President’s Message

Dear OTSS Members,

Greetings and welcome to the Ocular Toxicology Specialty Section (OTSS) summer newsletter! The year of 2020 has been nothing short of extraordinary; new challenges, new ways of living and working, communicating and collaborating for every one of us. I hope that this communication finds you and your family all safe and healthy. OTSS is no exception in finding novel ways to support our members in this new state of normal. Along with the OTSS Executive Committee, I am committed to embrace the new normal and continue to enhance our communication and support for OTSS members in promoting exchange of information among academic, clinical and preclinical researchers in ocular toxicology.

The cancellation of the SOT meeting in Anaheim, CA, was disappointing to many of us as we all looked forward to immerse ourselves with posters and presentations as well as to engage in discussions and catch up with old friends and opportunities to make new friends. However, we will continue to explore new ways of keeping our connections in safe ways! In this newsletter, we will share the information that was originally planned to be shared at the SOT OTSS reception, which includes, but not limited to, officer transitions, committee updates, and award announcements. This year, we are celebrating award winners for two awards.

We will also share the information regarding the OTSS-sponsored continuing education (CE) course titled “Developing Therapeutics for Ocular Indications: A 20/20 View,” which was held as a live webinar on Friday, April 10th in replacement of the cancelled CE course on March 15th in Anaheim, CA. I would like to extend my thanks to the Executive and Program Committees, and our four wonderful CE course speakers who contributed greatly to deliver a well-received CE course despite the challenges. It is a great honor to be able to work with talented and dedicated ocular toxicologists.

The focus of our Executive and Program Committees for the remainder of the year is to enhance and support communications with our members through webinar(s) and an updated OTSS website. We will also be solidifying more ways to reach graduate students and post-docs in the ocular field. In addition, the Program Committee will continue working hard to shape our symposium (tentative) that will be offered at the 2021 SOT in Orlando, FL. Thank you for those who sent us topic ideas! If you have any good suggestions, ideas, or even needs, especially to reach graduate students and post-docs in ocular field, please contact us at Ocular.SOT@gmail.com. With our new normal, the possibility is endless, and we would like your innovative ideas for connecting to each other.

Thank you for your support,

Hiromi Hosako, PhD, DABT
OTSS President
Due to the cancellation of the 2020 SOT meeting in Anaheim, CA, the OTSS reception planned on Monday, March 16, 2020 at the annual meeting was not held. Therefore, in this newsletter, we would like to highlight the information that was planned to be shared with you during the reception.

Supporters
First, OTSS would like to acknowledge and thank the supporters of the OTSS, which include: Charles River, Covance, Ocular Services On Demand (OSOD), Regeneron, and Absorption Systems. In addition, OTSS would like to acknowledge our new supporter, Biomere, for contributing to OTSS and allowing us to start a new award (see page 6)!

Officer Transitions
New officers for the 2020-2021 term were elected in February 2020. Welcome to the new officers (see below slide)! Officers new to the OTSS Executive Committee this year are Chris Schuetz from Genentech (Councilor) and Chris Steele from Alcon (Communications). Vladimir Bantseev from Genentech has transitioned from the Communications role to Vice President-Elect, and Qihong Huang and Hiromi Hosako take on the Vice President and President position, respectively.

Thank you also for the outgoing officers, Brenda Smith (Past-President) and Denise Rodeheaver (Councilor) for completing their term and serving OTSS. Brenda has been instrumental to OTSS’s activities and programs in the past few years and provided strong leadership. Denise has continued serving OTSS even after her well-deserved retirement. We would also like to thank Kathleen Krenzer, who served as the President in such uncertain
times ensuring that OTSS continues to support our members. Kathleen now serves as the Past-President for the 2020-2021 term.

Please note that the Postdoctoral/Graduate Student Representative position(s) were not filled due to the lack of candidates. OTSS is in a great position to support postdoctoral and graduate students in the ocular field, and these position(s) offer great opportunities to get involved and connected to toxicologists in this field. If you have or know of any postdoctoral and graduate students in the ocular field, please encourage them to apply for the position(s) as well as the awards mentioned in this newsletter!

Program Committee Update
The OTSS Program Committee is led by the Vice President and comprised of dedicated non-elected members. The Program Committee plays a critical role in organizing and supporting various programs, especially the program(s) offered at the annual SOT meeting and webinars. We would like to thank the 2019-2020 Program Committee members for their hard work and contributions to the OTSS. If you are interested in serving the Program Committee, please contact Ocular.SOT@gmail.com. The Committee meets monthly.

