

ANNUAL REPORT: 2020-2021
May 1, 2020, to April 30, 2021

I. Officers/Committees:

<u>Officers</u>	<u>2020-2021</u>	<u>2021-2022</u>
President:	Anup Ramachandran, PhD	Pallavi B. Limaye, PhD, DABT
President-Elect/Vice President:	Pallavi B. Limaye, PhD, DABT	Vacant
Secretary-Treasurer:	Michele Pritchard, PhD	Michele Pritchard, PhD
Past President:	James Sacco, PhD	Anup Ramachandran, PhD
Councilors:	Iván L. Csanaky, MD, PhD, DABT	Iván L. Csanaky, MD, PhD, DABT Rodrigo Franco Cruz, PhD
PDA Representative:	N/A	Kendra L. Clark, PhD
Grad Student Representative:	David Umbaugh, MS	David Umbaugh, MS

Committees: None

II. 2020 Membership total: 66

III. Key Outcomes in 2020-2021:

A. CSSOT Regional Chapter Annual Meeting, University of Kansas Medical Center

Meeting overview. Fifty participants attended the virtual Central States Regional Chapter of the Society of Toxicology (CSSOT) annual meeting on October 15–16th, 2020. The University of Kansas Medical Center in Kansas City, KS hosted the meeting virtually while SOT provided WebEx as our virtual meeting platform and technical support. The meeting themes were, in part, inspired by the SARS-CoV-2 pandemic: **vaccine toxicology** and **respiratory toxicology**. We had two keynote lectures. On Thursday, October 15, the talk was given by Drs. Alan Stokes (GlaxoSmithKline) and Lisa Plitnik (Merck & Co, Inc.) on ‘History and Risk Assessment of Vaccines: A Practical Perspective from an Immunologist and Toxicologist.’ On Friday, October 16, Dr. Alvin Singh (Children’s Mercy Kansas City) gave a talk on ‘Vaping and its Implications.’ Aside from these excellent keynote lectures, we had nine short platform presentations (15 minutes each) selected from abstracts submitted by trainees and 21 poster flash talks (5 min each), including all remaining abstracts submitted by trainees. Overall, despite the virtual format, we received positive feedback from several attendees and thus considered the annual meeting a success.

Awards administered:

1. John Doull Award. One CSSOT member was nominated for the 2020 John Doull Award, which was presented to Udayan Apte, PhD, DABT (*University of Kansas Medical Center, Kansas City, KS*).

2. Dr. Partha Kasturi Memorial Undergraduate Research Award. This year, we established a new award to honor the late Dr. Partha Kasturi to recognize scientific research achievements in toxicology at the undergraduate level. The award totaled \$100 and was sponsored by CSSOT. This award also came with a personalized certificate mailed to the awardee.

3. Short platform presentation awards. Three graduate student awards and one postdoctoral fellow award were given recognizing the top short platform presentations at the CSSOT RC annual meeting. These were sponsored by MRIGlobal and were \$100 each. Each award came with a personalized certificate mailed to the awardee.

4. Poster flash-talk presentation awards. Three graduate student and one postdoctoral fellow awards were given recognizing the top poster flash talk presentations at the CSSOT RC annual meeting. These were sponsored by Sekisui-XenoTech and were \$100 each. Each award came with a personalized certificate mailed to the awardee.

Meeting agenda:

Virtual Central States Regional Chapter of the Society of Toxicology Annual Meeting
October 15th and 16th, 2020

