also was the Founding Chair of the Postdoctoral Assembly and has served as a leader and member of numerous SOT Regional Chapters, Specialty Sections, and Committees. Notably, Dr. Luyendyk was the inaugural Chair of the Graduate Education Subcommittee. Dr. Luyendyk is the 2019–2020 Chair of the Committee on Diversity Initiatives and the 2019–2020 Senior Councilor for the Mechanisms Specialty Section. He also has been a member of the *Toxicological Sciences* Editorial Board since 2011, in addition to and in conjunction with service on Editorial Boards of other high-impact journals.

Importantly, Dr. Luyendyk's involvement in toxicology extends also to his trainees. He has served as a dedicated mentor not only to graduate and postdoctoral trainees, but also to undergraduate and high school students. His trainees are past recipients of the Mechanisms SS Gabriel L. Plaa Education and Carl C. Smith Graduate Student Awards, Pfizer SOT Undergraduate Student Travel Award, and Undergraduate Diversity Program Student Travel Award, among others. This underscores his influence on furthering the future of toxicology.



## Arnold J. Lehman Award

**Annie M. Jarabek**

US EPA, Research Triangle Park, NC

*Named after one of the SOT founders, this award recognizes an SOT member who has made a major contribution to risk assessment and/or the regulation of chemical agents, including pharmaceuticals. The contribution may have resulted from the application of sound scientific principles to regulation and/or from research activities that have significantly influenced the regulatory process.*

SOT is bestowing the 2020 SOT Arnold J. Lehman Award on Ms. Jarabek in recognition of her major role in transforming chemical risk assessment, especially in enhancing the opportunity for toxicology research to contribute to improved chemical risk assessments.

Ms. Jarabek received her bachelor of science in biology from the University of Notre Dame in 1978. She conducted subsequent graduate work at the University of Cincinnati Medical Center in inhalation toxicology and the University of North Carolina at Chapel Hill in decision analysis. Ms. Jarabek has had a distinguished career with the US Environmental Protection Agency (US EPA), contributing to the Agency's evaluation of health risks. She began her work at the US EPA in 1986 as an inhalation toxicologist in the Environmental Criteria and Assessment Office in the Office of Research and Development (ORD), later serving as a toxicologist in the National Health and Environmental Effects Research Laboratory. She held many positions within the National Center for Environmental Assessment, first as a toxicologist/risk assessor and later in such roles as Special Assistant to the Associate Director of Health and Deputy National Program Director of the Human Health Risk Assessment Research Program. She currently serves as Senior Science Advisor in the Health and Environmental Effects Division of the Center for Public Health and Environmental Assessment.

The work Ms. Jarabek performed within the US EPA has made her a leading advocate for science-based risk assessment within the Agency. She was the principal author of Agency methods to develop dosimetry models and a strategy for their deployment in risk assessment of inhaled agents. She is a nationally and internationally recognized expert on inhalation dosimetry and risk assessment methodology—including through advocacy for and development of examples of biologically motivated approaches to the risk assessment of inhaled chemicals. She has supported high-priority Agency assessments, including inhaled Libby asbestos, manganese, and particulate matter, and her work leading the risk characterization of ingested perchlorate served as the first example of the use of mode-of-action information to support harmonization of cancer and noncancer risk assessments for a chemical. Manifold additional contributions to risk assessment include developing the derivation of reference concentrations for nearly 100 chemicals, as well as a continued effort to foster the use of state-of-the-art scientific methods in regulatory risk assessments that is now extending to novel *in vitro* approach methodologies. The influence of Ms. Jarabek's work extends globally, allowing for more relevant and accurate risk assessments for chemicals.

Among numerous other technical awards and decorations—including best manuscript, abstract, and presentation awards from the SOT Risk Assessment Specialty Section (RASS)—Ms. Jarabek has received Gold, Silver, and seven Bronze Medals from the US EPA, with a bronze most recently bestowed in 2015 for the development of the *ORD Strategic Research Action Plan (StRAP) of the Human Health Risk Assessment (HHRA) National Research Program*. The Society for Risk Analysis recognized her with its Risk Practitioner of the Year award in 2008, and she received a Lifetime Achievement Award from the University of Massachusetts that same year. An SOT member since 1999, she was the 2004–2005 President of RASS and also is a member of both the Biological Modeling and the Inhalation and Respiratory Specialty Sections, as well as the Women in Toxicology Special Interest Group. She

has served on both the Scientific Program Committee and the Awards Committee as well as a strategic communications task force and has organized several Contemporary Concepts in Toxicology meetings. She continues to enjoy organizing and moderating the RASS webinar series.

## Best Postdoctoral Publication Awards

*Presented by the Postdoctoral Assembly, these awards recognize outstanding work accomplished during formal mentored postdoctoral traineeships by recognizing exceptional recently published papers in the field of toxicology.*



**Christopher D. Kassotis**, PhD, Duke University, Durham, NC

Kassotis, C.D., E.M. Kollitz, K. Hoffman, J.A. Sosa, and H.M. Stapleton. **"Thyroid Receptor Antagonism as a Contributory Mechanism for Adipogenesis Induced by Environmental Mixtures in 3T3-L1 Cells."** *Science of the Total Environment* 666 (2019): 431–44. [View abstract.](#)

**Miao Li**, PhD, US FDA/NCTR, Jefferson, AR

Li, M., Y.H. Cheng, J.T. Chittenden, R.E. Baynes, L.A. Tell, J.L. Davis, T.W. Vickroy, J.E. Riviere, and Z. Lin. **"Integration of Food Animal Residue Avoidance Databank (FARAD) Empirical Methods for Drug Withdrawal Interval Determination with a Mechanistic Population-Based Interactive Physiologically Based Pharmacokinetic (iPBPK) Modeling Platform: Example for Flunixin Meglumine Administration."** *Archives of Toxicology* 93, no. 7 (2019): 1865–80. [View abstract.](#)



**Meghan E. Rebuli**, PhD, University of North Carolina at Chapel Hill, Chapel Hill, NC

Rebuli, M.E., A.M. Speen, E.M. Martin, K.A. Addo, E.A. Pawlak, E. Glista-Baker, C. Robinette, H. Zhou, T.L. Noah, and I. Jaspers. **"Wood Smoke Exposure Alters Human Inflammatory Responses to Viral Infection in a Sex-Specific Manner. A Randomized, Placebo-Controlled Study."** *American Journal of Respiratory and Critical Care Medicine* 199, no. 8 (2019): 996–1007. [View abstract.](#)





## Distinguished Toxicology Scholar Award

**Shuk-mei Ho, PhD**

University of Arkansas for Medical Sciences, Little Rock, AR

Distinguished Toxicology Scholar Award Lecture

Tuesday, March 17, 11:00 AM to 12:00 Noon, CC Ballroom E

*This award recognizes an SOT member who has made substantial and seminal scientific contributions to the understanding of the science of toxicology and is actively involved in toxicological research.*

Dr. Ho has been awarded the 2020 SOT Distinguished Toxicology Scholar Award for her pivotal work elucidating the role of endocrine disruptors in disease and on the developmental origins of adult disease.

Dr. Ho received her PhD in zoology from the University of Hong Kong in 1978. Her illustrious career in academia began as a Research Associate and later Visiting Assistant Professor at Boston University, after which she spent nearly two decades at Tufts University, where she eventually became Associate Dean for Research of the School of Graduate Studies and Continued Education. During her next appointment, at the University of Massachusetts Medical School and Memorial Health Care System, she published 50 papers in seven years, completing her tenure as Vice-Chair for Research within the Department of Surgery. Dr. Ho then held positions at the University of Cincinnati, including Director of the Cincinnati Cancer Center, Director of the Center for Environmental Genetics, and Associate Dean for Basic Research in the University of Cincinnati Medical Center.