The Program Committee activities in 2019-2020 included:
• A webinar held on August 28, 2019 (with Medical Device and Combination Product SS) – “Biological Risk Assessments for Ocular Medical Devices” by Simona Bancos, FDA, CDRH
• SOT Continuing Education AM03 Webinar held on April 10, 2020 (see page 5)

The 2020-2021 Program Committee, now led by Qihong Huang, is also actively working on:
• A webinar tentatively planned in September 2020
• SOT Symposium Proposal (2021) – “Safety Strategies for Ocular Biotherapeutics”
Communications, Membership, and Treasurer Update

The chairperson of the Communications Committee is Vladimir Bantseev. Of the various committee activities, the principal activities focused on the OTSS newsletter, websites and OTSS poster for the annual SOT meeting, which is always in need of information to share with the members of the OTSS.

The chairperson of the Membership Committee (2020-2021) is Qihong Huang. As of March 2020, there were around 100 members of the OTSS. Of those members, 61% represent Pharma/Biotech, 9% represent CRO, 12% represent Consultant, 7% represent Academia, 8% represent Government, and 2% were others. This number has been steady for the past few years, but there is room for many more members, especially graduate students and postdoctoral fellows!

For financial updates, Neera Tewari-Singh indicates that the OTSS is doing well financially, with a balance ending 31 Dec 2019 of $74,344, representing a net gain of $2,329 this year.

Update from Japanese Society of Comparative and Veterinary Ophthalmology

Dr. Shoji Sasaki, a representative of the Japanese Society of Comparative and Veterinary Ophthalmology (JSCVO), updates us on their 2019 activities, which included a 3-day training encompassing lectures of basic ophthalmologic science and hands-on practices for OCT, ERG, macro/microophthalmoscopic examination, slit lamp, ocular tonometry, schirmer’s tears test, fluorescein fundus angiography (26 participants), a special Q&A session held at the 39th annual conference of JSCVO, and a special lecture at the 40th basic seminar (current status and future issues of gene therapy with channelrhodopsin by Dr. Hiroshi Tomita).

Award Announcements

This year, below two OTSS awards were awarded. Congratulations to the award winners!!

**Ocular Toxicology Best Poster Award: Sairum Bellum**

**Poster Title:** Optical Coherence Tomography (OCT) In Vivo Imaging Tool to Monitor Retina in Preclinical Species  
**Authors:** S. Bellum, B. Bennett, S. Born, W. Cook, C. Lazarus, B. Mattson, N. Muniappa, M. Viola, A. Galijatovic-Idrizbegovic, G. Wollenberg

The winner was awarded with a certificate of recognition.

**Annual “Paper of the Year” Award by Taylor & Francis**

**Paper Title:** Investigation of comet assays under conditions mimicking ocular instillation administration in a three-dimensional reconstructed human corneal epithelial model.  
**Authors:** Haruna Tahara, Kazuyo Sadamoto, Yoshinori Yamagiwa, Shingo Nemoto & Masaaki Kurata,  
The Taylor & Francis Award, “(Ocular) Paper of the Year,” is presented for the best paper in ocular toxicology published in the Journal of Cutaneous and Ocular Toxicology. Dr. Wallace Hayes presents the Taylor & Francis “Paper of the Year” at the OTSS reception every year. The authors were awarded with a certificate and a free subscription for a year to the Cutaneous and Ocular Toxicology Journal.

**2020 SOT CE Course Webinar**

*“Developing Therapeutics for Ocular Indications: A 20/20 View”*

**Chairpersons: Kathleen Krenzer and Hiromi Hosako**

This Continuing Education (CE) Course (AM03), which was originally scheduled on Sunday, March 15th at Anaheim, CA during the annual SOT meeting, was held as a live webinar on Friday, April 10th thanks to the SOT’s resilient efforts and flexibility by all four speakers. This course was endorsed by the OTSS, Biotechnology Specialty Section and Comparative and Veterinary Specialty Section. This course was well received according to the survey, and the recording and slides are now available on the SOT website (CED-Tox) for those who registered.

**Speaker 1:** Do Animals See 20/20? The Spectrum of Ocular Anatomy and Physiology in Animals. Seth Eaton, University of Wisconsin-Madison, Madison, WI.

**Speaker 2:** Getting the 20/20 Read: Clinical Evaluation Techniques for Ophthalmic Toxicology. Joshua T. Bartoe, Northern Biomedical Research Inc., Norton Shores, MI.

**Speaker 3:** 20/20 under the Scope: Evolving Strategies for Histopathological Assessment of Ocular Tissues. Helen Booler. Genentech Inc., South San Francisco, CA.

**Speaker 4:** Using 20/20 Hindsight to Set the Course for Considerations in the Preclinical Development of Ocular Therapeutics in the Future. Brenda Smith, Allergan, Irvine, CA.

