CARCINOGENESIS
SPECIALTY SECTION

Fall 2025 Newsletter

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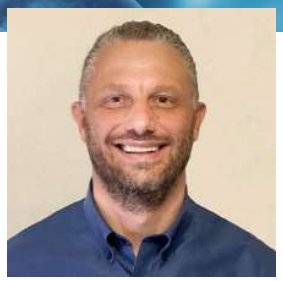
Greetings from the SOT Carcinogenesis Specialty Section!



Letter from the President

Dear CSS Members,

Over the past 50 years, the U.S. cancer mortality rate has fallen considerably due to improvements in prevention, early detection, and treatment. And yet, this progress is not enough. In 2023, there were an estimated 1.9 million cancers diagnosed and more than 600,000 deaths from cancer in the United States. This is on top of the alarming fact that cancer incidence is becoming more common among younger people.

For this reason, we need to advocate for continuous investments in basic and translational toxicology research. Understanding the causes of cancer remains critical. Current unmet needs are i) linking chemical exposures to cancer risk (including interindividual differences), ii) developing state-of-the-art technology (experimental and computational) to understand the pathophysiology of carcinogenesis, and iii) innovating existing carcinogenicity frameworks to improve chemical regulation and drug approvals for policy making.

CSS continues to play a critical role in promoting basic and applied research, chemical regulation for precision prevention and precision environmental health. We keep supporting and providing relevant, innovative, and informative sessions at the SOT Annual Meeting and through webinars during the year. We stay committed to organizing the

evening reception at the SOT Annual Meeting where we can gather to connect, catch up, and share our news from the year while celebrating the next generation of CSS researchers through our awards program.

Our newsletters (new template by Amber Goetz), websites, and general emails strive to highlight these events for you throughout the year. We want to maximize the power of social networks in our modern time by leveraging our CSS LinkedIn site, created by Sumira Phatak, to provide all members with the opportunity to stay visible, connect virtually, and post events, publications, and presentations. This year in San Diego, our section for the first time is going to be part of the SOT Career Advancement, Mentoring, and Networking (CAMAN) Committee networking event taking place on the evening of Monday March 23rd. More information about this exciting mentoring and networking opportunity will be released to all members next month.

I would like to thank everyone who submitted proposals for carcinogenesis related topics for continuing education, symposia, workshops, and roundtables both for the past SOT meeting in Orlando, Florida and for the upcoming SOT Annual Meeting in San Diego, California. Please stay active on this front!

Important: we continue to offer a total of five CSS awards to graduate students, postdoctoral, and junior faculty. We congratulate the 2025 Awardees and thank you to all the nominees. As stated during our reception in Orlando, we would like to see an increase in the number of applications. As we look forward to the 2026 SOT meeting, I encourage everyone to consider nominating students, postdoctoral scholars, and junior faculty candidates for the 2026 awards. Award descriptions and application requirements can be found on the CSS website, and any award-related questions can be directed to Justin Colacino, our Vice President who will be overseeing the Awards Committee.

If you are interested in becoming a part of the CSS leadership, we will have three positions open for 2026: VP-Elect, Councilor, and Secretary Treasurer. Please consider nominating yourself or your colleagues who are interested in serving the CSS community. Our past president, John Pierce Wise, Sr. will be leading the Nomination Committee. Please contact him with any questions regarding the nomination process.

Finally, as the President of this section, I am very committed and currently active to coordinate the creation of a new Endowment Fund (let's welcome our new Steward James Wise!) and the ongoing New Memberships Campaign to increase the total number of members to over 200. This will help to make sure that our section achieves financial sustainability over the next years and continues to expand for scientific diversity and excellence. You can help with the current Campaign by encouraging SOT and non-SOT members colleagues to join our specialty section. We count on you!

Please don't hesitate to reach out to CSS leadership to share your ideas and help the section grow and improve. Take the short Survey. Let's keep our voice loud to positively and collectively impact our section and the SOT moving forward.

Have a wonderful holidays season and see you in San Diego next year!

Sincerely,

William Bisson, PhD

CONGRATULATIONS AWARD WINNERS!

