



AACT NEWSLETTER – Spring 2022

Message from the President

In 2005, the American Chinese Toxicology Society (ACTS, established in 1984) and the American Chinese Society of Toxicology (ACSOT, est. 1995; previously named as Society of Chinese Scholars and Students of Toxicology in America, SCSSTA, 1990-1994) were combined to form a new organization, the American Association of Chinese in Toxicology (AACT). During the 44th SOT Annual meeting (New Orleans, LA in 2005), AACT organized its first Annual Meeting and Reception. Since 2007, AACT has become an SOT Special Interest Group (SIG), and in 2008, the AACT website was merged with the SOT website. AACT's Mission is to foster interactions among Chinese toxicologists by exchanging information in education, technology, employment, or business opportunities, to facilitate collaborative activities in toxicology-related research or projects between Chinese scientists or organization in the U.S. and abroad, and to promote the participation of scientists of any ethnical background who share the same common interests in toxicology and related fields. AACT currently has 228 members (2021-2022), and all members are from academia, industry, and government. AACT members share the vision: creating an organization that connects scientists with Chinese ethnic background in the toxicology (and related fields) and bridges the toxicological sciences between the Eastern and the Western world.

To reach its goals, AACT is actively assist SOT's global engagement. For example, we translated some of the journal material into Chinese when the Editor-in-Chief of *Toxicological Sciences* visited [China](#). AACT organizes several activities during the year, such as nomination for the toxicologists of Chinese origin for SOT awards, webinars on cutting-edge toxicology topics, AACT Mentor-Mentee program, regional membership forum and outreach activities, publication of the AACT newsletters, and networking via the social media platform – WeChat. AACT also honors and recognizes its members who have made significant contributions to the toxicology field. The AACT gives four category awards at the annual meeting each year, including Best Abstract Award of AACT (est. 2005; currently supported by Innostar from 2018, three winners/year) to support students for their presentations at the SOT annual meeting, Distinguished Chinese Toxicologist Award of AACT (est. 2006; currently supported by West China-Frontier PhamaTech from 2022, one winner/year) to honor an established toxicologist of Chinese ethnic origin, Jean Lu Student Scholarship Award of AACT (est. 2009, giving its first recipient in 2010; two winners/year) to provide the scholarship to Chinese students who is interested in graduate toxicology training, and Outstanding Young Toxicologist Award of AACT (est. 2021 and first awarded in 2022; supported by Joinn Biomere, two winners/year) to honor the young toxicologists in the early stage of their career. For more information, please visit the AACT website

<https://www.toxicology.org/groups/sig/aact/criteria.asp>. In the future, AACT may add another award, Best Publication Award, for the PhD students and postdoctoral fellows.

Please encourage your colleagues and students to [join](#) the AACT if they have Chinese background and/or ethnicity. AACT dues are \$15/year for full members. For SOT student/postdocs members, it is free for the first SIG membership. Membership in the national SOT is not required to be a member of the AACT. Please explore (<https://www.toxicology.org/groups/sig/aact/index.asp>).

(Note: *this article was drafted for [Asian American and Pacific Islander Heritage Month - May](#)*)



During the 30th SOT annual meeting (February 25 – March 1, 1991)



AACT Student Representative at 2022 SOT annual meeting

AACT Activities 2021-2022

AACT Session in ASIATOX-IX

Title:

COVID-19 vaccines and therapeutics: from industry to regulatory perspectives

Chairs:

Nan Mei, Yongbin Zhang

ASIATOX Hangzhou 2021

ASIATOX 2021

The 9th International Congress of ASIATOX
The 8th CST Youth Forum of Science & Technology
第九届亚洲毒理学大会
暨中国毒理学会第八次中青年科技论坛

October 20-23, 2021 Hangzhou · China / Virtual



BNT162b2 mRNA vaccine efficacy 100% in Adolescents (12-15yr)

Vaccine Efficacy - 100%

Table 3. Vaccine Efficacy against Covid-19 in Participants 12 to 15 Years of Age.*

