Dear HOT Members,

On behalf of the HOT Executive Committee it is my pleasure to invite you to join us during the 58th SOT Annual Meeting in Baltimore. HOT’s program for this year includes the traditional HOT Business and Reception (Tuesday, March 12 at the Baltimore Marriott Inner Harbor, 6-9 pm) where you can congratulate our 2019 Award Winners, recognize HOT’s generous Sponsors and meet old and new friends. Also, you cannot miss the HOT Mentoring Activity (Tuesday, March 12 at the Sheraton Inner Harbor, 12:30-13:30 pm) organized by our Grad Rep Yanelli Nunez and Councilor Teresa Palacios. Take time to visit the HOT member presentations throughout the week, and the HOT Poster that includes our annual achievements. Come join HOT leadership at the SOT Pavilion during the ToxExpo hours.

We look forward to seeing you in Baltimore.

Silvia Berlanga de Moraes Barros
HOT President
silviaberlanga@gmail.com
2019 HOT Distinguished Toxicologist Award

Pedro Del Valle, PhD
Center for Drug Evaluation and Research, Office of New Drugs
U.S. Food and Drug Administration

2019 HOT Outstanding Officer

Julieta Martino, PhD
Postdoctoral Fellow
Fundación Instituto Leloir
Buenos Aires, Argentina.

HOT Student Travel Awards

Lyda Yuliana Parra Forero
Centro de Investigación y Estudios Avanzados
Instituto Politécnico Nacional, Mexico

Henry Lujan
Department of Environmental Science
Baylor University

Yael-Nathalie Escobar
Center for Environmental Medicine, Asthma & Lung Biology
University of North Carolina at Chapel Hill

Eduardo Gonzalez
School of Veterinary Medicine
University of California, Davis
AWARDS

• Dr. Ignacio Tripodi obtained the Research excellence award for the poster presented at ISCB's Next Generation Sequencing Conference (NGS April 2018).

• Dr. Karina Caballero Gallardo, Professor at the University of Cartagena (Colombia), obtained a scholarship (Resolution No. 02243-2018) to perform a 1 month-internship from November 1, 2018 to December 9, 2018 at the Laboratory of Food Chemistry and Toxicology - University of Valencia under the supervision of Professor Dr. Ana Juan-García. During this time, she received training on cell cultures and evaluated the cytotoxicity of sediment extracts from Cartagena Bay, an industrial area in Northern Colombia”. Dr. Caballero also has been selected as a recipient of an SOT/SOT Endowment Fund/IUTOX Travel Award to attend the 2019 Society of Toxicology Annual Meeting in Baltimore, Maryland, and nominated by Colombian Academy of Exact, Physical and Natural Sciences as a candidate to represent Colombia in the IANAS Anneke Levelt Sengers Prize 2018 call.

• Dr. Teresa Palacios was awarded first place with the Bern Schwetz Award from SOT-National Capital Area Chapter, for her abstract entitled “Impact of Various Surface Coatings on In Vitro Cell Uptake and Cytotoxicity of Ultrasmall Superparamagnetic Iron Oxide Nanoparticles (USPION)”. Her research will be presented at SOT 2019 as poster.

PUBLICATIONS


• Toxicity profiling of flame retardants in zebrafish embryos using a battery of assays for developmental toxicity, neurotoxicity, cardiotoxicity and hepatotoxicity toward human relevance Author links open overlay panel Ainhoa Alzualde, Mamt Behl, Nisha S. SipesbJui-Hua Hsieh, Aintzane Aldaya, Raymond R. Tice, Richard S.Paules, Arantza Muriana, Celia Quevedo. Neurotoxicology and Teratology 70 (2018), 40-50

Announcements

HOT

58TH ANNUAL MEETING & ToxExpo • MARCH 10-14, 2019


ICTXV Meeting
Join us in Hawaii 2019

Toxicology Solutions for Global Public, Environmental, and Personal Health


XXIII CONGRESO ESPAÑOL DE TOXICOLOGÍA Y VII IBEROAMERICANO

More information here: http://www.aetox.es/

CURSO TEÓRICO PRÁCTICO:

“INYECTOTERAPIA Y EXTRACCIÓN SANGUÍNEA”

FECHAS: 21, 22, 28 DE FEBRERO Y 1, 7, 8 DE MARZO DE 2019
HORARIO: 10:00am a 1:00pm
LUGAR: FACULTAD DE FARMACIA Y BIOQUÍMICA, UNMSM

INVERSIÓN:

- ESTUDIANTES UNMSM: S/.100.00*
- DOCENTES Y PERSONAL ADMINISTRATIVO UNMSM: S/.100.00*
- PÚBLICO EN GENERAL: S/.150.00*

*Incluye certificacón a nombre del alumno de la UNMSM

INFORMES E INSCRIPCIONES:

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FACEBOOK: CERESU FB
CORREO INSTITUCIONAL:
caupa.farmacia@unmsm.edu.pe
Whatsapp 977-648-852

VACANTES LIMITADAS

More information here:
The first time we attend a scientific conference, it is natural to be excited and nervous because you really wish to give a good impression and get as much information as possible from different speakers in your research field. The first time I attended a conference, I was very happy about it, since many of the speakers presenting their talks were researchers and were very important as most of them were cited on my thesis and my papers. I wanted to talk to many of them, but sometimes I was a little nervous. However, I took the courage and started knowing more about their research topics face-to-face and in that way I got new contacts. If this is your first time attending a SOT meeting or a different scientific conference, I strongly recommend you to follow this tips:

1. Visit the website from the organizers and give a look to the program to know a little more about the speakers that are presenting. It would be nice if you read some of their papers to get more information about them.
2. Start practicing your elevator speech. You don’t know if you are going to share it with the speaker that you listened to the previous day, or maybe with a Nobel Prize recipient! It would be nice to start with some general questions about their work. Also, if someone wants to know more about your research topic or your affiliation, be prepared to have in mind something easy to remember by you, and by them.
3. Start prioritizing the conferences you are going to attend. I am sure that you would like to list as many as possible, however be prepared, because sometimes they could overlap.
4. Ask questions. You don’t want to miss something important that might be helpful to learn more about the topic. Just don’t be shy and do it!
5. Try to attend the social events organized by the different groups or companies participating in the conference. It would be very nice for you to get new contacts and potential collaborators. Don’t forget to prepare cards with your information and ask for theirs.
6. The most important: Enjoy it and learn as much as you can!

References:
https://www.oxford-royale.co.uk/articles/first-academic-conference.html
https://www.sciencemag.org/careers/2017/05/how-get-most-out-attending-conferences
Immunology, Data Science, the Environmental, and Human Health

Felix E. Rivera-Mariani, PhD
Assistant Professor, College of Biomedical Sciences, Larkin University
Miami, FL
frivera@ularkin.org

When I was growing up in a small town of the southeast of Puerto Rico (Arroyo...about 20 miles west from where Hurricane Maria made landfall) it did not pass through my mind that we can contribute to society beyond the sports arena. My focus was towards contributing to society was through sports (baseball specifically). A family tragedy spun my world around in such a way that my focus was completely inverse—contribute to society by understanding our human bodies when it interacts with the outside (i.e. the environment). Although the competitive and discipline spirits of sports did not leave my soul, there was a different mindset towards society. At the end of my undergraduate career, at the time that my “clock ran out” (a jargon to refer that 4-year sports eligibility in college athletics was completed), it was the microbiology field which got my attention...after my first very streak plate technique attempt in a microbiology lab. It was a “perfect streak” according to my lab instructor—I take her word on that! Nevertheless, I was not sure on which type of microbe (i.e. bacteria, fungi, viruses) to focus in my prospective graduate career.

It was a coincidence that for reasons I do not recall, the stipend that I was offered in my first semester of graduate school (Dept. of Microbiology, University of Puerto Rico - Medical Sciences Campus) was half the salary of a normal stipend. For this reason, my eventual PhD thesis advisor (an authority in medical mycology in Puerto Rico, Dr. Benjamin Bolaños-Rosero), offered me a part-time job as research assistant. One of our milestones was understanding the aerobiology of airborne fungi in the atmosphere of San Juan, PR [1]. We used to joke that airborne spores from fungi, which in we found to be in higher concentrations than pollen in Puerto Rico in a daily basis, were “vampires” because their concentrations would peak at night and early morning (before the sunrise). Our studies also provided preliminary data about relationships of increases in asthma visits to the ER and peak concentrations of fungal spores. These preliminary data eventually to studies supporting the notion that previously uncharacterized fungal allergen, for which there are no commercial extracts for allergy testing, have potential induce immune reactivity in asthmatic and allergic rhinitis subjects. [2–4].