James A. Swenberg Carcinogenesis Merit Award for Junior Faculty Members

Congratulations Dr. James Wise!
University of Louisville

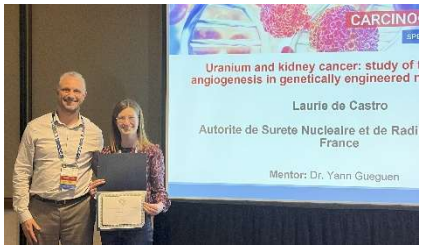
Dharm V. Singh Graduate Student Endowment Award – 1st Place

Congratulations Idoia Meaza Isusi!
University of Louisville, Mentor: Dr. John P. Wise, Sr.

Dharm V. Singh Graduate Student Endowment Award – 2nd Place

Congratulations Tessa Jordan!
Michigan State University, Mentor: Dr. Sophia Lunt

Dharm V. Singh Graduate Student Endowment Award – 3rd Place

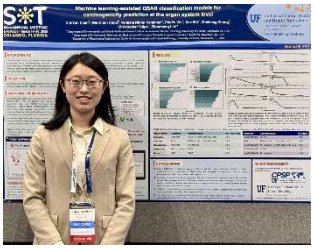


Congratulations Laura de Castro!
Autorite de Surete Nucleaire et do Radioprotection, France, Mentor: Dr. Yann Gueguen

CSS Environmental Carcinogenesis Merit Award for Postdoctoral Researchers

Congratulations Dr. Li Xia!
National Center for Toxicological Research, US FDA
Mentor: Dr. Tao Chen

CSS Postdoctoral Research & Young Investigator Award



Congratulations Dr. Chi-Yun Chen!
University of Florida, Mentor: Dr. Zhoumeng Lin

CSS Environmental Carcinogenesis Merit Award for Graduate Students – 1st Place

Congratulations Samantha Musso!
Michigan State University, Mentor: Dr. Jamie Bernard

Carcinogenesis Specialty Section Environmental Carcinogenesis Merit Award for Graduate Students – 2nd Place

Congratulations Kaitlyn Venneman!
University of Kansas Medical Center
Mentor: Dr. Udayan Apte

A Message from Your Student Representative

Hello everyone!

My name is Charlotte McVeigh, and I am delighted to serve as the graduate student representative for the Carcinogenesis Specialty Section. I am a PhD candidate at the University of New Mexico in the lab of Dr. Alicia Bolt. My research focuses on the heavy metal tungsten and the role it plays on bone marrow adipocytes to enhance breast cancer metastasis to the bone.

As the Graduate Student Representative, I also serve on the SOT Graduate Student Leadership Committee (GSLC) where graduate student representatives from all Specialty Sections, Regional Chapters, and Special Interest Groups come together to help aid in the growth and success of graduate students in SOT. Part of this is through webinars, which will be hosted before the annual meeting on various topics. One I am helping plan is on resume building with some interactive activities. So, stay tuned for all of those opportunities!

As I am sure most of you are aware, the SOT Annual Meeting will be taking place in March in San Diego, California. During this meeting, there are going to be plenty of opportunities for graduate students to network and meet other graduate students. There is always fun *Student/Postdoctoral Mixer,* but I also encourage students to look at some other opportunities such as *Chat with an Expert* and *Volunteering Opportunities*. Last year, I served as a buddy for someone who was attending the meeting for the first time. We viewed posters together, grabbed lunch, and chatted. I have also served as a peer mentor for the Undergraduate Development Program and meeting with undergraduates over lunch (Undergrad Gab with a Grad over Grub) to discuss graduate school and your journey.

All in all, there are many opportunities out there! If you would like to learn about any of these opportunities, please visit https://www.toxicology.org/groups/gs/graduates.asp to learn more.

As a final note, remember that there are many opportunities for awards, including ones through our specialty section: Dharm V. Singh Graduate Student Endowment and the CSS Environmental Carcinogenesis Merit Award for Graduate Students. Please consider applying and any information about awards, eligibility and requirements can be found at the following link https://sot.toxicology.org/award. Some deadlines are fast approaching, so remember that!

Finally, please feel free to reach out to me if you have any questions or suggestions for the specialty section. I have a few ideas I would like to try to implement, but I am always up to hearing more! I can be reached at CMMcVeigh@salud.unm.edu.

Can't wait to see everyone at the SOT Annual Meeting!

Charlotte McVeigh, Carcinogenesis Specialty Section

A Message from Your Postdoctoral Representative

Hello, fellow postdoc!