Efficacy End Point†	BNT162b2		Placebo		% Vaccine Efficacy (95% CI)‡
	No. of Participants with Event/Total No.‡	Surveillance Time (No. at Risk)§	No. of Participants with Event/Total No.‡	Surveillance Time (No. at Risk)§	
Covid-19 occurrence at least 7 days after dose 2 in participants without evidence of previous infection	0/1005	0.154 (1001)	14/978	0.147 (972)	100 (75.3–100)
Covid-19 occurrence at least 7 days after dose 2 in participants with or without evidence of previous infection	0/1119	0.170 (1109)	18/1110	0.163 (1094)	100 (78.3–100)

Local Events after 2 dose: Redness, Swelling, Pain at Injection Site

Systemic Events after 2 dose: Fever, Fatigue, Headache, Chills, Vomiting, Diarrhea, Muscle Pain, Joint Pain, Antipyretic Use

Robert W. Frenck et al. N Engl J Med 2021; 385(3): 239-250.

- The introduction of SOT and AACT (Yongbin Zhang, AACT)
- Overview of non-clinical safety assessment for antiviral drugs development (Hanan Ghantous, FDA/CDER)
- Non-clinical safety assessment for preventative vaccines development (Nabil Al-Humadi, FDA/CBER)
- Rapid development of REGN-COV2, an anti-spike antibody cocktail for treatment and prevention of COVID-19 (Matt Y. Liu, AACT)
- Development of mRNA COVID-19 vaccine BNT162b2 in China (Aimin Hui, FosunPharma)

2022 SOT Achievement Award

To promote the recognition of accomplished toxicologists of Chinese origin, AACT has nominated several distinguished scholars in the past for the SOT awards. AACT has submitted nomination packages in 2019 (three), 2020 (one), and 2021(one). One of the previous AACT nominations won the SOT Achievement Award in 2022.



Dr. Yue Cui

Associate Professor
Department of Environmental &
Occupational Health Sciences,
University of Washington

2022 SOT Achievement Award

AACT Board would like to encourage all toxicologists in Chinese origin to be forthright and proactive in recognizing yourself or your colleagues' accomplishment!

Distinguished Chinese Toxicologist Award

2020 Winner



Lu Cai, MD, PhD
Professor,
School of Medicine
University of Louisville
Louisville, USA

2021 Winner



Ke Jian Liu, PhD
Professor
College of Pharmacy
University of New Mexico
Albuquerque, USA



2022 AACT Award Recipients

The AACT Awards Committee is pleased to announce the winners of the 2022 AACT Awards: Distinguished Chinese Toxicologist Award, Outstanding Young Toxicologist Award, Jean Lu Student Scholarship Award, and Best Abstract Awards. All awards were presented during the 61st SOT Annual Meeting held in San Diego, CA on March 27–31, 2022.

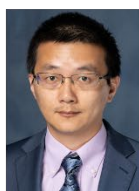
West China-Frontier PhamaTech Distinguished Chinese Toxicologist Award of AACT



Menghang Xia, PhD

National Center for Advancing Translational Sciences (NIH/NCATS)

JOINN Biomere Outstanding Young Toxicologist Award of AACT



Zhoumeng Lin, PhD

University of Florida



Kan Shao, PhD

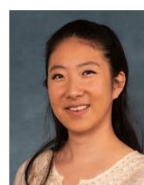
Indiana University

Jean Lu Student Scholarship Award of AACT



Karen Chiu

University of Illinois Urbana-Champaign



Hannah S. Xu

University of Georgia

InnonStar Best Abstract Award of AACT



1st Place

Zimu Wei

Michigan State University



2nd Place

Li Xia

Purdue University



3rd Place

Chao Ji

Indiana University

Dr. Menghang Xia of the National Center for Advancing Translational Sciences (NIH/NCATS) is the recipient of the 2022 Distinguished Chinese Toxicologist Award. The AACT award recognizes established toxicologist of Chinese ethnic origin who contributed significantly to the science of toxicology and is exemplary in his/her professional life. As a group leader, Dr. Xia played a key role in the Tox21 program and successfully screened 10K compound collection against more than 90 assays in a quantitative high throughput screening (qHTS) platform. Dr. Xia also initiated a Tox21 cross-partner project to identify acetylcholinesterase (AChE) inhibitors that significantly impact environmental safety.