**Abstract:** No longer are eye drops the only way to treat the eye; the emergence of novel therapeutic and development approaches for ocular indications has impacted how we design toxicology assessments, select species, and perform toxicity evaluations. Additionally, the structural complexity of the eye as well as the unique aspects of ocular dose-administration routes require continued refinements of ocular evaluation techniques and assessment strategies. The goal of this course is to provide toxicologists with a broad overview of highly specialized ocular anatomy, current ophthalmic diagnostic techniques, evolving histopathological assessment strategies, and thought-provoking ocular drug development strategies, including case studies. The first speaker will open the session with an detailed overview of ocular anatomy complexity, focusing on unique features of the eye and critical anatomical and physiological features that may influence or impede a drug’s efficacy and safety in human patients. The speaker also will discuss novel routes of drug administration in ocular drug development. The second presentation will tune in to gold-standard, in-life ophthalmic diagnostic techniques with selected case examples showing how modern ocular diagnostic equipment can be used to prove multifactorial questions. This presentation also will touch upon recent efforts at harmonization of ocular finding nomenclature and clinical record-keeping lexicon in preparation for SEND (Standard for Exchange of Nonclinical Data) requirements dictating reporting of ocular toxicology studies. The third talk will focus on evolving strategies for histopathological assessment of
ocular tissues, which will include key points to consider when processing the eye to ensure a thorough examination of key structures of the globe as well as the effect of factors such as the route of administration and the formulation or character of the therapeutic candidate on effective examination of the eye. The last presentation will highlight unique nonclinical safety challenges and considerations during ocular drug development using case studies to push our assumptions of what is the best way to evaluate the safety of ophthalmic therapeutics.

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**Call for Award Nominations**

**Deadline: December 18, 2020** (except for the Best Poster Award – see below #5)

Submit all nominations to: Andrea Rodrigues and Chris Schuetz ([Ocular.SOT@gmail.com](mailto:Ocular.SOT@gmail.com))

Link to award details: [https://www.toxicology.org/groups/ss/otss/awards.asp](https://www.toxicology.org/groups/ss/otss/awards.asp)

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1. **NEW! I² Award (Innovation and Impact) Sponsored by Biomere**

   This award recognizes Innovations and/or scientific advances that Impact the field of ocular toxicology based on papers published (or in press) in any journal in the calendar year (January 1 through December 31) prior to the SOT Annual Meeting. The award will be announced at the OTSS reception held during the SOT Annual Meeting. A single award will be conferred each year.

   Applicants for the award must be an author of the peer-reviewed paper and a member of the OTSS at the time they apply.

   The applicants shall submit a copy of the publication and a description or other documentation describing how the subject work is Innovative in ocular toxicology or Impacts the scientific advancement of ocular toxicology.

   Submit nominations to: Submit nominations to: [Ocular.SOT@gmail.com](mailto:Ocular.SOT@gmail.com)

   The winner will receive a plaque and a monetary award of $1,000 to recognize their accomplishment at the OTSS reception held during the SOT Annual Meeting.

   **Submission Deadline: December 18, 2020**

2. **Biannual Career Achievement Award**

   Every other year, the OTSS recognizes a Senior Investigator for lifetime achievement or for contribution of a particularly influential body of work to the field of ocular toxicology. This award is for scientists in academia, industry, or those who have had an impact on regulation in the field. The award will be announced at the OTSS reception held during the SOT Annual Meeting.

   Nominations of candidates not selected will be considered for two additional award cycles unless the nomination is withdrawn by the nominator.

   Nominations are encouraged with respect to any of the following criteria:

   1) Contribution to the field of ocular toxicology—depth and breadth of scientific contributions and
significance of contributions for advancing the field
2) Major influence in the education/training/mentorship of young scientists in the field of ocular toxicology including training in government, industry, or academia
3) Leadership and service to the ocular toxicology field including involvement in the Specialty Section or other meetings/organizations related to ocular toxicology
4) Influence on regulatory and risk/safety assessment decisions related to ocular toxicology

The nominator (or himself/herself) should provide a discussion of the role that the candidate’s work has played in any of the above 4 points. A curriculum vitae and bibliography should also be included. A letter of recommendation from another investigator in the field would be helpful.

Submit nominations to: Ocular.SOT@gmail.com

The winner will receive a certificate, monetary award of $1000 and will give a 10 minute presentation of their work at the OTSS reception held during the SOT Annual Meeting.

Submission Deadline: December 18, 2020

3. Covance-OSOD Graduate Student/Postdoctoral Fellow Research Award

Each year, OTSS recognizes outstanding student/postdoctoral candidates for their contribution to advancing the understanding of ocular toxicology and pharmacology. The award will be announced at the OTSS reception held during the SOT Annual Meeting.