Thursday, October 15, 2020

8:30 AM – 8:40 AM	Welcome remarks Dr. Anup Ramachandran, University of Kansas Medical Center Dr. Hartmut Jaeschke, Chair Department of Pharmacology, Toxicology, and Therapeutics University of Kansas Medical Center
8:40 AM – 9:20 AM	Keynote Lecture Dr. Alan Stokes, GlaxoSmithKline, and Dr. Lisa Plitnick, Merck & Co, Inc. <i>History and Risk Assessment of Vaccines: A Practical Perspective from an Immunologist and a Toxicologist.</i>
9:20 AM – 9:30 AM	Discussion
9:30 AM – 9:35 AM	Break
9:35 AM – 10:35 AM	Short platform presentations, selected from abstracts
9:35 AM – 9:50 AM	Olamide Adelusi, graduate student, University of Kansas Medical Center <i>The role of ferroptosis in acetaminophen induced hepatotoxicity</i>
9:50 AM – 10:05 AM	Brianna Cagle, graduate student, University of Iowa <i>The impact of environmental organochlorines on the disruption of dopamine homeostasis – implications in neurological conditions</i>
10:05 AM – 10:20 AM	Xiaojuan Chao, graduate student, University of Kansas Medical Center <i>Chronic plus acute binge alcohol induces steatohepatitis and fibrosis in mice with hepatic deficiency of tuberous sclerosis 1</i>
10:20 AM – 10:35 AM	Rachel Crawford, graduate student, University of Iowa <i>Dopamine and its metabolites inhibit glutathione S-transferase</i>
10:35 AM – 10:50 AM	Neenah Huang, graduate student, Iowa State University

Mitochondrial dysfunction induces epigenetic dysregulation by H3K27 hyperacetylation to perturb active Enhancers in Parkinson's disease models

10:50 AM – 11:00 AM

Break

11:00 AM – 12:00 PM

Flash Talk Poster Session I

12:00 PM

Meeting adjourned

Friday, October 16, 2020

8:30 AM – 8:35 AM

Remarks

Dr. Anup Ramachandran, University of Kansas Medical Center

Keynote Lecture

8:35 AM – 9:15 AM

Dr. Alvin Singh, Children's Mercy Kansas City

Vaping and its implications

9:15 AM – 9:25 AM

Discussion

9:25 AM – 9:35 AM

Break

9:35 AM – 10:35 AM

Short platform presentations, selected from abstracts

9:35 AM – 9:50 AM

Xueshu Li, postdoctoral fellow, University of Iowa

The gut microbiome affects the disposition of polychlorinated biphenyls in mice

9:50 AM – 10:05 AM

Moses New-Aaron, graduate student, University of Nebraska Medical Center

Alcohol-induced TFEB dysregulation leads to hepatotoxicity in HIV-exposed hepatocytes

10:05 AM – 10:20 AM

Nga Nguyen, graduate student, University of Kansas Medical Center

Macrophages regulate liver recovery through induction of chemokine receptor CXCR2 on hepatocytes after acetaminophen overdose in mice

10:20 AM – 10:35 AM

Nathanial Parizek, graduate student, University of Iowa

Maternal and offspring pulmonary responses to perinatal inhalation of cadmium sulfide engineered nanomaterials

10:35 AM – 10:45 AM

Break

10:45 AM – 11:45 AM

Flash Talk Poster Session II

11:45 AM – 11:55 AM

Break

11:55 AM – 12:40 PM

John Doull Award presentation and talk

CSSOT 2020 Recipient – Udayan Apte, Ph.D., DABT

University of Kansas Medical Center
Developing human-relevant toxicity evaluation framework for persistent organic pollutants: Perfluorinated chemicals as a case study

- 12:40 PM – 1:15 PM Undergraduate, graduate, and postdoctoral trainee awards
(Announcing the inaugural Dr. Partha Kasturi Memorial Undergraduate Research Award (Society of Toxicology, Central States Regional Chapter))
- 1:15 PM Meeting adjourned

CSSOT RC Regional Chapter Annual Meeting Budget

Venue (virtual by SOT via WebEx): \$0

Catering: \$0

Trainee (undergraduate and graduate students, postdoctoral fellow) awards: \$900

Speakers: \$0

IV. Activities:

- A. 2021 SOT Virtual Annual Meeting Activities (e.g., courses, scientific sessions, or virtual receptions):
Several CSSOT members attended the meeting virtually.