In her current position as Vice Chancellor for Research at the University of Arkansas for Medical Sciences, Dr. Ho oversees strategic planning and administration of research portfolios in six colleges and seven institutes at the main campus in Little Rock, Arkansas; the Northwestern Arkansas campus; and across eight regional medical campuses in Arkansas.

Dr. Ho is a leader in developmental and reproductive toxicology. Her research relating early exposure to bisphenol A to increased cancer risk later in life bolstered the ban against the use of bisphenol A in products for babies and children. Further, Dr. Ho first demonstrated that epigenetics plays a major role in gene-environment interactions and disease etiology, and she contributed significantly to the idea that there were windows of susceptibility in toxicant-induced diseases. Dr. Ho's findings opened the possibility of using biomarkers of early-life exposure to predict and prevent environmental diseases later in life.

Dr. Ho's massive publication record is a testament to her distinction in the field. Her more than 240 articles have been cited 17,500 times, resulting in an h-index of 69 and contributing to the furtherance of environmental epigenetics and the understanding of developmental origins of adult health and disease.

Further, through her commitment to instruction and training, Dr. Ho has garnered over \$50 million in funding from the National Institutes of Health (NIH), and her work has been continuously supported by the NIH for more than 30 years. She has trained more than 80 pre- and postdoctoral fellows, clinical researchers, junior faculty, and international visiting scholars in her laboratory. Dr. Ho has been an SOT member since 2008.



## Education Award

**James E. Klaunig, PhD, ATS, IATP**

Indiana University, Bloomington, IN

*This award recognizes an individual who is distinguished by the teaching and training of toxicologists and who has made significant contributions to education in the broad field of toxicology.*

In addition to his scientific contributions to the understanding of the mechanisms of carcinogenesis, Dr. Klaunig has received the 2020 SOT Education Award for his excellence, breadth, and depth as a toxicology educator.

Dr. Klaunig received his bachelor of science in biology from Ursinus College and his PhD in pathology from the University of Maryland School of Medicine in 1980 under the mentorship of Benjamin F. Trump. After postdoctoral studies at the Medical College of Ohio, he joined the faculty, first as an Assistant Professor and later as an Associate Professor in the Departments of Pathology and Pharmacology. During this time, Dr. Klaunig instituted the PhD and master's program in toxicology, establishing the curriculum, recruiting students, and securing support.

In 1991, after a sabbatical at CIIT, Dr. Klaunig was recruited to Indiana University School of Medicine as Professor and Director of Toxicology. He revitalized the graduate program in toxicology first established by Robert B. Forney in the 1960s, in the Department of Pharmacology and Toxicology. In addition to teaching medical and graduate students in the Department of Pharmacology and Toxicology in the School of Medicine, Dr. Klaunig served as Associate Director of the IU Cancer Center. Concomitantly with his academic appointment, he served the state of Indiana as Director of the Department of Toxicology and State Toxicologist from 1991 to 2003, being responsible for the state's forensic toxicology program. In this role, he lectured and advised on toxicology-related issues to state officials, law enforcement, and the bar. These efforts earned him the Sagamore of the Wabash—the highest civilian honor in Indiana—from the Governor of Indiana for his service to the state.

In 2010, he was recruited to the Indiana University Bloomington campus to serve as the founding chair of the Department of Environmental Health in the newly formed School of Public Health. In this role, he also planned, initiated, and developed the PhD program in Environmental Health within the school, the first in the IU system.

During his decorated career, Dr. Klaunig has to date mentored 25 doctoral students, 23 master's students, and 27 postdoctoral fellows, and has served as a research advisor to more than 20 undergraduate students. Most of these students have remained in the toxicology or carcinogenesis disciplines. Dr. Klaunig received the IU Trustee's Teaching Award in 2005 in recognition of his distinction in education.

Dr. Klaunig joined SOT in 1985. In addition to membership in the Carcinogenesis; Mechanisms; Regulatory and Safety Evaluation; and Comparative Toxicology, Pathology, and Veterinary Specialty Sections, he is currently a member of the Endowment Fund Board. He has served as Treasurer of the Society as well as a member of the Nominating Committee and as President of the Carcinogenesis Specialty Section. Dr. Klaunig also is past member and Chair of the Education Committee. Further, he is a past recipient of the Kenneth P. DuBois Award from the Midwest Regional Chapter and the Ambassador Award from the Mid-Atlantic Regional Chapter. In addition to his service to SOT, Dr. Klaunig also is an elected Fellow in the Academy of Toxicology Sciences, the International Academy of Toxicologic Pathology, and the American Association for the Advancement of Science.





## Enhancement of Animal Welfare Award

**Kristie M. Sullivan, MPH**

Physicians Committee for Responsible Medicine, Washington, DC

*This award recognizes an SOT member for contributions made to the advancement of toxicological science through the development and application of methods that replace, refine, or reduce the need for experimental animals. This award recognizes outstanding/significant contributions made by SOT members to the scientifically sound and responsible use of animals in research. This award also serves to recognize member contributions to the public awareness of the importance of animals in toxicology research. The achievement recognized may be either a seminal piece of work or a long-term contribution to toxicological science and animal welfare.*

Ms. Sullivan has received the 2020 SOT Enhancement of Animal Welfare Award for her influence in advancing science and policy to reduce or replace the use of animals in testing without compromising public health.

Ms. Sullivan earned her master of public health in toxicology and public health genetics from the University of Michigan School of Public Health in 2003, after which she joined the Physicians Committee for Responsible Medicine as a research analyst. Then, as a Scientific and Policy Advisor and the Director of Regulatory Testing Issues, Ms. Sullivan collaborated with stakeholders both within and outside the United States to fund validation studies, hold training courses and seminars, organize workshops, and publish and present scientific and policy analyses on predictive toxicology.

In her current role as Vice President for Research Policy, Ms. Sullivan directs efforts to promote human-relevant alternatives to the use of animals in medical research; education; and testing of drugs, chemicals, and other products. She has formed collaborations between a wide range of public and private stakeholders, working to develop, evaluate, and implement new approach methodologies that do not use animals for endpoints including respiratory sensitization, endocrine disruption, and dermal absorption. She also has coordinated efforts to provide training opportunities to federal scientists on new approach methodologies and, where appropriate, their application in regulatory decision-making.

Further, Ms. Sullivan's work with the International Council on Animal Protection in OECD Programmes within the Organisation for Economic Co-operation and Development (OECD) contributed significantly to the international adoption of guidance documents and test guidelines for a variety of *in vitro* methods as well as the OECD QSAR Toolbox and the Adverse Outcome Pathway Programme.

Ms. Sullivan also served as a founding Board member for and manages the administrative activities of the American Society for Cellular and Computational Toxicology. This society provides a forum for discussion of the replacement of traditional animal models with new approaches for toxicological testing, promotes the development and implementation of computational and *in vitro* toxicology models, and supports early career scientists in these fields.

Ms. Sullivan has been an SOT member since 2007 and serves the Society by participating in Continuing Education courses as well as the *In Vitro* and Alternative Methods, Regulatory and Safety Evaluation, and Computational Toxicology Specialty Sections. Additionally, she is a member of the Michigan Regional Chapter and regularly presents her research during Platform and Poster Sessions at the SOT annual meetings.



