



Association of Scientists of Indian Origin

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President's Message

Dear ASIO members,

Hope you are having a great start to this year. I wish you all the very best and happy New Year!

The 54th annual meeting of Society of Toxicology (SOT) at San Diego is around the corner (March 22 - March 26, 2015). It will be a great opportunity for the ASIO members to meet again. Annual ASIO reception is scheduled on Monday, March 23rd from 7:00 to 9:00 PM at the Temecula Salon 1-4, San Diego Marriott Marquis & Marina (Headquarters). On behalf of ASIO, I would like to take this opportunity to personally invite you to the reception and other activities planned by ASIO during the SOT annual meeting. Detailed information is presented in this newsletter.

We had a great year and we have been communicating all the achievements with you via newsletter. I would like to thank all the committee members and volunteers for their dedication and hard work. I believe that there is always room for further improvement. If you have any suggestions or would like to volunteer then please do not hesitate to contact any one of us. I look forward to seeing you all at San Diego!

Together, Everyone Achieves More (TEAM)

Sincerely,

Sachin Devi, B.Pharm, Ph.D.
President, ASIO-SOT

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Dr. Sachin Devi, President ASIO

ASIO Activities at SOT 2015 Annual Meeting

ASIO ANNUAL RECEPTION

Monday, March 23, 7:00 PM – 9:00 PM

Location: San Diego Marriott Marquis & Marina (Headquarters), 333 West Harbor Drive, San Diego

Room: Temecula Salon 1 – 4.

It is our great pleasure to invite you to the ASIO Annual Reception 2015. This is a really good opportunity to meet your fellow ASIO members, ASIO 2015 award recipients, ASIO Sponsors and Endowment fund donors all at the same time and same place. Enjoy the evening full of networking, entertainment and food.



LUNCH 'N LEARN

Tuesday, March 24, 12:00 PM – 2:00 PM

Location: San Diego Marriott Marquis & Marina (Headquarters), 333 West Harbor Drive, San Diego

Room: La Costa Room.

In this casual, small group setting, 'invited experts' from academia, industry and government sector will answer your queries related to the career paths in Toxicology. This is also a good time to discuss about the expectation of a potential employer in different sectors.

Please RSVP with couple of questions for panelist to Prathap Kumar at drprathapk@gmail.com with subject line 'ASIO LNL' along with your meal preference (Veg/ Non Veg) by February 20th, 2015.



Our 2015 LNL Expert Panel includes:

Academia: Dr. Udayan Apte, Associate Professor, University of Kansas Medical Center

Industry: Dr. Vijayapal Reddy, Senior Research Advisor, Eli Lilly and company

Government: Dr. Mugimane Manjanatha, Toxicologist, US FDA-NCTR

Lunch and knowledge are free! Participation is limited to the first 35 students/Post docs!

COFFEE HOUR

Let's chat over coffee!! It's an opportunity to meet one-on-one with mentors and experts in the area of your choice- be it Academia or Industry or Government and get guidance to mold your career! Today you will learn and tomorrow you shall guide!! Let's pass on this light!!

To sign up, RSVP Mallikarjun Basavarajappa at mbshivapur@gmail.com by February 28th, 2015 with subject line 'COFFEE HOUR'.

ABT Diplomats 2014

Out of 99 candidates who passed the DABT examination in 2014, 12 diplomats are of Indian origin and are listed below. Kudos to all the new diplomats.

Aradhana Gupta, Senior Pathologist, Merial (a Sanofi Company), USA

Lakshmi Kelamangalath, Study Director, Covance Central Laboratory Services Inc., USA

Paramita Mookherjee, Senior Scientist - Toxicology Sciences, Amgen, USA

Rama Pai, Senior Scientist - Toxicology, Medivation, USA

Murali Vara Prasad Nadella, Associate Director and Head, Pathology Sciences, AstraZeneca, USA

Sukhdeep Sahambi, Study Monitor, Novartis Institutes for Biomedical Research, USA

Hariharan Saminathan, Senior Research Investigator - Discovery Toxicology, Biocon, India

Madhuri Singal, Senior Product Safety Associate, Reckitt Benckiser, USA

Rao M. Uppu, Professor & Director Environmental Toxicology PhD Program, Southern University, USA

Somashekarappa Gowda Nanjappa, Assistant Scientist, University of Wisconsin, USA

Bhaja Krushna Padhi, Biologists, Health Canada, Canada

Pramod K. Pawar, Glenmark Pharmaceuticals Ltd., India

CONGRATULATIONS TO ALL THE NEW DIPLOMATS

CONGRATULATIONS to SOT 2015 Award Recipients

Vishal Vaidya, PhD

Recipient of Achievement Award (2015)

Vishal is an assistant professor at Harvard Medical School and Harvard School of Public Health. He directs the Laboratory of Kidney Toxicology and Regeneration at Brigham and Women's Hospital.

