

Central States Regional Chapter

**ANNUAL REPORT: 2019-2020**

May 1, 2019 to April 30, 2020

**I. Officers/Committees:**

<u>Officers</u>	<u>2019-2020</u>	<u>2020-2021</u>
President:	James Sacco	Anup Ramachandran
President-Elect:	Partha Kasturi	Pallavi Limaye
Vice President-Elect:	Anup Ramachandran	
Secretary-Treasurer:	Zhoumeng Lin	Michele Pritchard
Past President	T. Annelise Nguyen	James Sacco
Councilors:		Ivan Csanaky
Postdoctoral Representative:	Jie Luo	
Graduate Student Representative:	Nazmin Akter Eti	David Umbaugh
Committees:	None	

**II. 2019 Membership total: 62**

**III. Key Outcomes in 2019-2020:**

CSSOT RC annual meeting, Drake University

One-hundred and seven participants attended the Central States Regional Chapter of the Society of Toxicology (CSSOT) annual meeting on September 26-27<sup>th</sup>, 2019, at Drake University in Des Moines, IA. The theme of the meeting was “Undergraduate Education in Toxicology”, and the keynote talks were entitled “Applying Vision and Change to your Undergraduate Toxicology Course: Tips for Using the Undergraduate Toxicology Learning Framework” by Dr. Joshua Gray, and “Poisoning the Curriculum (with good reason!): Novel Approaches to Spreading and Embedding Toxicology Concepts in Undergraduate Science Courses”, by Dr. Christine Curran. In compliance with the theme of the meeting, a series of undergraduate sessions were held in parallel to the main program on the afternoon of September 27<sup>th</sup>. Funding to defray travel expenses was available for undergraduate and graduate students.

Four members were nominated for the 2019 John Doull Award, which was presented to Dr. Annelise Nguyen, PhD. Nine poster and podium awards (\$100 per award) were given to postdoctoral fellows, graduate and undergraduate students in recognition of their outstanding research.

Meeting Agenda

Thursday, September 26, 2019

**Location: Levitt Hall, Old Main, Second Floor**

5:00-6:00 PM            Registration Desk  
6:00-9:00              Dinner, Social, Icebreakers

Friday, September 27, 2019

**Location: Olmsted Center, Second Floor**

8:00-9:00 AM	Registration Continental breakfast Poster set-up Officers' Business Meeting	
9:00-9:05	Introduction by Dr. James Sacco, President CSSOT	
9:05-9:15	Welcome by Dr. Sue J. Mattison, Provost, Drake University	
9:15-9:50	Dr. Joshua Gray U.S. Coast Guard Academy Title: <i>Applying Vision and Change to Your Undergraduate Toxicology Course: Tips for Using the Undergraduate Toxicology Learning Framework</i>	
9:50-10:00	Discussion	
10:00-10:35	Dr. Christine Curran Northern Kentucky University Title: <i>Poisoning the Curriculum (with good reason!): Novel Approaches to Spreading and Embedding Toxicology Concepts in Undergraduate Science Courses</i>	
10:35-10:45	Discussion	
10:45-11:00	Break	
11:00-11:35	Dr. Deborah Christensen Drake University Title: <i>Transgenerational Effects of Endocrine Disruptors: Does Drinking Out of a Plastic Bottle Really Matter?</i>	
11:35-11:45	Discussion	
11:45-1:45 PM	Lunch and networking Poster presentations	
	<b>OFFICIAL SESSION</b>	<b>UNDERGRADUATE BREAKOUT SESSION – HI 135 (1.00-3.00 pm)</b>
1.15-1.45	Poster presentations	<b>1.00-1.30 Dr. Nguyen "Introduction to Toxicology"</b>
1:45-2:30	Oral Postdoctoral presentations	<b>1.30-2.15 Dr. Gray "Opioids"</b>
2:30-3:00	Oral Grad student presentations	<b>2.15-3.00 Dr. Curran "The Strange Case of Jennifer Strange"</b>
3:00-3:15	Break	
4:00-4:45	John Doull Award Lecture	
4:45-5:00	Undergraduate, graduate and postdoctoral awards	
5:00	Meeting adjourned	

## CSSOT RC Annual Meeting Budget

Venue (Drake University):	\$ 1101
Catering:	\$ 4395
Student travel awards:	\$ 900
Speakers:	\$ 1063

Keynote speaker and graduate student travel expenses were completely covered by an SOT Regional Chapter Strategic Initiative Funding Grant. This grant also contributed \$2000 towards the meeting expenses. An additional \$500 was made available via the FUTURE undergraduate education grant.

We also had an additional \$2750 available towards the expenses of this meeting through the kind sponsorship of MRI Global and an anonymous corporate donor. Name tags, award certificates, and the meeting booklet were sponsored by the College of Pharmacy and Health Sciences, Drake University.

At the end of the meeting, the incoming President, Dr. Anup Ramachandran, announced that the next CSSOT meeting would be held at UKMC in Kansas City, in the Fall of 2020.