My name is Idoia Meaza, and I am extremely excited to serve as the postdoctoral representative for the Carcinogenesis Specialty Section. A little bit about me: I am a postdoctoral researcher in the Wise Laboratory of Environmental and Genetic Toxicology at the University of Louisville. My research focuses on studying how environmental exposures to toxic metals drive lung cancer and studying ways we can treat or prevent this disease.

As your postdoctoral representative, I hope to be a valuable resource for current and prospective trainees. I would like to remind you that the upcoming annual meeting will take place March 22-25 in San Diego, California, and the abstract submission deadline is now open until November 13th (11:59 pm EST). For those attending, consider submitting your abstract to be considered for awards. These awards can be found at https://sot.toxicology.org/award. Make sure to use the filter setting to check out what awards postdocs are eligible for. Also, don't forget to check those available in the Carcinogenesis Specialty Section, such as the CSS Environmental Carcinogenesis Merit Award for Postdoctoral Researchers and the CSS Postdoctoral Researcher and Young Investigator Award. In addition, be on the lookout for Postdoctoral Assembly (PDA) updates through ToXchange for information specifically directed to postdocs, such as events at SOT like the Student/Postdoc Mixer event or awards targeted to postdocs.

Please don't hesitate to contact me if you have any questions/suggestions about the Carcinogenesis Special Section or the PDA by emailing me at idoia.isusi@louisville.edu.

Looking forward to seeing you at the SOT Annual Meeting in San Diego!

Idoia Meaza, Carcinogenesis Specialty Section.

2026 Awards – Call for Applications

The Carcinogenesis Specialty Sections offers the following awards:

Award	Application
CSS Dharm V. Singh Carcinogenesis Graduate Student Endowment Award	LINK to Apply
CSS Environmental Carcinogenesis Merit Award for Graduate Students	LINK to Apply
CSS Environmental Carcinogenesis Merit Award for Postdoctoral Researchers	LINK to Apply
CSS James A. Swenberg Carcinogenesis Merit Award for Junior Faculty Members	LINK to Apply
CSS Postdoctoral Researcher and Young Investigator Award	LINK to Apply

https://www.toxicology.org/groups/ss/CSS/awards.asp

Nominations and/or applications for 2026 CSS Awards are now being accepted. Last day to apply is January 12, 2026. Apply Today!

Celebrating Member Accomplishments

Congratulations on your well-deserved success! It's inspiring to see your dedication and hard work recognized. Your contributions are invaluable to the team.

Awards

McVeigh, C. received the MWSOT Yost/Burchiel Predoctoral Student Award, University of New Mexico

Meaza, I. received the Dean's Citation Award, Graduate School Deans, University of Louisville

Meaza, I. received the Guy Stevenson Award for Excellence in Graduate Studies, University of Louisville

Publications

Arcos, M., Goodla, L., Kim, H., Desai, S. P., Liu, R., Yin, K., Liu, Z., Martin, D. R., & **Xue, X.** (2025). PINK1-deficiency facilitates mitochondrial iron accumulation and colon tumorigenesis. Autophagy, 21(4), 737–753. https://doi.org/10.1080/15548627.2024.2337421

Bernard, J., Liby, K., **Bisson, W.** eds. 2024 Furthering precision medicine and cancer prevention through novel insights in molecular and chemical carcinogenesis. Lausanne: Frontiers Media SA. DOI:10.3389/978-2-8325-5568-2.

Chen, S., Li, Y., **Li, X.**, Mei, N., He, X., Bryant, M. S., Qin, X., Li, F., & Guo, L. (2025). Mechanistic study of pexidartinib-induced toxicity in human hepatic cells. Chemico-Biological Interactions, 111641. https://doi.org/10.1016/j.cbi.2025.111641

Corton, J. C., Auerbach, S. S., Koyama, N., Mezencev, R., Yauk, C. L., & Suzuki, T. (2025). Review and meta-analysis of gene expression biomarkers predictive of chemical-induced genotoxicity in vivo. Environmental and Molecular Mutagenesis. Advance online publication.

Corton, J. C., Chorley, B., & Liu, J. (2025). Characterization of a gene expression biomarker predictive of hypoxia-inducible factor-1 modulation. Chemico-Biological Interactions. Advance online publication.

Corton, J. C., Gift, J. S., Auerbach, S. S., Liu, J., Das, K. P., Ren, H., Lang, J. R., Chernoff, N., Lau, C., & Hill, D. (2025). Dose-response modeling of effects in mice after exposure to a polyfluoroalkyl substance (Nafion byproduct 2). Toxicological Sciences, 205(2), 380–400.