As a postdoc, I further open-up my research mindset to integrate environmental health and epidemiological approaches. Nevertheless, my interest in fungi and developing immunological techniques were assets that according to one of my former postdoc mentors (Dr. Patrick Breysse, now a director in the CDC) was key in being recruited to Johns Hopkins. At the beginning I was somewhat lost—you can imagine participating in a meeting in which you were the only biologist (among experts in respiratory diseases, environmental health engineers, statisticians, pediatricians, among others). Eventually, I got the message and understood the goal of participating in such meetings—to address human health from an interdisciplinary perspective. After Dr. Thomas Hartung, internationally-known expert in toxicology and director of the Center for Alternative to Animal Testing at Hopkins), join my mentoring team, interdisciplinary collaborations emerged, for example to study the aerobiology of mouse allergens (an important indoor allergen in Baltimore, MD) and the indoor pro-inflammatory potential in homes of patients with COPD [5,6].
Between the last years as a postdoctoral fellow and joining the College of Biomedical Sciences at Larkin University as an Assistant Professor, I integrated a “hot topic” into my line of research: computational approaches in data science. I noticed the need to become expert in this field after a notice that I was struggling to communicate the message of findings from my experiments with statistician. Such another coincidence could not have come at a better moment—due to family health situations, I had to slow down a bit my research endeavors. This gave me the opportunity to dedicate, intensively, to training in data science—“breakfast, lunch, and dinner” of learning how to code in data science in R, Matlab, and Python platforms. Today, these training came handy to address environmental health situations through collaborative projects, for example in the aftermath of Hurricane Maria (R21ES029762-01, PI Humberto Cavallin), lunch in my lab at Larkin University (https://www.riplrt.com), and provide mentoring opportunities to graduates students in my lab, many of which stayed and are now key personnel of our research endeavors. They are now fascinated with finding datasets to address environmental health and immunological questions [7–12].

References:
4. Rivera-Mariani FE, Bolaños-Rosero B.

What is Going On?
Environmental factors associated with the development of autism are largely unknown. Population studies have recently demonstrated an association between autism spectrum disorder in children with maternal pregnancy serum levels of polychlorinated biphenyl (PCB), a known endocrine disruptor. Previously, we showed that PCB153 activates the transcription regulator Inhibitor of Differentiator 3 (ID3) within human blood brain barrier endothelial cells. Here we propose to use machine learning applications to determine if PCB exposure activates an ID3 gene network that can be used to help explain cognitive dysfunction in exposed populations by:

• Collecting genomics data from PCB exposed populations using the National Center for Biotechnology Information (NCBI) data repository Gene Expression Omnibus (GEO).
• Identifying an ID3 regulated molecular gene network within PCB exposed populations to predict molecular risk factors of cognitive dysfunction in the general population.

References:
Announcements

16th Annual Reception

Tuesday, March 12th, 2019
6:00 PM-9:00 PM
Baltimore Marriott Inner Harbor,
University Ballroom 1

HOT Mentoring Activity

A Path to Success
Tips and strategies for my professional interview

Tuesday, March 12th, 2019
12:30 PM–1:30 PM
Sheraton Inner Harbor, Severn Room 1-3
### Sister Organizations

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<td>Asociación Española de Toxicología</td>
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<td>Asociación Latinoamericana de Toxicología</td>
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<td>Asociación Venezolana de Toxicología Médica</td>
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If your Hispanic Organization is planning a Toxicology meeting or if you are organizing a Toxicology event intended for a primarily Hispanic audience, and want to promote it, send an email to María Cárdenas González (Councilor for Sister Organizations) at Mariana_CardenasGonzalez@hms.harvard.edu for more information for its inclusion in upcoming Toxenlaces issues.
HOT wants you to be part of the organization! To make it available to everyone, HOT accepts applications from non-SOT members to become HOT members. Yes, that is right!! You only have to have the desire to collaborate with and be part of our great organization.

Your HOT membership provides you with valuable resources throughout your scientific career as for networking through the largest Hispanic toxicologist community, giving you opportunity for Travel Awards or serving as a mentor to the young Hispanic toxicologists; besides you receive the Toxenlaces newsletter every two months.

Application and more information can be found at Non-SOT Member Application. So, what are you waiting for? We are looking forward to receiving your application today!!

Follow us on Facebook at: http://www.facebook.com/hispanicorganizationoftoxicologists
Don’t forget to visit also the SOT Facebook page: http://www.facebook.com/pages/Society-of-Toxicology-SOT/163627880427831?fref=ts

- Toxenlaces is the newsletter that informs Hispanic toxicologists in the United States and the international Spanish and Portuguese-speaking scientific communities about important toxicological events and issues occurring in our countries. It is electronically published and distributed to our membership and Sister Organizations in Ibero-America. Toxenlaces disseminates critical dates for events, health perspectives, and funding and training opportunities. It serves as a toxicology forum for our members and other partner organizations, engages in educational outreach to the Hispanic communities and provides the essential elements to support networking among Hispanic toxicologists. Toxenlaces is open to receive collaborations from HOT and SOT members, and Sister Organizations. You can collaborate with short scientific articles, news or notes related with toxicology. Other ways to collaborate is by nominating your peers or yourself for the sections Trainee Section and When I Grow Up. For more information about collaborating with Toxenlaces send an email to Jose Delgado (Toxenlaces Editor) at jose.delgadojz@gmail.com with copy to Alejandro Ramirez-Lee (Toxenlaces Assistant Editor and Graphic Designer) at alejandroramirezlee@gmail.com

The views expressed in this Toxenlaces issue do not necessarily represent those of the Hispanic Organization of Toxicologists (HOT) or Society of Toxicology (SOT).