## Founders Award (for Outstanding Leadership in Toxicology)

**Sidney Green, PhD, ATS**

Howard University College of Medicine, Washington, DC

*This award, sponsored by the SOT Endowment Fund, recognizes a Full, Emeritus, or Retired Full member who has demonstrated outstanding leadership in fostering the role of toxicological sciences in safety decision-making through the development and/or application of state-of-the-art approaches that elucidate, with a high degree of confidence, the distinctions for humans between safe and unsafe levels of exposures to chemical and physical agents.*

Through his more than 50 years as a practicing toxicologist, Dr. Green has made major contributions to academia, industry, and government for which he has earned the 2020 SOT Founders Award (for Outstanding Leadership in Toxicology).

Dr. Green joined the US Food and Drug Administration (US FDA) as a pharmacologist in 1965, after spending several years in industry. He received his PhD in biochemical pharmacology from Howard University in 1972. Through various roles at US FDA—most recently as Director of the Division of Toxicological Research—Dr. Green contributed to safety decision-making by ensuring appropriate research information was available to facilitate the development of regulatory guidelines used to establish safe versus unsafe exposure levels for chemical and physical agents that humans encounter daily. His efforts as the Agency's chief spokesperson in the area of alternative tests contributed significantly to the establishment of the Interagency Regulatory Alternatives Group, which set the stage for the Interagency Coordinating Committee on the Validation of Alternative Methods.

Dr. Green's contributions to safety decision-making continued through his role at the US Environmental Protection Agency (US EPA), where he served as Chief of the Toxic Effects Branch, Health Review Division, in the Office of Toxic Substances. In this role, he and other members of the branch represented US EPA on many Organisation for Economic Co-operation and Development (OECD) scientific panels responsible for developing toxicological guidelines for the testing of materials by OECD members. He also chaired the US EPA GeneTox Committee, the charge of which was to review the status of most of the methods used in genetic toxicology.

Joining Covance Inc. as Director of the Department of Toxicology in 1995, Dr. Green was charged with ensuring the appropriateness of studies in multispecies for generating data to support safety-of-use requirements for designated products as part of the premarket approval process. Then, in 1998, Dr. Green joined Howard University College of Medicine as an Adjunct Associate Professor of pharmacology, a position he continues to hold.

Dr. Green also served on the National Academy of Sciences Committee on Toxicity Testing. He was a member of the committee, the efforts of which resulted in the 2007 publication of *Toxicity Testing in the 21st Century: A Vision and a Strategy*, which has been instrumental in changing how toxicologists think about the approach to safety evaluation. In addition, Dr. Green has authored more than 70 publications, primarily on topics involving genetic toxicology, short-term test methodology, and policy issues associated with alternatives to animal testing.

Dr. Green has been actively involved in SOT since 1974 in appointed, elected, and volunteer capacities. His service includes positions on Council, as Chair of the Membership Committee, and as President of several Component Groups. In addition to service to SOT, Dr. Green is a Past President of the American College of Toxicology, Association of Government Toxicologists, and Academy of Toxicological Sciences.

## Global Senior Scholar Exchange Program

The Global Senior Scholar Exchange Program (GSSEP) aims to increase the global impact of toxicology on human health and safety by working to strengthen toxicology programs and capacity at universities in developing countries. GSSEP provides funding support for a senior-level scientist from a developing country to visit a senior-level scientist from an established toxicology program and vice versa.



Scholar: **Monday Michael Onakpa, DVM, PhD**  
University of Abuja, Abuja, Nigeria

Host: **Augustine Arukwe, DSc**

Norwegian University of Science and Technology (NTNU),  
Trondheim, Norway



Dr. Onakpa is an Associate Professor of pharmacology and toxicology at the University of Abuja in Nigeria. His areas of interest include toxicology, pharmacology, occupational health, and environmental health and safety.

The Department of Veterinary Pharmacology and Toxicology has eight academic staff members. All staff members hold PhDs in their respective areas of specialization, which include chemotherapy, toxicology, medicinal plants, and ethno-pharmacology. They would like to broaden their knowledge on modalities for strengthening the toxicology program in their department. This includes fine-tuning their toxicology curriculum, program structure, research designs, and methods.

Dr. Onakpa has collaborated with various professional societies and international research institutions. Knowledge gained from this exchange will improve laboratory procedures and modalities in graduate programs. It also will be used to encourage undergraduates to pursue graduate programs in toxicology and to conduct informational programs at secondary schools about the science and benefits of toxicology and criteria for becoming a toxicology researcher.



Scholar: **John Joseph Placheril, PhD**  
University of Rajasthan, Jaipur, India

Host: **J. Christopher States, PhD**

University of Louisville School of Medicine, Louisville, KY



Dr. Placheril is an Associate Professor and Head of the Department of Zoology at the University of Rajasthan in Jaipur, India. His areas of interest and specialization are environmental biology, toxicology, and zoology.

The Department of Zoology currently has 36 faculty members, 50 master's students, 70 doctoral students, and seven postdocs. Through the exchange, Dr. Placheril desires to fill gaps in the core toxicology curriculum within the department and beyond to strengthen the research infrastructure in the department to reach international standards.

Dr. Placheril has collaborated with various professional societies and international research institutions. Knowledge of this exchange also will improve animal cell culture techniques, including culture/subculture, maintenance of cell lines, cell proliferation and viability studies, cytotoxicity and genotoxicity studies, organ culture and suspension culture, flow cytometry techniques, and tissue engineering.



## Leading Edge in Basic Science Award

**Wen-Xing Ding, PhD**

University of Kansas Medical Center, Kansas City, KS

Leading Edge in Basic Science Award Lecture

Wednesday, March 18, 1:30 PM to 2:30 PM, CC Ballroom E

*This award recognizes a scientist who, based on research, has made a recent (within the last five years), seminal scientific contribution/advance to understanding fundamental mechanisms of toxicity. The recipient should be a respected basic scientist whose research findings are likely to have a pervasive impact on the field of toxicology.*

Dr. Ding has received the 2020 SOT Leading Edge in Basic Science Award for his recent contributions to advancing the fundamental understanding of liver toxicology and his breakthrough research on autophagy and mitophagy.

Dr. Ding received his PhD from the National University of Singapore in 2002. He then conducted his postdoctoral fellowship within the Department of Pathology at the University of Pittsburgh School of Medicine, where he quickly became a Research Associate and Research Assistant Professor. Dr. Ding joined the faculty at the University of Kansas Medical Center in 2009 as an Assistant Professor, rapidly achieving the rank of Professor in 2016. He currently serves as a tenured Professor in the Department of Pharmacology, Toxicology, and Therapeutics.

Dr. Ding's research has been continuously funded by the National Institutes of Health since his first year as faculty; he has received 17 grants throughout his career. His work has demonstrated that autophagy, and particularly mitophagy, is an endogenous protective mechanism against alcohol- and drug-induced liver injury. His research has evinced that autophagy is induced in many cases of hepatotoxicity and other forms of liver injury and that inhibition of autophagy is detrimental in those diseases. This research enforces the idea that enhancing autophagy may be a promising approach to treating acute liver injury and chronic liver and pancreatic disease. Lysosome, an important organelle, sits at the end step for autophagy, which is often impaired in drug-induced liver injury and chronic liver disease. More recent work from Ding's team uncovered a critical role of TFEB, a master regulator of lysosomal biogenesis, in drug- and alcohol-induced liver injury. Dr. Ding's work highlights the potential promise to target TFEB for treating drug-induced liver injury and alcoholic and non-alcoholic fatty liver diseases. Dr. Ding's research also involves the basic mechanisms of cell death in liver injury caused by drugs and other xenobiotics, and he has recently begun to engage with the understudied problem of alcohol-induced pancreatitis.