The requirements/criteria for the award include that the Applicant:

1) Must be a graduate student or postdoctoral fellow as of October 1 the year prior to the SOT Annual Meeting
2) Is preferred to be a SOT and OTSS member
3) Must have an submitted and/or accepted abstract (for platform or poster presentation) at the upcoming SOT Annual Meeting
4) His/her accepted abstract must be related to ocular toxicology and/or pharmacology
5) Must attend the OTSS reception held during the SOT Annual Meeting

The applicant should submit:

1) His/her submitted and/or accepted abstract (for platform or poster presentation) at the SOT Annual Meeting
2) A letter of support from trainee’s advisor or mentor indicating the role of the applicant and independence in conducting the research
3) Narrative describing their research hypothesis, background and significance (up to 2-pages)

Submit nominations to: Ocular.SOT@gmail.com

The winner(s) will receive a certificate and monetary award of up to $500, funded by generous contributions from Covance and OSOD. The winner(s) will present a 5-minute synopsis of his/her research at the OTSS reception held during the SOT Annual Meeting.

Submission Deadline: December 18, 2020
4. Graduate Student and Postdoctoral Fellow Trainee Travel Award

Each year, OTSS recognizes outstanding student/postdoctoral candidates with the Graduate Student and Postdoctoral Fellow Trainee Travel Award. The purpose of this award is to recognize outstanding contributions of graduate students and postdoctoral fellows in the area of ocular toxicology specifically to support attendance to the upcoming SOT Annual Meeting. The award will be announced at the OTSS reception held during the SOT Annual Meeting.

Criteria for the selection will be based on both the applicant’s need and merit.

The requirements/criteria for the award include that the Applicant:

1) Must be a graduate student or postdoctoral fellow as of October 1 the year prior to the SOT Annual Meeting
2) Must have a submitted and/or accepted abstract (for platform or poster presentation) at the upcoming SOT Annual Meeting
3) His/her abstract must be related to ocular toxicology and/or pharmacology
4) Must attend the OTSS reception held during the upcoming SOT Annual Meeting

The application should submit:

1) A cover letter from the trainee indicating his/her intent to apply for this award and interest in attending the SOT Annual Meeting
2) Current CV
3) His/her submitted and/or accepted abstract (for platform or poster presentation) at the SOT Annual Meeting
4) A letter from trainee’s advisor or mentor indicating the trainee’s merit, as well as the confirmation of need for funding to enable travel

Submit nominations to: Ocular.SOT@gmail.com

This award will be conferred to one (1) graduate student and/or one (1) postdoctoral fellow. The winner(s) will receive an achievement plaque and a monetary award of $500 at the OTSS reception held during the SOT Annual Meeting.

Submission Deadline: December 18, 2020

5. Ocular Toxicology Best Poster Award

Any poster accepted for presentation during the SOT Annual Meeting in the field of ocular toxicology are eligible for the Best Poster Award. The award will be announced at the OTSS reception held during the SOT Annual Meeting.

Nominees must have a submitted and/or accepted poster for the upcoming SOT Annual meeting and attend the meeting to present the poster.

A submitted and/or accepted abstract and a pdf file of the poster must be submitted for consideration.

Submit nominations to: Ocular.SOT@gmail.com
The winning author(s) will receive a ribbon for the poster. The winning author(s) will also receive a certificate of recognition at the OTSS reception held during the SOT Annual Meeting.

Submission Deadline: February 17, 2021

In addition to the above awards, our Annual “Paper of the Year” Award will be selected by Taylor & Francis from articles published in the Journal of Cutaneous and Ocular Toxicology between 01 January and 31 December of the year preceding the SOT annual meeting. No nominations from our members will be solicited for this award.

Call for OTSS Officer Nominations and Elections

Support your Specialty Section by serving on the OTSS Executive Committee. Each year there is a call for Nominations. Please consider self-nominating or nominating a fellow OTSS member.

For the 2021-2022 term, the following positions will open: Councilor, Vice President-Elect, and Postdoctoral/Graduate Student Representative. See the link (https://www.toxicology.org/groups/ss/otss/officers.asp) for the officer handbook with a description of these officer positions. Send nomination suggestions to Hiromi Hosako (Ocular.SOT@gmail.com).

Voting occurs in February 2021, with induction of the new OTSS Executive Committee at the 2021 SOT meeting. Please keep an “eye” out for the email requesting your vote.

OTSS Member Suggestions

Please feel free to contact OTSS (Ocular.SOT@gmail.com) for any suggestions, ideas, or needs at any time!

Supporters

We sincerely thank you for your generous support!!

2019-2020 Supporters