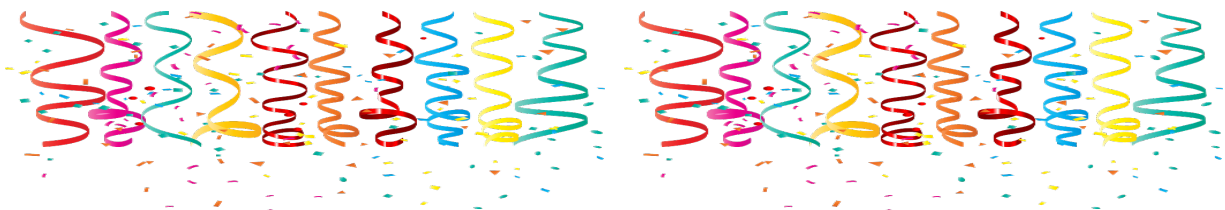
Dr. Zhoumeng Lin of the University of Florida and Dr. Kan Shao of Indiana University are the recipients of the 2022 JOINN Biomere Outstanding Young Toxicologist Award. This Award

recognizes outstanding scientists who have made significant contributions to the toxicology field in the early stage of their career. Dr. Lin developed and applied computational technologies to address research questions related to nanotoxicology, environmental chemical toxicity, animal-derived food safety and human health risk assessment. Dr. Shao developed innovative statistical and computational modeling approaches to facilitate toxicity evaluation and promoted the application of advanced dose-response modeling in chemical risk assessment.

Ms. Karen Chiu of University of Illinois Urbana-Champaign and Ms. Hannah S. Xu of University of Georgia are the recipients of the 2022 Jean Lu Student Scholarship Award. This Award was established with an initial generous gift from Dr. Frank C. Lu in memory of his wife, Jean Lu, and recognizes graduate student who has demonstrated academic achievement in the field of toxicology. Ms. Chiu's graduate study focuses on how exposure to the environmental phthalate, DiNP, affects the gut microbiome and inflammatory processes in the colon. Her novel findings are that DiNP causes a shift in the bacterial populations within the colon and that a short exposure leads to significant inflammation in the colon of mice with increased infiltration of immune cells, increases in expression of several cytokines, and alterations in steroid metabolites. Ms. Xu has been working on how nanocellulose ingestion alters the gut microbiota and how these changes affect the immune system and diseases such as diabetes, Alzheimer, and depression. She has made significant progress and her results may provide the food industry, policy makers, and consumers vital information on the beneficiary or/and toxicological effects of dietary nanocellulose.

Ms. Zimu Wei of Michigan State University, Ms. Li Xia of Purdue University, and Ms. Chao Ji of Indiana University are the 1st, 2nd, and 3rd place recipients of the 2022 AACT and InnoStar Best Abstract Awards, respectively. Ms. Wei focuses on investigating mechanisms linking the blood coagulation cascade to acute liver injury and repair after acetaminophen overdose. She discovered that fibrin polymerization was an essential determinant of a shift in fibrin to the insoluble protein fraction in the acetaminophen-injured liver. Ms. Xia investigated mechanisms of susceptibility to nanoparticle (NP) exposures using biocorona (BC) to mimic disease conditions, such as metabolic syndrome (MetS). She found that the formation of distinct NP-BCs occurred following inhalation of particles in MetS, which might contribute to exacerbated inflammatory effects and susceptibility. Ms. Ji developed a web-based toxicogenomic analysis module that was incorporated in their previously developed Bayesian BMD (BBMD) system to quantitatively address uncertainty from data inputs and model estimates. Her results demonstrated that BBMD represented a unique, robust, and user-friendly alternative for genomic dose-response data analysis with outstanding functionalities to quantify uncertainty from various sources.