DeMarini, D. M., Chiu, W. A., Guyton, K. Z., Gwinn, W., Reisfeld, B., **Wang, A.**, **de Conti, A**., Schubauer-Berigan, M. K., & **Madia, F.** (2025). Response to "Comment on 'IARC workshop on the key characteristics of carcinogens: Assessment of end points for evaluating mechanistic evidence of carcinogenic hazards.'" Environmental Health Perspectives. https://doi.org/10.1289/EHP17625

DeMarini, D. M., Gwinn, W., Watkins, E., Reisfeld, B., Chiu, W. A., Zeise, L., Barupal, D., Bhatti, P., Cross, K., Dogliotti, E., Fritz, J. M., Germolec, D., Andersen, M. H. G., Guyton, K. Z., Jinot, J., Phillips, D. H., Reddel, R. R., Rothman, N., van den Berg, M., Vermeulen, R. C. H., Vineis, P., **Wang, A.**, Whelan, M., Ghantous, A., Korenjak, M., Zavadil, J., Herceg, Z., Perdomo, S., Dossus, L., Chittiboyina, S., Cuomo, D., Kaldor, J., Pasqua, E., Rigutto, G., Wedekind, R., Facchin, C., El Ghissassi, F., **de Conti, A.**, Schubauer-Berigan, M., & **Madia, F.** (2025). IARC workshop on the key characteristics of carcinogens: Assessment of end points for evaluating mechanistic evidence of carcinogenic hazards. Environmental Health Perspectives, 133(2). https://doi.org/10.1289/EHP15389

Froetschl, R., **Corton, J. C.**, Li, H., Aubrecht, J., Auerbach, S. S., Caiment, F., Doktorova, T. Y., Fujita, Y., Jennen, D., Koyama, N., Meier, M. J., Mezencev, R., Recio, L., Suzuki, T., & Yauk, C. L. (2025). Consensus findings of an International Workshops on Genotoxicity Testing workshop on using transcriptomic biomarkers to predict genotoxicity. Environmental and Molecular Mutagenesis. Advance online publication.

Griffin, G., **Delnicki, M. E.**, **Lu, H.**, **Meaza, I.**, **Williams, A.**, Vielee, S. T., Bolatimi, O. E., Wise, R. M., Liu, R., **Kouokam, J. C.**, **Wise, S. S.**, **Wise, J. P., Sr**, Cave, M. C., Wise, J. P., Jr, & **Wise, J. L.** (2025). Exposure to low levels of hexavalent chromium in drinking water alters diet-induced steatotic liver disease in male rats. Journal of trace elements in medicine and biology : organ of the Society for Minerals and Trace Elements (GMS), 91, 127731. Advance online publication.

Li, X., Li, Y., Chen, S., Guo, L., & Mei, N. (2025). Potential anticancer effects and toxicity of flavones luteolin and apigenin in vivo. Journal of Environmental Science and Health, Part C, 1–37. https://doi.org/10.1080/26896583.2025.2527437

Li, X., Wang, Y., Xu, H., He, X., Chen, S., Guo, X., Manjanatha, M. G., Zhou, T., Bonzo, J., & Mei, N. (2025). Development of a TK6-derived cell line expressing four human cytochrome P450s for genotoxicity testing. Toxicology in Vitro, 108, 106085. https://doi.org/10.1016/j.tiv.2025.106085

Lu, H., **Delnicki, M.**, **Griffin, G.**, **Wise, J. L.** Current Understanding of Sex Differences in Metal-Induced Diseases. Curr Envir Health Rpt 12, 18 (2025).

Li, H. H., Aubrecht, J., Doktorova, T. Y., Jennen, D., **Corton, J. C.**, Froetschl, R., Mezencev, R., & Yauk, C. L. (2025). Review of transcriptomic biomarkers that predict in vitro genotoxicity in human cell lines. Environmental and Molecular Mutagenesis. Advance online publication.

Lau, C., Das, K. P., Pancras, J. P., Strader, L. F., Narotsky, M. G., Dye, J. A., Moore, M. L., Kodavanti, U. P., Jackson, T. W., Wang, X., Li, J. L., Bell, D. A., O'Neill, J., Slotkin, T. A., Guyotte, I., Carswell, G. K., Liu, J., **Corton, J. C.**, Chorley, B. N., & Miller, C. N. (2025). Does consumption of a high-fructose diet during pregnancy and lactation exacerbate the effects of maternal exposure to cadmium on development and metabolic function of mouse offspring? Journal of Toxicology and Environmental Health, Part A, 30(1–2), 1–24.

