

## **2022 RASS Student/Postdoc Award Winners**

### **John Doull Risk Assessment Endowment Award**

Kruuttika Satbhai, Advisor: Jordan Crago

Texas Tech University, Lubbock, TX

Comparative Toxicokinetics and Toxicity of PFOA and Its Replacement GenX in the Early Stages of Zebrafish

Chao Ji, Advisor: Kan Shao

Indiana University, Bloomington, IN

Bayesian Benchmark Dose Estimation with BBMD: Inference from Genomic Data

### **Perry J. Gehring Best Postdoctoral Fellow Abstract Award**

Anna Kreutz, Advisor: Barbara Wetmore

US EPA Center for Computational Toxicology and Exposure, Research Triangle Park, NC

*In Vitro* to *In Vivo* Extrapolation (IVIVE) for Neurodevelopment: Toxicokinetics and *In Vitro* Point of Departure Evaluation of Putative Developmental Neurotoxicants

Bevin Blake, Advisor: Xabier Arzuaga

US EPA Center for Public Health and Environmental Assessment, Research Triangle Park, NC

Synthesis of Mechanistic Evidence for Male Reproductive Toxicity of Benzo[a]pyrene Using the Key Characteristics Approach in Concert with the Mode of Action Framework

### **Perry J. Gehring Best Graduate Student Abstract Award**

Alexandra Cordova, Advisor: Ivan Rusyn

Texas A&M University, College Station, TX

Dosing Methods to Enable Cell-based *In Vitro* Testing of Complex Environmental Samples and UVCB Substances

Rachel Lacroix, Advisor: Deborah Kurrasch

University of Calgary, Calgary, AB, Canada

Impaired Development of Social and Locomotor Behaviours in Zebrafish Exposed to Glyphosate during Primary Neurogenesis

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

Danielle Kozlosky, Advisor: Lauren Aleksunes

Rutgers University, Piscataway, NJ

In Utero Cadmium Exposure Disrupts Development of the Placental Vasculature Leading to Growth Restriction in Male Offspring

### **Andersen Clewell Trainee Award**

Long Yuan, Advisor: Zhoumeng Lin

University of Florida, Gainesville, FL

Development and Application of a Web-based Interactive Physiologically Based Pharmacokinetic (iPBPK) Model for Meloxicam in Broiler Chickens and Laying Hens

(Honorable Mention) Anna Kreutz, Advisor: Barbara Wetmore

US EPA Center for Computational Toxicology and Exposure, Research Triangle Park, NC

*In Vitro* to *In Vivo* Extrapolation (IVIVE) for Neurodevelopment: Toxicokinetics and *In Vitro* Point of Departure Evaluation of Putative Developmental Neurotoxicants

(Honorable Mention) Qiran Chen, Advisor: Zhoumeng Lin

University of Florida, Gainesville, FL

Integration of Toxicogenomics and Physiologically Based Pharmacokinetic (PBPK) Modeling in Human Health Risk Assessment of Perfluorooctane Sulfonate (PFOS)

### **2021 Best Abstract Award Winners**

#### **Best Abstract**

Pharmacokinetic (PK) Models for Chemical Risk Assessment of Perfluorooctanoic Acid (PFOA) and Perfluorooctanesulfonic Acid (PFOS)

M. W. Dzierlenga, T. Zurlinden, P. Schlosser, B. Jacobs, and V. Morozov

US EPA, Research Triangle Park, NC

#### **Remaining Top 10 Best Abstracts**

Risk Assessment by Combined Three-Dimensional Human Cardiac Microtissues and Pharmacokinetic Modeling

M. C. Daley<sup>1</sup>, M. Moreau<sup>2</sup>, J. Fisher<sup>2</sup>, U. Mende<sup>3</sup>, B. Choi<sup>3</sup>, P. McMullen<sup>2</sup>, and K. Coulombe<sup>1</sup>

<sup>1</sup>Brown University, Providence, RI, <sup>2</sup>ScitoVation, Research Triangle Park, NC, and <sup>3</sup>Rhode Island Hospital and Warren Alpert Medical School of Brown University, Providence, RI

An Integrated Approach for Testing Developmental and Reproductive Toxicity (DART) Endpoints for Next-Generation Risk Assessment (NGRA)

I. Muller<sup>1</sup>, M. Baltazar<sup>1</sup>, E. Barrett<sup>1</sup>, D. Basili<sup>1</sup>, L. Flatt<sup>2</sup>, M. Dent<sup>1</sup>, G. Hendriks<sup>2</sup>, J. Houghton<sup>1</sup>, A. Jamalpoor<sup>2</sup>, K. Predrag<sup>1</sup>, H. Li<sup>1</sup>, A. Middleton<sup>1</sup>, T. Osterlund<sup>2</sup>, R. Rajagopal<sup>1</sup>, A. White<sup>1</sup>, and P. Carmichael<sup>1</sup>