- B. Fall 2020 CSSOT Annual Meeting Awards Information:

Graduate Students

1st place short platform presentation – Xiaojuan Chao (University of Kansas Medical Center) (tie)

1st place short platform presentation – Nga Nguyen (University of Kansas Medical Center) (tie)

2nd place short platform presentation – Nathaniel Parizek (University of Iowa)

Graduate Students

1st place poster flash talk – David Umbaugh, MS (University of Kansas Medical Center)

2nd place poster flash talk – Derek Simonsen (University of Iowa)

3rd place poster flash talk – Benjamin Elser (University of Iowa)

Postdoctoral Fellow Awards

1st place – Srinivas Chava, Ph.D. (University of Nebraska Medical Center)

2nd Place – Madan Arumugam, Ph.D. (University of Nebraska Medical Center)

Dr. Partha Kasturi Memorial Undergraduate Research Award

Deanna Mosley (University of Nebraska Medical Center)

- C. Other Educational Activities Conducted (e.g., webinars, in-person meetings): Due to the SARS-CoV-2 pandemic, in-person meetings could not be held. Two keynote webinars were included in the annual meeting.

- D. Communication Activities:

1. Newsletter publication frequency: None
 2. New or Significant Announcements/blogs: CSSOT RC meeting announcement, Call for John Doull Award nominee announcement, Dr. Partha Kasturi Memorial Undergraduate Research Award announcement.
 3. Highlight of Website enhancements: We updated the CSSOT website for overall accuracy, additional information and have added a new tab with job listings from regional chapter universities and companies.
- E. Mentoring activities: Judges for the CSSOT Regional Chapter annual meeting provided constructive feedback to each trainee they evaluated. This information was sent to each presenter after the meeting.
- F. Activities supporting undergraduate students: CSSOT established a new award to honor the late Dr. Partha Kasturi (University of Kansas Medical Center) which recognizes scientific research achievement in toxicology at the undergraduate level.

V. Feedback and Ideas:

- A. In what ways is your group fostering and maintaining an inclusive environment?

CSSOT has reached out to regional scientists (academia and industry) in Kansas, Missouri, Iowa and Nebraska encouraging them to become members of the SOT and CSSOT and to get them interested in leadership opportunities.

- B. How might SOT better support your group's activities (perhaps something the Society should be doing that we currently do not do, or do not do effectively, that would be of importance/benefit to the members of your component group?):

Note: If funding is listed, please provide detail on the membership need that the funding would support.

Recruiting members. We would like to increase membership in the CSSOT. Would it be possible to automatically assign SOT members to their regional chapters when they become SOT members or when they renew their memberships? This way, regional chapters can grow membership and engage SOT members who live in the territory of each chapter. This would include emeritus and retired members, who do not pay membership fees otherwise.

Virtual meeting support. We appreciate the support we received from the SOT to conduct the last CSSOT annual meeting virtually through Webex. It would be immensely helpful if support could be extended to include other capabilities, such as breakout rooms, whiteboard, etc., during future virtual conferences.

- C. What is one thing that the Society is currently doing that impacts your component group that should be changed (e.g., stopped, modified, etc.)?

Inability to reach our membership directly. It is challenging to communicate with our members without having access to email addresses. Moreover, contacting the membership exclusively via regional chapter liaisons through ToXchange has added to this problem. The changes to ToXchange requiring members to sign in before seeing messages have only amplified these issues. In general, these changes to ToXchange have made communication to our membership

inefficient and burdensome. These issues are exemplified in our significant challenge and efforts to identify nominees for leadership positions within our regional chapter, leaving us with little recourse in engaging our community of researchers.

Website revisions. If at all possible, we would appreciate it if modernization of the CSSOT website could occur before 2022.

- D. What changes does your component group anticipate making in the way in which it operates in the coming year?

After the CSSOT Annual Meeting, we intend to send out a post-meeting survey for feedback on what aspects of the program worked well vs. those that did not work so well so that we can improve the meeting in subsequent years.