Extending his expertise to the next generation of scientists, Dr. Ding has mentored seven graduate students and four postdoctoral fellows, as well as seven undergraduate summer students, two high school summer students, one medical student, and five visiting scholars from outside the United States.

Dr. Ding's publication record encompasses over 150 highly cited peer-reviewed papers, including on fundamental studies on the basic mechanisms of autophagy. Seventy-nine of these pieces have been published in the past five years. Throughout his career, he has served as a member of 15 different Editorial Boards and currently serves as an Associate Editor for *Drug Metabolism and Toxicology* and *Autophagy*. He also was the co-editor of the 2017 book *Cell Death in Liver Disease*. A member of six scientific societies, including SOT, Dr. Ding frequently chairs sessions at scientific meetings and has served as an invited speaker more than 100 times. He has been a member of SOT since 2015.



## Merit Award

**Norbert E. Kaminski, PhD**

Michigan State University, East Lansing, MI

Merit Award Lecture

Monday, March 16, 3:00 PM to 4:00 PM, CC Ballroom A

*This award recognizes an SOT member who has made distinguished contributions to toxicology throughout an entire career in areas such as research, teaching, regulatory activities, consulting, and service to the Society.*

Dr. Kaminski has received the 2020 SOT Merit Award for his sustained and highly influential contributions to the discipline of toxicology.

After receiving his PhD in toxicology and physiology from North Carolina State University in 1985, Dr. Kaminski conducted his postdoctoral training at the Medical College of Virginia and then advanced first to Research Instructor and then to Assistant Professor. Thereafter, Dr. Kaminski took a position as an Assistant Professor at Michigan State University, where he currently serves as a Professor of Pharmacology and Toxicology. Dr. Kaminski also is the Director of the Institute for Integrative Toxicology (IIT) and the Center for Research on Ingredient Safety, both at Michigan State University.

Dr. Kaminski's research involves molecular mechanisms of immunotoxicology, particularly those by which cannabinoids alter immune competence; his laboratory discovered cannabinoid receptor expression within cells of the immune system. His work also involves investigating B cell development and differentiation and its impairment by halogenated hydrocarbons, and he has contributed greatly to the understanding of activation of lymphoid cells resulting in the upregulation of the aryl hydrocarbon receptor. Within the past decade, Dr. Kaminski has focused on developing functional, biochemical, and molecular assays employing primary human leukocytes to identify immune-modulating agents and the mechanisms by which they mediate their activity.

The Kaminski laboratory has been continuously funded for more than three decades through grants from the National Institutes of Health, US Environmental Protection Agency, and industry. Notably, in his role as IIT Director, Dr. Kaminski has coordinated research efforts across institutions to secure two successful competing renewals for the Superfund Research Program.

Dr. Kaminski has served as an advisor to numerous predoctoral, master's, and postdoctoral scholars, many of whom have been highly awarded—a testament to Dr. Kaminski's commitment and excellence in toxicology instruction. Dr. Kaminski also furthers toxicological understanding through regular speaking engagements as well as chairing Symposia and Workshops during scientific meetings.

In addition to his rich publication history—which includes approximately 150 hypothesis-driven peer-reviewed papers and 25 reviews or book chapters—Dr. Kaminski co-authored the chapter on “Toxic Responses of the Immune System” in the seventh, eighth, and ninth editions of *Casarett and Doull's Toxicology: The Basic Science of Poisons*, the leading text in toxicology graduate studies. He also has served on numerous journal Editorial Boards throughout his career, including his current role as a member of the Editorial Board of *Toxicology*.

Dr. Kaminski has been active within SOT since he joined the membership in 1983. He served as Treasurer from 2005 to 2007 and was the 2014–2015 SOT President. He is a past Chair of the Endowment Fund Board and Finance Committee and a current member of the Michigan Regional Chapter, Food Safety Specialty Section, and Immunotoxicology Specialty Section.

## SOT Welcomes Its Newest Honorary Member



**Laura E. Nagy, PhD,**

Cleveland Clinic Lerner College of Medicine, Case Western Reserve University, Cleveland, OH

Dr. Nagy is an internationally recognized leader in the field of alcohol-induced organ diseases. In particular, she has made significant contributions to the understanding of the role of the innate immune system in the progression of alcohol-associated liver diseases (AALD). She also has done pioneering work on alcohol's impact on adipose tissue and on the interaction between adipose tissue and the liver in the development of AALD. Her laboratory consistently produces new and unanticipated insights into mechanisms of alcohol damage to the liver by following unique avenues of research.

Dr. Nagy obtained her PhD in nutrition from the University of California Berkeley. She currently is a Professor of molecular medicine at Cleveland Clinic Lerner College of Medicine of Case Western Reserve University and a staff member in the Department of Inflammation and Immunity and the Department of Gastroenterology, Hepatology, and Nutrition at the Cleveland Clinic. In addition, she is an Adjunct Professor of nutrition at Case Western Reserve University.

Visit the [2020 awards web page](#) for more information.

## Perry J. Gehring Diversity Student Travel Award

*Selected by the Committee on Diversity Initiatives and named after an SOT Past President, this award recognizes an undergraduate or graduate student who was previously selected to participate in the SOT Undergraduate Diversity Program, who is from a racial/ethnic group underrepresented in toxicology (for example, African American, Hispanic, Native American, or Pacific Islander), and who is presenting a poster at the SOT Annual Meeting and ToxExpo.*



**Juliana Agudelo**

University of Rhode Island, Pawtucket, RI



ABSTRACT NUMBER: 4048

ABSTRACT TITLE: Low-Dose PFOS Exposure Alters the Placental Transcriptome in C57BL/6 Mice

## Honorable Mention

**Talia N. Seymore**

Pennsylvania State University, State College, PA



ABSTRACT NUMBER: 1218

ABSTRACT TITLE: Anti-TNF $\alpha$  Antibody Mitigates Sulfur Mustard-Induced Lung Injury in Rats



## SOT/SOT Endowment Fund/IUTOX Travel Awards

*These travel fellowships, administered by IUTOX and sponsored by SOT and the SOT Endowment Fund, are awarded to junior and senior scientists from countries where toxicology is underrepresented to assist with travel to attend the SOT Annual Meeting and ToxExpo.*



**Rozaini Abdullah, PhD**  
Universiti Putra Malaysia, Serdang, Malaysia



**Dania Bacardí Fernandez, MSc, PhD**  
Center for Genetic Engineering and Biotechnology, Havana, Cuba



**Rungnapa Boonpawa, PhD**  
Kasetsart University, Muang District, Thailand



**Sapana Kushwaha, PhD**  
Babasaheb Bhimrao Ambedkar University, Lucknow, India



**Janet Olugbodi, PhD**  
Bingham University, Karu, Nigeria



**Yared Beyene Yohannes, PhD**  
University of Gondar, Gondar, Ethiopia

## Toxicological Sciences Paper of the Year Award

*Selected by the SOT Board of Publications, this award recognizes the author(s) of a paper published in the official SOT journal, Toxicological Sciences, during the 12-month period terminating with the June issue of the calendar year preceding the Annual Meeting at which the award is presented.*



### **Comparative Analysis of Zebrafish and Planarian Model Systems for Developmental Neurotoxicity Screens Using an 87-Compound Library.**

D. Hagstrom, L. Truong, S. Zhang, R. Tanguay, and E.-M. S. Collins. *Toxicological Sciences*, Volume 167, Issue 1, January 2019, Pages 15–25.