Mathisen, G. H., Svendsen, C., Vist, G. E., Husøy, T., Ames, H. M., Bearth, A., Audebert, M., Bernard, A., Beronius, A., Bruzell, E. M., Consiglio, E. D., Davenport, M., Druwe, I., Geci, R., Gundert-Remy, U., Hartung, T., Hoffmann, S., Hogberg, H. T., Hooijmans, C. R., Lizarraga, L. E., Olker, J. H., Prieto, P., Robinson, J. F., Rooney, A. A., Sebollela, A., Smith, N. M., Spilioti, E., Spyropoulou, A., Tcheremenskaia, O., Testai, E., **Wang, A.**, Zilliacus, J., & Whaley, P. (2025). Identification of concepts of importance for the assessment of internal validity of in vitro toxicology studies using a modified Delphi technique. Evidence-Based Toxicology. (In press). https://doi.org/10.5281/zenodo.15850217

Matteo, G., Cho, E., Rigden, M., Eickmeyer, D. C., Bradford, L. M., Meier, M. J., Williams, A., **Corton, J. C.**, Yauk, C. L., & Atlas, E. (2025). High-throughput transcriptomics analysis of equipotent and human relevant mixtures of BPA alternatives reveal additive effects in vitro. Archives of Toxicology. Advance online publication.

Meaza, I., **Wise, J. L.**, **Wise, S. S.**, **Lu, H.**, **Williams, A. R.**, **Delnicki, M.**, **Easley, J.**, **Kouokam, J. C.**, **Wise, J. P., Jr,** Vielee, S. T., **Wise, J. T. F.**, **Wise, R. M.**, & **Wise, J. P., Sr.** Oropharyngeal aspiration of particulate hexavalent chromium increases chromium levels in lung and liver, and induces essential metal

dyshomeostasis in lung, liver, and blood. J Trace Elem Med Biol. 2025 Jul 26;91:127705. doi: 10.1016/j.jtemb.2025.127705. Epub ahead of print. PMID: 40773862.

Miranda, J. A., Dad, A., Qu, X., Seo, J., **Li, X.**, Guo, X., & Revollo, J. R. (2025). Background mutation frequencies in TK6 and L5178Y cells: Implications for error-corrected sequencing. Environmental and Molecular Mutagenesis. https://doi.org/10.1002/em.70024

Seo, J. E., Xu, H., **Li, X.**, Atrakchi, A. H., McGovern, T., Davis Bruno, K. L., Keire, D. A., Mei, N., & Heflich, R. H., Guo, X. (2025). Genotoxicity evaluation of ten nitrosamine drug substance-related impurities using 2D and 3D HepaRG cells. Regulatory Toxicology and Pharmacology, 162, 105906. https://doi.org/10.1016/j.yrtph.2025.105906

Yin, K., Villareal, L., Wu, X., Arcos, M., Lee, J., Martin, D. R., In, J. G., Leslie, K., Zhang, D. D., & **Xue, X.** (2025). The STEAP4 target NQO1 mediates colon tumorigenesis. Journal of Cell Science, 138(10), jcs263402. https://doi.org/10.1242/jcs.263402

Reports

NTP Report on Carcinogens Handbook on Methods for Conducting Cancer Hazard Evaluations. National Toxicology Program (NTP). 2025. DOI: https://doi.org/10.22427/NTP-OTHER-1008

Key Characteristics-associated End-points for Evaluating Mechanistic Evidence of Carcinogenic Hazards. IARC Monographs Technical Report. Lyon, France: International Agency for Research on Cancer (IARC). 2025. https://monographs.iarc.who.int/wp-content/uploads/2025/06/KCW-FINAL.pdf

Presentations

Bisson, W. Further precision cancer prevention through novel insights in chemical carcinogenesis. SWCR 2025- The 5th Symposium on World Cancer Research. March 2025, Kyoto, Japan.

Xue, X. Environmental Microplastics Promote Colon Tumorigenesis Via Piezo1–Ca^{2+}–ROS Signaling and Hypoxia-Induced Metastatic Pathways. Mountain West Society of Toxicology Annual Meeting. August 2025, Albuquerque, NM.