Congratulations!

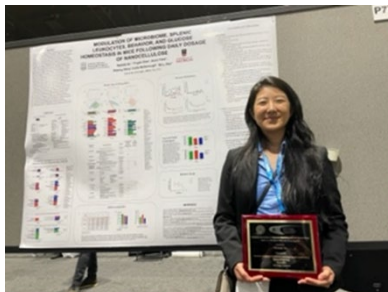


SOT 2022 Annual Meeting

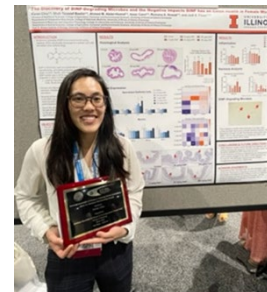
SOT 2022 Annual Meeting, San Diego, Mar 27th - 31st



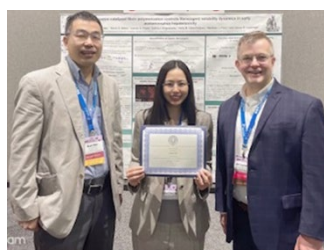
Dr. Shao Kan: Joinn Biomere Outstanding Young Toxicologist Award of AACT



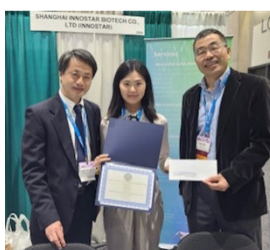
Hannah Xu: Jean Lu Student Scholarship Award of AACT



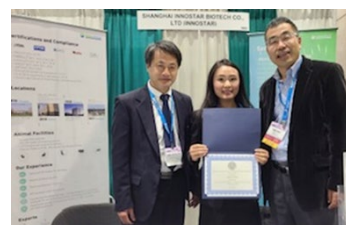
Karen Chiu: Jean Lu Student Scholarship Award of AACT



Zimu Wei: InnoStar Best Abstract Award of AACT – First Place



Li Xia: InnoStar Best Abstract Award of AACT – Second Place



Chao Ji: InnoStar Best Abstract Award of AACT – Third Place



Shengjie Xu: 2021 Jean Lu Student Scholarship Award



Qian Lin: 2021 Best Abstract Award



Wei-Chun Chou: 2021 Best Abstract Award

American Association of Chinese in Toxicology - AACT Business Meeting

Date: Thursday, April 28, 2022

Time: 8:00 PM- 9:30 PM EDT



AACT Officers

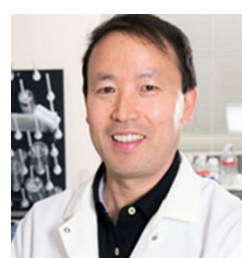
	2021-2022	2022-2023
President:	Nan Mei	Xi Yang
President-Elect:	Xi Yang	Kan Shao
Secretary:	Xiaoqing Guo	Dongying Li
Treasurer:	Quanshun Zhang	Xiefan Fang
Immediate Past President:	Yongbin Zhang	Nan Mei
Councilor:	Dongying Li	Xiaoling (Sharlene) Dai
Councilor:	Xiefan Fang	Zhenquan Jia
Postdoc Representative:	Hao Chen	Jie (Daniel) Luo
Student Representative:	Shengjie Xu	Yunqi An

2022-2023 New officers

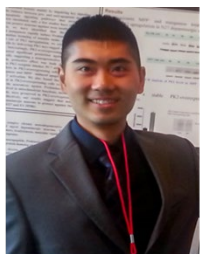
President-Elect
Kan Shao, PhD
Indiana University School of Public Health