[View abstract.](#)

There are ongoing efforts to devise new screening models to predict toxicity and potentially prioritize chemicals that might influence development. Hagstrom and colleagues compared two models that utilized aquatic species to examine developmental neurotoxicity by compounds in a chemical library. An interesting aspect of these models is that they span a spectrum of events associated with development, allowing for breadth of analyses and the relatively short period of time to observe effects. Results from these analyses demonstrated that the models provided a high degree of predictability based on examination of known developmental neurotoxicants. This work illustrates the effective utility and potential future application of a model that can be used for screening large chemical libraries to mechanistically evaluate potential developmental neurotoxicants. This well-written manuscript has made a significant positive impact to the field of toxicology. The Board of Publications proudly confers the Paper of the Year Award to Dr. Collins and her research team.

## Upcoming Award Announcements

### **Regional Chapter, Special Interest Group, and Specialty Section Awards**

Regional Chapters, Special Interest Groups, and Specialty Sections offer awards throughout the year. Visit the [SOT website](#) for full details. Recognition and presentation of these awards will occur during Regional Chapter, Special Interest Group, and Specialty Section meetings and receptions in Anaheim.

### **Outstanding Graduate Student Leadership Award**

The Outstanding Graduate Student Leadership Award recognizes student representatives who have contributed to the Society in a significant manner (i.e., above and beyond the normal, expected, basic service as a representative). Academic achievements are not considered for the award. Representative nominations and support letters should be submitted by February 1. The recipients will be honored during the Student/Postdoctoral Scholar Mixer on Sunday, March 15.



## Toxicologist Mentoring Award

**Ofelia A. Olivero, PhD, ATS**

National Cancer Institute, Rockville, MD

*This award recognizes an SOT member who has displayed a commitment to mentoring and whose advice and counsel have substantially enhanced the career development of toxicologists.*

In its inaugural year, the 2020 SOT Toxicologist Mentoring Award has been awarded to Dr. Olivero for her demonstrated and extensive commitment to mentoring researchers at various career levels and from diverse backgrounds.

Her outstanding scientific contributions have uniquely positioned Dr. Olivero to have a widespread influence in the lives and careers of young scientists, in both her professional and her volunteer capacities. Dr. Olivero is recognized for her protection of human health in the areas of HIV therapeutics, toxicology, and safety assessment. After receiving her PhD in cytogenetics in Argentina and serving as an Assistant Professor of Biology and Evolution at the Universidad Nacional de La Plata Facultad de Ciencias Naturales y Museo in La Plata, Argentina, Dr. Olivero conducted her postdoctoral training in carcinogenesis at the National Cancer Institute (NCI) within the National Institutes of Health. She then served as a Staff Scientist and Senior Staff Scientist at NCI, where she was the first to demonstrate the ability of antiretroviral drugs to bind the DNA of cultured cells and to interact with the genetic material of the fetuses of mice exposed *in utero*.

Dr. Olivero currently serves as Chief of the Intramural Diversity Workforce Branch of NCI. In this capacity, she implements strategies and initiatives to recruit and retain minority scientists at NCI. She has designed and runs two mentoring programs: the first, for postdoctoral trainees, is a 10-month training program in leadership, career development, mentoring, and soft skills; the second is an eight-month program designed to support staff scientists in finding career fulfillment.

In 2013, Dr. Olivero published a book entitled *Interdisciplinary Mentoring in Science: Strategies for Success*, which describes and instructs on team science and interdisciplinary mentoring. This text is a resource employed in many mentoring programs and has reached thousands of students. Dr. Olivero's mentees range from high school students, to postdoctoral fellows, to staff scientists, many of whom have gone on to have successful careers in the sciences owing largely to her personal and professional guidance.

Dr. Olivero's mentoring efforts are widespread and have been widely recognized. Dr. Olivero contributes her expertise to organizations such as the Association of Women in Science—which named her the 2013 Mentor of the Year—and the Society for the Advancement of Hispanics/Chicanos and Native Americans in Science—which presented her with the 2018 Distinguished Mentor Award. Dr. Olivero also chaired the Mentoring Program of the Environmental Mutagenesis and Genomics Society, as well as the Student Outreach Committee for the Genetic Toxicology Association.

An SOT member since 2004, Dr. Olivero currently chairs the Mentoring Task Force. She also is a Past President of the Hispanic Organization of Toxicologists Special Interest Group and a member of the Women in Toxicology Special Interest Group. She is a past Chair of the Committee on Diversity Initiatives and the co-founder of the SOT Mentoring Breakfast, which takes place during the SOT Annual Meeting and has matched over 300 mentees with mentors. Through Dr. Olivero's guidance and encouragement, several of her mentees have accepted leadership positions within the Society.



## Translational Impact Award

**David A. Jett, PhD**

NIH Countermeasures Against Chemical Threats (CounterACT) Program and  
National Institute of Neurological Disorders and Stroke, Bethesda, MD

*This award recognizes a scientist whose recent (within the last 10 years) outstanding clinical, environmental health, or translational research has improved human and/or public health in an area of toxicological concern.*

Dr. Jett has received the 2020 SOT Translational Impact Award for his translational research efforts to develop safer and more effective treatments for highly toxic agent exposure.

After earning his PhD in pharmacology and experimental therapeutics from the University of Maryland in 1992, Dr. Jett conducted his postdoctoral fellowship at the Johns Hopkins University, where he later joined the faculty and led a laboratory focused on organophosphorus pesticides. He then joined the National Institutes of Health (NIH) as a Program Director at the National Institute of Neurological Disorders and Stroke (NINDS), where he worked on programs to increase diversity in the neuroscience workforce and began the development of the NIH Countermeasures Against Chemical Threats (CounterACT) Program in response to a request from the White House Office of Science and Technology Policy.

Currently, Dr. Jett is the Director of the NIH CounterACT program and the Scientific Team Leader within the Division of Translational Research at NINDS, among other intergovernmental responsibilities related to chemical security and public health. Since the program's establishment in 2006, Dr. Jett and his team of NIH scientists have recruited more than 100 of the nation's top laboratories into the program, including senior investigators with diverse areas of expertise, including epilepsy, lung disease, toxicology, dermal toxicology, and ophthalmology. The basic and translational research generated by these scientists has resulted in over 1,400 publications in civilian peer-reviewed journals that have provided an unprecedented enrichment in the scientific knowledge base for chemical poisonings. Further, several products initially developed by CounterACT researchers are in the last stages of development, and many more are poised for advanced development in the near term. The recent approval of Seizalam, now on the market for treating nerve agent exposure, was largely due to a CounterACT-supported clinical trial that Dr. Jett helped organize with several federal agencies. The CounterACT program's success is owed in large part to Dr. Jett's "basic to translational" design of the program in its infancy. His efforts in establishing the program earned him and his team the prestigious NIH Director's Award in 2007.