### IV. Activities:

A. 2020 SOT Annual Meeting Virtual Activities (e.g. courses, scientific sessions, or virtual receptions): None

B. 2019 CSSOT Awards Information:

Postdoctoral category

Podium – Sireesha Manne

Poster – Dongsuk Kim

Graduate student category

Podium – Yinwen Cheng, Hui Wang

Poster – Tasnim Al-Rashaideh, Nazmin Aktar Eti, Nathaniel Parizek

Undergraduate student category

Poster – Breanna Moore, Haley Miller

Haley Miller, an undergraduate student from Drake University won a 2019-2020 Regional Chapter Communications and Collaboration Committee (RC4) Undergraduate Travel Award for her project entitled: “Perfluoroalkyl carboxylic acids are substrates of the bile acid transporter NTCP”.

C. Other Educational Activities Conducted (e.g. webinars, in person meetings, etc.):

D. Communication Activities:

1. Newsletter publication frequency: None
2. Key Announcements/blogs: CSSOT RC meeting announcement, Call for John Doull award nominee announcement
3. Website highlights: None

E. Regional Chapter activities supporting undergraduate students:

In compliance with the theme of the RC annual meeting, a series of undergraduate sessions were held in parallel to the main program on the afternoon of September 27. There were 11 college undergraduate

students (from Drake University and Kansas State University) and 30 high school students from the Greater Des Moines metro area. Six undergraduate students presented posters at the meeting, and two were presented with awards for best poster presentation. To encourage participation, registration for the meeting was free for these students.

#### Summary of student feedback collected.

The undergraduate college and high school students filled out an online exit survey using the SOT FUTURE form. When reading these results, it is important to note that half the high school students (~15 students) attended the morning poster session while the other half attended the breakout sessions later in the afternoon.

A summary of the results (n=29) is given below:-

The overall meeting was found to be 'valuable' or 'very valuable' to 38% and 48% respectively of the respondents. 58% of the students found the undergraduate presenters to be valuable or very valuable – it is possible that the number would be higher as 12 students reported this question as 'not applicable', perhaps indicating some confusion on its meaning. The student poster session was also reported to be valuable or very valuable by the majority of the students (83%). In fact a significant number of the replies to the question "What did you like best about the meeting?" commented on the interactivenss and research information provided for by the poster session

As a result of participation in the CSSOT 2019 meeting, students were more likely to visit the SOT website. They are also more interested to apply for an internship in a toxicology lab or seek information about toxicology graduate programs. This is encouraging news in view of the fact that, prior to the meeting, 59% had no direct experience in, or were exposed to toxicology. Interestingly, almost 40% of the respondents are interested in careers in medicine, with 5% and 3% being interested in future careers in graduate school and pharmacy respectively. Since the majority of students who attended the CSSOT meeting are still in high school it is to be expected that 28 out of 29 respondents replied that they have not yet applied to graduate school.

Student replies to "What did you like best about the meeting?" (pertaining to the undergraduate breakout sessions) :-

- I liked the time I was able to spend learning about the effects of opiates on the brain
- The most interesting part was when we looked at the brain receptors and how they reacted to opioids, we also talked about tolerance that one can build for a drug, but we also learned how the tolerance to a drug can go away.
- I really liked the presentation about toxicology and drugs and the strange case of Jennifer Strange.
- I loved learning about the strange case of Jennifer strange. I also loved the undergrad talks they were very interesting
- I really enjoyed the undergraduate breakout session.
- I enjoyed the undergraduate breakout session specifically the opioid presentation.

Some of the students gave helpful suggestions for enhancing the experiences of undergraduates at future meetings. These included having more teaching sessions, and having more professionals describing their personal experiences with toxicology. The meeting worked best for those high school students that were able to attend the afternoon undergraduate breakout sessions.

The undergraduate educators noted a strong participation in the active learning sessions conducted during the breakout sessions. The high school students in particular were deeply engaged and asked insightful questions that demonstrated a genuine interest for the toxicology topics that were being covered. After the sessions were over, one of the undergraduate students asked Dr. Sacco whether "Drake University offered a Toxicology Minor". Another relevant comment from the student exit survey was "I really enjoyed the 3

keynote speakers at the beginning. I think you had a nice balance of toxicology and education based presentations. I think all three speakers did a really wonderful job”.

The students also sent the organizer of the event a thank-you card which delineated their appreciation regarding the opportunities they were given to look into potential careers and to learn about what toxicology is.

F. Mentoring activities:

The faculty mentors in attendance at CSSOT were Dr. James Sacco (Drake University), Dr. Thu Annelise Nguyen (Kansas State University), and Dr. Holly Showalter (Waukee High Schools District – Apex Innovation Center).

V. **Feedback and Ideas:**

- A. 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.*

Increased funding support for the annual regional chapter meeting.

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

None.

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

A potential virtual CSSOT meeting in October 2020 due to the COVID-19 pandemic.