Xue, X. Environmental Microplastics Promote Colon Tumorigenesis Via Piezo1–Ca^{2+}–Ros Signaling and Hypoxia-Induced Metastatic Pathways. Micro-Nano Plastics in Water: Characterization, Cure and Prevention. July 2025, Davos, Switzerland (Zoom Participation)

Goetz, A. Conceptual Framework for Predictive Risk Assessment for Non-genotoxic Agrochemicals using Read-across to Reduce Vertebrate Testing. 64th Annual Society of Toxicology Meeting, March 16-20, 2025. Orlando, FL, USA.

Invited Services

Lu, H. Postdoctoral Assembly Committee Representative for the Education and Experiential Opportunities Committee, Society of Toxicology

Xue, X. Digestive System Host Defense, Microbial Interactions and Immune and Inflammatory Disease (DHMI) Study Section, NIH, April 2025.

Xue, X. Digestive and Nutrient Physiology and Diseases (DNPD) Section, NIH, June 2025.

Xue, X. Czech Health Research Council, Ministry of Health, Czech Republic, June 2025.

Xue, X. Artificial Intelligence/Machine Learning Consortium to Advance Health Equity and Researcher Diversity (AIM-AHEAD) Research Fellowship Cohort 4, FAIR-MED, Clinicians Fellowship Programs, June-July 2025.

Relevant News

CSS Past President, Professor Ruth Roberts was delighted to hear that her company ApconiX have been honoured with the UK King's Award for Enterprise for Innovation 2025.

- The King's Awards for Enterprise, previously known as The Queen's Awards for Enterprise, recognised outstanding UK businesses.
- This King's Award was awarded for iSLA (the ApconiX in vitro Seizure Liability Assay), an innovative assay which improves drug development safety and success rates. iSLA was developed over 3 years and is based on original open-source research carried out at the ApconiX laboratory. iSLA predicts if a compound in drug discovery or development might cause seizures by measuring the electrical activity in human-derived neuronal stem cells (hiPSC) using microelectrode array (MEA) and by screening a panel of 15 seizure-associated ion channels using automated patch clamp electrophysiology.
- ApconiX was founded by Ruth and her colleagues Dr Michael Morton and Dr Richard Knight. The journey began with the idea of providing life science companies with access to high quality drug safety expertise, normally available only in large pharmaceutical companies. Celebrating ten years of trading this year, ApconiX has grown into a strong team of over 100, helping clients all over the world make better decisions on drug safety.
- Professor Ruth Roberts, Director, and Co-founder of ApconiX commented, "Receiving the King's Award is a tremendous honour and testament to the hard work, creativity and ambition of the whole team. Our aim is to find better solutions to identifying effective medicines quicker and at lower overall cost and in sustainable and ethical manner."

Call for Officer Nominations!

Each fall we seek volunteers from our members and fellow colleagues to serve on the Carcinogenesis Leadership Committee. The continued success of this Specialty Section is dependent on the efforts of those willing to serve. We have three positions which will be available for the 2026-2027 year (below). Self-nominations are strongly encouraged. Nominees will be reviewed by current officers and a ballot compiled for election. If you are interested in any of the positions available, please contact John P. Wise, Sr. (john.wise@louisville.edu). Please submit all nominations by November 30, 2025. Our sincere gratitude!

Open Positions for 2026 – 2027

- Vice President-Elect (4-year term; VP-Elect, VP, President, Past President)
- Councilor (2-year term)
- Secretary/Treasurer (2-year term)

Please don't forget that abstracts are due to SOT by November 13, 2025, and apply for the many SOT career achievement, graduate student, and postdoctoral awards applications also available outside of the Carcinogenesis Specialty Section: https://sot.toxicology.org/award

Connect with the SOT Carcinogenesis Specialty Section

We want to hear from you! The Carcinogenesis Specialty Section is looking for additional opportunities to promote and expand our membership. Would virtual seminars, workshops, ideation sessions outside of the annual meeting be of interest to you? Please take this short survey to share your thoughts and ideas: https://forms.office.com/e/3W5FMDabmk

- Virtual seminars and workshops outside the annual meeting
- Case study work sessions to learn, train and develop new skills with alternative approaches to carcinogenicity safety assessments
- Mentorship and networking

We look forward to seeing you in San Diego, CA for the 2026 SOT Meeting!

SOT MARCH 22-25 SAN DIEGO