In addition to his appointment as Professor Adjunct of Epidemiology and Public Health at Yale University, Dr. Jett contributes his expertise to the scientific community through serving on the *Neurotoxicology* Editorial Board and as a reviewer for many high-impact journals. He has served on state and federal advisory panels and is an active member of the International Neurotoxicology Association, New York Academy of Sciences, and American Society for Experimental Neurotherapeutics, as well as SOT, which he joined in 1993. Dr. Jett is a member of the SOT National Capital Area Regional Chapter, Neurotoxicology Specialty Section, and Clinical and Translational Toxicology Specialty Section.



## Bruce A. Fowler Undergraduate Educator Award

**Christine Perdan Curran, PhD**  
Northern Kentucky University, Highland Heights, KY



*This award, sponsored by the SOT Endowment, recognizes an SOT member who is distinguished by outstanding contributions to the teaching of undergraduate students in toxicology and toxicology-related areas and whose efforts support the Society's strategic efforts to "Build for the Future of Toxicology." In 2020, the award's name honors Bruce A. Fowler in recognition of his contributions to the SOT Endowment Fund and his attainment of Paracelsus Circle Visionary status.*

Dr. Curran has been awarded the 2020 SOT Undergraduate Educator Award for her excellence, creativity, and success in undergraduate instruction in toxicology and the sciences as a whole.

Dr. Curran received her BSJ from Ohio University. Then, as evidence of her devotedness to the field, she began instructing undergraduates even before she received her PhD in environmental health from the University of Cincinnati in 2007. Dr. Curran began her teaching career in 1992 as an Adjunct Instructor and later as an Adjunct Assistant Professor of biology at the University of Cincinnati. In 2008, she joined Northern Kentucky University as an Assistant Professor of biological sciences, where she continues to serve as a Professor of biological sciences and Director of the neuroscience program.

Dr. Curran has played a key role in the environmental science program at Northern Kentucky University, which not only has doubled in size but also has added a bachelor of arts program in addition to the original bachelor of science program since she began her career at the university. Specifically, she has developed a widely popular course in environmental toxicology that combines problem-based, team-based, and service learning to expose students to toxicology concepts and encourage them to apply such concepts to issues in the community. Further, Dr. Curran has integrated her toxicology training into her anatomy and physiology courses, which more than 200 students take each semester.

The Curran laboratory, which focuses on gene-environment interactions during brain development, is primarily composed of undergraduate students. At 90%, the average retention and graduation rate for Dr. Curran's students is double that of STEM students throughout the nation. Over the past decade, more than 75 undergraduates have trained under Dr. Curran, and during that time frame, her students have delivered 110 presentations—many of which received awards—during regional and national meetings. She also works toward facilitating success in the STEM fields for women, underrepresented minorities, and underserved populations through her involvement in both the Next-Generation Researchers Initiative working group of the National Institutes of Health and the Diversity, Equity, and Inclusion Task Force of the Federation of American Societies for Experimental Biology (FASEB).

Dr. Curran's exemplary scientific service includes her current role as President of the Society for Birth Defects Research and Prevention (formerly the Teratology Society) and participation on several Editorial Boards, including presently, as a member of the *Reproductive Toxicology* Editorial Board. She also is a FASEB Board Member.

Dr. Curran has been a champion of undergraduate education within SOT as well, including active involvement in the Undergraduate Educator Network. An SOT member since 2004, she not only has co-chaired the K-12 Education Subcommittee and the Undergraduate Education Subcommittee, but also has been making major contributions to the Ohio Valley Regional Chapter since she was a graduate student. In addition to serving as the chapter's first K-12 liaison, Dr. Curran also initiated the undergraduate poster awards and was the 2015–2016 Ohio Valley Regional Chapter President. Further, Dr. Curran is the inaugural Chair of the Faculty United for Undergraduate Recruitment and Education (FUTURE) Committee, formed in 2019 with the purpose of recruiting, retaining, training, and educating undergraduates with an interest in toxicology and preparing future generations for success in the field.



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

*The purpose of this award is to enhance graduate student research training using in vitro methods or alternative techniques to replace the use of animals in toxicological research.*



**Marco Franco, MS**, Baylor University, Waco, TX

PROJECT TITLE: Microfluidic Models for the Screening of Environmental Pollutants and Their Toxicological Effects in Aquatic Ecosystems

## Colgate-Palmolive Grant for Alternative Research

*This grant identifies and supports efforts that promote, develop, refine, or validate scientifically acceptable animal alternative methods to facilitate the safety assessment of new chemicals and formulations.*



**Lena Smirnova, PhD**, Johns Hopkins University Center for Alternatives to Animal Testing, Baltimore, MD

PROJECT TITLE: Automated Synaptogenesis Screening in *In Vitro* Human 3D BrainSphere Model to Assess Developmental Neurotoxicity



## Colgate-Palmolive Postdoctoral Fellowship Awards in *In Vitro* Toxicology

*These awards supports research to advance the development of alternatives to animal testing in toxicological research.*



**Souvarish Sarkar, PhD**, Brigham and Women's Hospital, Boston, MA

PROJECT TITLE: A Gene-Environment Multiplex System Identifies Novel Interactions among LRRK2, Rotenone, and  $\alpha$ -Synuclein

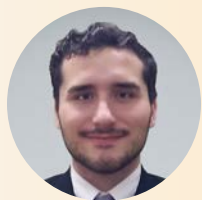
**Niyati Vachharajani, PhD**, UNC Eshelman School of Pharmacy, Chapel Hill, NC

PROJECT TITLE: A Quantitative *In Vitro* Approach to Assess the Impact of Human Hepatocyte-Derived Exosomes on Immune Response in Idiosyncratic Drug-Induced Liver Injury



## Pfizer SOT Undergraduate Student Travel Awards

*These awards recognize outstanding undergraduates who have not yet received their bachelor's degrees and are presenting research at the SOT Annual Meeting and ToxExpo. The goal of these awards is to foster interest in graduate studies in the field of toxicology. These awards are provided by Pfizer Inc. and SOT.*



**William Luke Acuff**, Mississippi State University, Mississippi State, MS

ABSTRACT NUMBER: 2655

ABSTRACT TITLE: Analysis of the Inhibitory Potency, Oxime-Mediated Reactivation Profile, and Binding Characteristics of Metabolites of Phorate

**Celeste K. Carberry**, University of North Carolina at Chapel Hill, Chapel Hill, NC

ABSTRACT NUMBER: 1806

ABSTRACT TITLE: Integrated Genomic, Epigenomic, and Exposomic Analysis of Placentas from Preeclamptic Patients Identifies Links to Acetaminophen and Placental Cellular Damage Signaling





**Jonathan M. Carnino**, Boston University, Boston, MA

ABSTRACT NUMBER: 1115

ABSTRACT TITLE: Effects of Ozone-Generated Microvesicles and MV-MiR-199a-3p on Inflammatory Lung Responses in Alveolar Macrophages

**Christopher Wayne Clark**, University of Massachusetts Amherst, Amherst, MA

ABSTRACT NUMBER: 1608

ABSTRACT TITLE: Assessing Gluthaione Utilization and Target Organs of Toxicity in a Complex PFAS Mixture



**Lucie Ford**, Salve Regina University, Newport, RI

ABSTRACT NUMBER: 1974

ABSTRACT TITLE: Time to Treatment after Plating Impacts PFAS Induction of Gene Expression in Cryopreserved Human Hepatocytes

INSTITUTION WHERE RESEARCH WAS CONDUCTED: University of Rhode Island.