<sup>1</sup>Unilever, Bedford, United Kingdom and <sup>2</sup>Toxys, Leiden, Netherlands

Risk Assessment of Organic Impurities Detected in Hand Sanitizers Marketed to Children during the COVID-19 Pandemic

J. S. Kozal<sup>1</sup>, M. J. Vincent<sup>2</sup>, L. E. Gloekler<sup>3</sup>, E. J. de Gandiaga<sup>3</sup>, A. Massarsky<sup>3</sup>, R. E. Zisook<sup>1</sup>, N. R. Binczewski<sup>3</sup>, K. E. Gibbs<sup>3</sup>, S. H. Gaffney<sup>1</sup>, and G. S. Dotson<sup>2</sup>

Cardno ChemRisk, <sup>1</sup>San Francisco, CA, <sup>2</sup>Cincinnati, OH, and <sup>3</sup>Aliso Viejo, CA

Evaluation of Tumor Markers and Immune Parameters among Chicken Husbandry, Grape Orchard, and Rose Greenhouse Workers

A. Maharjan<sup>1</sup>, R. Gautam<sup>1</sup>, J. Jo<sup>1</sup>, M. Acharya<sup>1</sup>, D. Lee<sup>1</sup>, H. Son<sup>1</sup>, S. Seo<sup>1</sup>, C. Kim<sup>1</sup>, Y. Heo<sup>1</sup>, and H. Kim<sup>2</sup>

<sup>1</sup>Daegu Catholic University, Gyeongsan, Republic of Korea and <sup>2</sup>Catholic University of Korea, Seoul, Republic of Korea

Estimation of No-Observed-Adverse-Effect Level (NOAEL) by Read-Across for Large Inventories of Structurally Related Chemicals and Metabolites

J. Rathman<sup>1,2</sup>, C. Yang<sup>1</sup>, J. V. Ribeiro<sup>1</sup>, A. Mostrag<sup>1</sup>, T. Magdziarz<sup>3</sup>, and B. Hobocienski<sup>1</sup>

<sup>1</sup>MN-AM, Columbus, OH, <sup>2</sup>Ohio State University, Columbus, OH, and <sup>3</sup>MN-AM, Nuremberg, Germany

Addressing Inter-Individual Variabilities in Human Exposure and Toxicological Susceptibility in Environmental Risk and Impact Assessments

L. Li and D. Li

University of Nevada, Reno, NV

Lack of Reproductive and Developmental Toxicity for AT-527, an Oral Purine Nucleotide Prodrug for COVID-19 Infection

S. Luo, S. S. Good, A. Moussa, and J. P. Sommadossi

Atea Pharmaceuticals, Boston, MA

3D InSight Liver Microtissues as Promising Preclinical Safety Assessment In Vitro Tools: Mechanistic Investigation of Aflatoxin B1 Toxicity in Dog, Rat, and Human 3D InSight Liver Microtissues

B. Filippi, F. Wenz, D. Busler, R. Kostadinova, K. Sanchez, and A. Wolf

InSphero, Brunswick, ME

Device Type, Nicotine, and E-liquid Flavors Determine the Extent of E-cigarette-Induced Pulmonary Oxidative Stress in Mice

A. R. Ramalingam<sup>1</sup>, C. Kucera<sup>1,2</sup>, A. L. Hodges<sup>1,2</sup>, G. A. Shirk<sup>1</sup>, A. Bhatnagar<sup>2</sup>, and A. P. Carll<sup>1,2</sup>

<sup>1</sup>University of Louisville School of Medicine, Louisville, KY and <sup>2</sup>American Heart Association Tobacco Regulation and Addiction Center, Louisville, KY

## **2021 Best Published Paper Award Winners**

### **Best Published Paper in the Application of Risk Assessment**

Chou WC, Lin Z. Development of a Gestational and Lactational Physiologically Based Pharmacokinetic (PBPK) Model for Perfluorooctane Sulfonate (PFOS) in Rats and Humans and Its Implications in the Derivation of Health-Based Toxicity Values. Environ Health Perspect. 2021 Mar;129(3):37004. doi: [10.1289/EHP7671](https://doi.org/10.1289/EHP7671). PMID: 33730865.

### **Best Published Paper Advancing the Science of Risk Assessment**

Boberg J, Bredsdorff L, Petersen A, Löbl N, Jensen BH, Vinggaard AM, Nielsen E. Chemical Mixture Calculator - A novel tool for mixture risk assessment. Food Chem Toxicol. 2021 Jun;152:112167. doi: [10.1016/j.fct.2021.112167](https://doi.org/10.1016/j.fct.2021.112167). PMID: 33823229.