Councilor
Xiaoling (Sharlene) Dai, PhD
Abbott Laboratories



Councilor
Zhenquan Jia, PhD
University of North Carolina



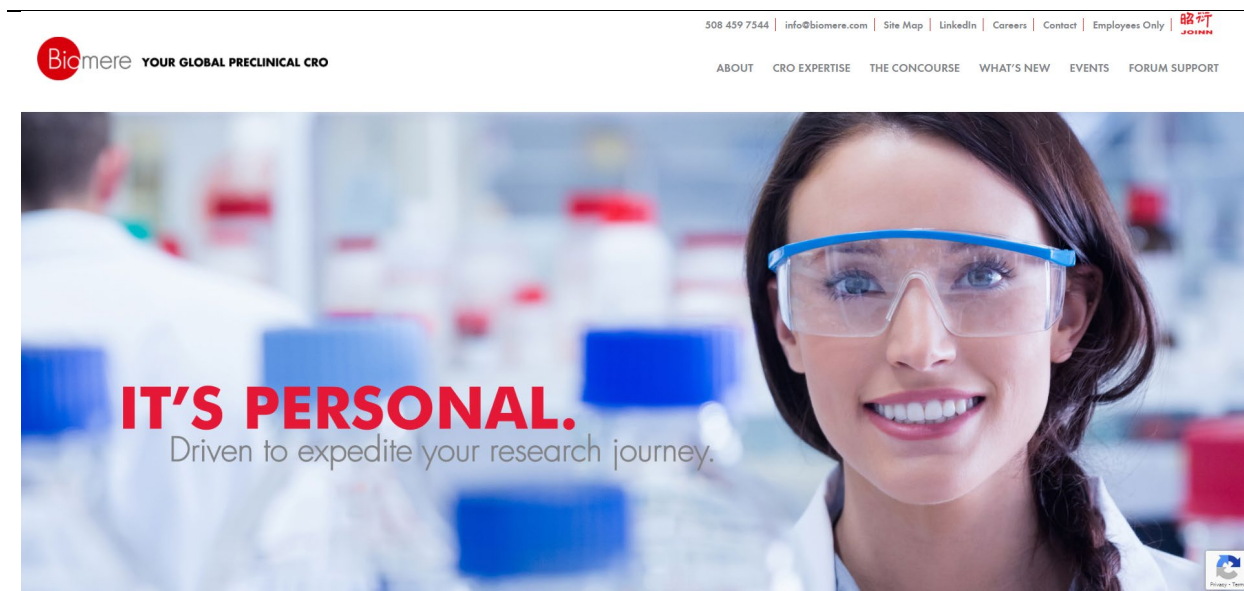
Postdoc Representative
Jie (Daniel) Luo, PhD
Duke University



Student Representative
Yunqi An, MSc
Rutgers, The State University of New Jersey

2022 Sponsors

Gold Sponsor



The screenshot shows the top of the Biomere website. The header includes the Biomere logo with the tagline "YOUR GLOBAL PRECLINICAL CRO" and a navigation menu with links for "ABOUT", "CRO EXPERTISE", "THE CONCOURSE", "WHAT'S NEW", "EVENTS", and "FORUM SUPPORT". A secondary navigation bar contains contact information: "508 459 7544 | info@biomere.com | Site Map | LinkedIn | Careers | Contact | Employees Only" and a Chinese character logo. The main banner features a smiling female scientist in a lab coat and safety goggles, with the text "IT'S PERSONAL. Driven to expedite your research journey." and a small "Privacy - Terms" icon in the bottom right corner.

Note: this image is from Sponsor's presentation at the AACT Annual Business Meeting.

Gold Sponsor



InnoStar Biotech

New Drug Safety Evaluation and Research



Note: this image is from Sponsor's presentation at the AACT Annual Business Meeting.

Gold Sponsor



Note: this image is from Sponsor's presentation at the AACT Annual Business Meeting.

Bronze Sponsor



Important Dates for Future SOT Event



Important Dates and Deadlines

Session Proposal Submissions
May 16, 2022

Registration and Housing Open
August 1, 2022

Award Nominations and Applications
October 9, 2022

Abstract Submissions
December 1, 2022