**Munchelou M. Gomonit**, Sam Houston State University, Huntsville, TX

ABSTRACT NUMBER: 2643

ABSTRACT TITLE: *In Vitro* Degradation and *In Vivo* Biotransformation of Cyanide Antidote Candidate Dimethyl Trisulfide



**Natalie L. Johnson**, Oregon State University, Corvallis, OR

ABSTRACT NUMBER: 1959

ABSTRACT TITLE: Hepatocyte Aryl Hydrocarbon Receptor Is Required for Extracellular Matrix Degredation after Combined Carbon Tetrachloride and 2,3,7,8-Tetrachlorodibenzo-p-dioxin Exposure in Mice

INSTITUTION WHERE RESEARCH WAS CONDUCTED: University of Kansas Medical Center



**Dana Joseph**, Yale School of Medicine, West Haven, CT

ABSTRACT NUMBER: 1902

ABSTRACT TITLE: Endocrine Disruptors Exert Cell Type-Specific Effects on Endogenous Glucocorticoid Signaling





**Jordan Michele Lee**, Rutgers, The State University of New Jersey, Piscataway, NJ

ABSTRACT NUMBER: 1109

ABSTRACT TITLE: Valproic Acid Blunts Lung Injury, Oxidative Stress, Inflammation, and Altered Pulmonary Mechanics Induced by Inhaled Ozone

**Clayton Mansel**, William Jewell College, Liberty, MO

ABSTRACT NUMBER: 1462

ABSTRACT TITLE: Lead Exposure Alters the Neurogenic Potential of Pluripotent Stem Cells



**Macarena Martín Mayor**, King University, Bristol, TN

ABSTRACT NUMBER: 2259

ABSTRACT TITLE: Effects of Nonnutritive Artificial Sweeteners on Lipid and Insulin Metabolism in the Model Organism *Caenorhabditis elegans*

**Dylan McBee**, Texas A&M University, College Station, TX

ABSTRACT NUMBER: 1600

ABSTRACT TITLE: Targeting Nrf2 through Lactational Transfer of Sulforaphane—Implications for Respiratory Virus Severity in a Neonatal Mouse Model



**Joseph P. McGaunn**, University of Massachusetts Amherst, Amherst, MA

ABSTRACT NUMBER: 1637

ABSTRACT TITLE: The Role of the mTOR Pathway in Developmental Programming of Liver Lipid Metabolism and by 2,2',4,4'-Tetrabromodiphenyl Ether (BDE-47)

**Nam D. Nguyen**, University of Utah, Salt Lake City, UT

ABSTRACT NUMBER: 1124

ABSTRACT TITLE: Transient Receptor Potential Vanilloid-3 (TRPV3) and Ankyrin-1 (TRPA1) Regulate Wood Smoke PM<sub>2.5</sub>-Induced Endoplasmic Reticulum Stress and Cytotoxicity in Lung Epithelial Cells





**Kelly Jane Rivenbark**, King University, Bristol, TN

ABSTRACT NUMBER: 1888

ABSTRACT TITLE: Bisphenol A and Bisphenol F Exposure Alters Brood Size and Decreases Food Availability for Wild-Type *Caenorhabditis elegans*

**Andrés D. Rivera Ruiz**, Universidad Ana G. Méndez Gurabo, Gurabo, PR

ABSTRACT NUMBER: 2736

ABSTRACT TITLE: Understanding the Relationship between the Aryl Hydrocarbon Receptor (AhR) and the Translocator Protein (TSPO) in Regulating Mitochondrial Function in Mouse Lung Epithelial Cells

INSTITUTION WHERE RESEARCH WAS CONDUCTED: Michigan State University



**Jessica R. Schlabbach**, Western Kentucky University, Bowling Green, KY

ABSTRACT NUMBER: 2727

ABSTRACT TITLE: The Impact of Structural Modification of Oxaliplatin on Cell Survival

**Emily Severance**, University of Massachusetts Amherst, Amherst, MA

ABSTRACT NUMBER: 2539

ABSTRACT TITLE: Glutathione Depletion and Nrf2 Activation Underlie PFOS Toxicity in Human Kidney Cells



**Saren Smith**, College of St. Scholastica, Duluth, MN

ABSTRACT NUMBER: 1927

ABSTRACT TITLE: The Role of Bromodomain and Extra-Terminal (BET) Proteins on APAP-Induced Hepatotoxicity

INSTITUTION WHERE RESEARCH WAS CONDUCTED: University of Connecticut

**Emily L. Strand**, Oberlin College and Conservatory, Oberlin, OH

ABSTRACT NUMBER: 3037

ABSTRACT TITLE: Disease-Toxicant Screen Reveals a Neuroprotective Interaction between Mutations in Alpha-Synuclein Implicated in Multiple System Atrophy (MSA) and Acute Exposure to Endosulfan



**Menna Y. Teffera**, University of Massachusetts Amherst, Amherst, MA

ABSTRACT NUMBER: 1635

ABSTRACT TITLE: The Intergenerational Metabolic and Behavioral Effects of Paternal Phthalate Exposure

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

*This award, presented to either a third-year (or later) graduate student or a postdoctoral trainee, supports mode-of-action research aimed at characterizing dose-dependent effects of xenobiotics on mammalian systems in such a way that the causal sequence of key events underlying toxicity is elucidated.*



**Kumari Itishree Kaushik, MS**, Texas Tech University Health Sciences Center, Abilene, TX

PROJECT TITLE: Moxidectin: A Promising Candidate for the Management of Pediatric Medulloblastoma



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**ENDOWMENT**  
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## Mary Amdur Student Award Fund



**Jacklyn Kelty, BS,**  
University of California Davis

## Andersen/Clewell Trainee Award Fund



**Wei-Chun Chou, PhD,**  
Institute of Computational  
Comparative Medicine at  
Kansas State University

## Boehringer Ingelheim Biotherapeutic Safety Excellence Fund



**Ekram Chowdhury, MSc,**  
Texas Tech University  
Health Sciences Center



## Edward W. Carney Trainee Award Fund



**Catheryne Chiang, BS,**  
University of Illinois  
at Urbana-Champaign



**Isabelle Lee, BS,**  
University of Pennsylvania



**Subham Dasgupta, PhD,**  
University of California Riverside

## Celebrating Women in Toxicology Award Fund



**Rita-Josiane Gouesse, MS,**  
INRS-Institut Armand-Frappier,  
Canada



**Saniya Rattan, PhD,**  
University of Illinois  
at Urbana-Champaign



**Lauren Lewis, BS,**  
Texas A&M University

**Brittany Rickard, MS,**  
University of the Sciences in  
Philadelphia



## Young Soo Choi Student Scholarship Award Fund



**Ji-Eun Seo, PhD,**  
US FDA/NCTR



**Dahea (Diana) You,**  
PharmD, PhD,  
NIEHS/NTP

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



**Navatha Alugubelly, MS,**  
Mississippi State University

## Diversity Initiatives Fund



**Dalia Arredondo,**  
University of St. Thomas



**Yanelli Nunez, MA,**  
Columbia University

## John Doull Student Award Fund



**Rance Nault, PhD,**  
Michigan State University

## Founders Award (for Outstanding Leadership in Toxicology)



**Lois D. Lehman-McKeeman, PhD, ATS,**  
Bristol-Myers Squibb Company

## Bruce A. Fowler Metals Endowment Fund



**Somshuvra Mukhopadhyay, MD, PhD,**  
University of Texas at Austin

## Donald E. Gardner Inhalation Toxicology Education Award Fund



**Andres Henriquez, PhD,**  
US EPA/Oak Ridge Institute for  
Science and Education

## Perry J. Gehring Biological Modeling Student Award Fund



**Axelle Marchand, MS,**  
Université de Montréal

## Perry J. Gehring Diversity Student Travel Award Fund



**Jessica A. Jimenez, BA,**  
University of North Carolina  
at Chapel Hill

## Perry J. Gehring Risk Assessment Student Award Fund



**Miao Li, PhD,**  
Kansas State University



**Axelle Marchand, MS,**  
Université de Montréal

## Health and Environmental Science Institute Immunotoxicology Young Investigator Student Award Fund



**Yining Jin, PhD,**  
Michigan State University

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



**Elana Elkin, MPH,**  
University of Michigan



**Jessica Murray, BS,**  
University of Pennsylvania

## Frank C. Lu Food Safety Student Award Fund



**Jeremy Gingrich, BS,**  
Michigan State University

## Jean Lu Student Scholarship Award Fund



**Jun Zhou, MS,**  
University of Georgia

## Roger O. McClellan Student Award Fund



**Sireesha Manne, DVM,**  
Iowa State University

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



**Sireesha Manne, DVM,**  
Iowa State University



**Sharavan  
Ramachandran, MS,**  
Texas Tech University  
Health Sciences Center

## Metals Specialty Section Student Research Award Fund



**Damaris Albores-Garcia, PhD,**  
Florida International  
University



**Sireesha Manne, DVM,**  
Iowa State University

**Ana Paula Ferragut  
Cardoso, PhD,**  
University of Louisville



**Jiqun Wang, PhD,**  
University of Louisville



**Travis Conley, BA,**  
University of California  
Santa Cruz



**Xian Wu, PhD,**  
NIEHS

## Molecular and Systems Biology Student Award Fund



**Tara Catron, PhD,**  
BASF Corporation



**Ryan Mote, MBA,**  
University of Georgia

**Matthew Wyatt Cole, BA,**  
Kenyon College



**Kari Neier, MPH,**  
University of Michigan



## Sheldon D. Murphy Memorial Fund



**Elizabeth Corteselli,** MSPH,  
University of North Carolina  
at Chapel Hill



**Archit Rastogi,** BTech,  
University of Massachusetts  
Amherst

**Ludwick J. Gorczyca,** BA,  
Rutgers, The State University of  
New Jersey



**Argel Islas Robles,** BS,  
University of Arizona

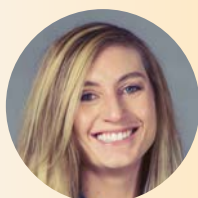


**Tiffanie Hargraves,** BS,  
University of Arizona

## Toshio Narahashi Neurotoxicology Fellowship Award Fund



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



**Carolyn Klocke,** PhD,  
University of California Davis

**Aseel Eid,** PhD,  
Florida International University



**Shreesh Sammi,** PhD,  
Purdue University



**Eduardo Gonzalez,** BS,  
University of California Davis



**Cherish Taylor,** BA,  
University of Texas at Austin

**Hendrik Greve,** BS,  
Indiana University  
School of Medicine



**Morgan Thomas,** BA,  
Oberlin College





## Pacific Northwest Toxicology Development Fund



**Tarana Arman, MS,**  
Washington State University



**Rebekah Petroff, PhD,**  
University of Washington

**Brynne Coulam,**  
Boise State University



**Courtney Roper, PhD,**  
Oregon State University



**Josi Herron, BA,**  
University of Washington



**David Scoville, PhD,**  
University of Washington

**Celine Huynh,**  
Oregon State University



**Prathana Shankar, BS,**  
Oregon State University



**Sarah Kobernat, BA,**  
Boise State University



**Shivakumar  
Veereabhadraiah, MS,**  
Boise State University

**Michael-Andres Man, BS,**  
Oregon State University



## Emil A. Pfitzer Drug Discovery Student Award Fund



**Paige Glumac, MS,**  
University of Minnesota



**Lutz Mueller, PhD,**  
F. Hoffmann-La Roche Ltd,  
Switzerland

**Monica Langley, PhD,**  
Mayo Clinic



**Souvarish Sarkar, PhD,**  
Harvard Medical School



**Lauren Lewis, BS,**  
Texas A&M University

## Gabriel L. Plaa Education Award Fund



**Matthew Dodson, PhD,**  
University of Arizona



**Asmita Pant, PhD,**  
Michigan State University

**Aseel Eid, PhD,**  
Florida International University



## Regulatory and Safety Evaluation Student Award Fund



**Sarah Burnett, BS,**  
Texas A&M University



**Wei-Chun Chou, PhD,**  
Kansas State University

**Yi-Hsien Cheng, PhD,**  
Kansas State University



**Sarah Faure, MS,**  
Health Canada



## Renal Toxicology Fellowship Award Fund



**Tarana Arman, MS,**  
Washington State University



**Yu-Syuan Luo, PhD,**  
Texas A&M University

**Yu-Wei Chang, PhD,**  
Texas Tech University  
Health Sciences Center



## Robert J. Rubin Student Travel Award Fund



**Robert Freeborn, BS,**  
Michigan State University

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



**Manushree Bharadwaj**, DVM, PhD,  
US FDA



**Bharat Bhushan**, PhD,  
University of Pittsburgh

## Dharm V. Singh Carcinogenesis Award Fund



**Keshav Karki**, MS,  
Texas A&M University



**Sharavan Ramachandran**, MS,  
Texas Tech University  
Health Sciences Center

**Sumira Phatak**, BS,  
Utah State University



**Sreedhar Reddy Suthe**,  
BPharm,  
Texas Tech University  
Health Sciences Center



## Carl C. Smith Mechanisms Student Award Fund



**Robert Freeborn**, BS,  
Michigan State University



**Jessica Murray**, BS,  
University of Pennsylvania

**Kelly Hanson**, MS,  
University of Rochester  
Medical Center



## SOT/SOT Endowment Fund/IUTOX Travel Awards



**Flavia Abe, PhD,**  
Universidade de São Paulo



**Mary Gulumian, PhD,**  
National Institute for Occupational  
Health, South Africa

**Maria Alcala, PhD,**  
Universidad de Cartagena,  
Colombia



**Weeraya Karnpanit, PhD,**  
Mahidol University, Thailand



**Karina Caballero-  
Gallardo, PhD,**  
Universidad de Cartagena,  
Colombia

## Ronald G. Thurman Student Travel Award Fund



**Jephthe Akakpo, MS,**  
University of Kansas  
Medical Center



**Monika Roy, MSPH,**  
University of Massachusetts  
Amherst

## Toxicologists of African Origin Endowment Fund



**Ahmed Abdelmoneim,**  
DVM, PhD,  
Cornell University



**Alexandra Noel, PhD,**  
Louisiana State University

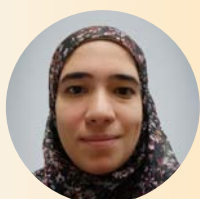
**Olushola Awoyemi,**  
PhD,  
Texas Tech University



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



**Diana Kimono, MS,**  
University of South Carolina



**Ola Wasel, MS, MPH,**  
Purdue University

## Toxikon, a Preclinical Toxicology Organization, and Dr. Dharm Singh Association of Scientists of Indian Origin Award Fund



**Rashmi  
Rajashekaraiah, PhD,**  
Veterinary College, India



**Nitin Verma, PhD,**  
Baddi University, India

## Daniel and Patricia Acosta Undergraduate Educator Award



**Wade H. Powell, PhD,**  
Kenyon College