Vishal's work, supported by 'NIH/NIEHS Pathway to Independence' grant, in collaboration with the Predictive Safety Testing Consortium, led to the first kidney toxicity biomarker (Kidney Injury Molecule-1) qualified by the US-FDA and the European Medicines Agency in 2008. In 2011, Vishal won the NIH/NIEHS Outstanding New Environmental Scientist (ONES) award and in 2013 he was selected as one of six North American scientists to win the Innovation in Regulatory Science Award from the Burroughs Wellcome Fund. Vishal has delivered more than 50 seminars as an invited speaker and written more than 60 peer-reviewed publications, with more than 4,000 citations. Vishal's laboratory uses cellular systems, mouse models as well as human biospecimens, and applies methodologies at the interface of cell and molecular biology, systems pharmacology, and translational science in understanding kidney disease. Vishal was awarded the Leading Edge in Basic Science Award in 2014 by Society of Toxicology (SOT) and is also the recipient of 2015 Achievement Award by SOT.



Prajakta Shimpi, MS

Recipient of Colgate-Palmolive Student Research Award in Alternative Methods (2015)

Prajakta is a 3rd year PhD candidate at University of Rhode Island in Pharmacology and Toxicology program. Before joining graduate school, Prajakta completed her bachelors and masters of Pharmacy at the University of Pune in India. After moving to the USA, she worked as a research volunteer in Dr. Angela Slitt's laboratory for about a year and then joined the Pharmacology and Toxicology Graduate program.

Prajakta works on mechanistic toxicology of environmental chemicals as a part of her PhD dissertation. Currently, she is exploring the epigenetic alterations in the rodents induced by environmental estrogen mimetic



compound, bisphenol A. Early life exposure to toxicants such as bisphenol A and perfluoroalkyl flame-retardants has been implicated in the metabolic disease-related consequences, and Prajakta's work focuses on a perinatal peripubertal exposure model.

As a part of Colgate-Palmolive Student Research Award in Alternative Methods, Prajakta will visit the Xenotech LLC facility in Lenexa (KS) and get intensive hand-on training on isolation, culturing and cryopreservation of primary human hepatocytes. This grant money allows her to pursue the *in-vitro* mechanistic aspect of her dissertation. Prajakta has been an active member of Society of Toxicology, as well as northeast regional chapter, and ASIO for more than three years. Prajakta has also presented her work at Gordon Research Conference on Mechanisms of Toxicity. At Fall-2014 NE-SOT meeting, she was bestowed with the 'Best Student Platform Presentation'.

Alok Ranjan, B.Pharm

Recipient of Syngenta Fellowship Award in Human Health Application of New Technologies (2015)

In 2010, Alok received his Bachelor of Pharmacy (B.Pharm) from Babasaheb Bhimrao Ambedkar Bihar University at Muzaffarpur, India. Later he joined the Graduate Program of Pharmaceutical Sciences as a PhD student at the Texas Tech University and is currently working in the lab of Dr. Sanjay Srivastava.

Alok is interested in diverse areas ranging from identification and development of new anti-cancer agents, studying metastasis and its prevention by the anti-cancer agents, cell signaling involved in carcinogenesis and novel *in vivo* cancer model for the study of cancer progression and its therapeutic intervention.



His research project specifically focuses on potential repurposing of antipsychotic drugs in cancer treatment, particularly metastatic breast cancer. Breast cancer metastasis to brain accounts for 50% of deaths. In current scenario, metastatic breast cancer is like death sentence to the patients because most of the drugs cannot reach brain due to the presence of blood brain barrier (BBB). So he is exploring the possibility of using already approved drug, penfluridol, which is crosses BBB and being therapeutically used to treat schizophrenia.

Alok expects that any positive findings from this research will shorten the FDA review process and speed-up the clinical development for establishing penfluridol as an option to treat breast cancer and its metastasis to the brain.

Alok has received accolades for his research with numerous awards including SOT's Carcinogenesis Specialty Section (CSS) Graduate Student Award, Graduate Student Travel Award, and Syngenta Fellowship Award in Human Health Application of New Technologies to name a few.

Please send your suggestions/comments to asio.sot.newsletter@gmail.com

Presentations of ASIO Members at SOT 2015

Chairperson / Presenter	Date	Time	Topic
Udayan M. Apte	Sunday, March 22	7:00 AM– 7:45 AM	New Horizons in Chemical Carcinogenesis: Advances in Mode of Action and Mechanism of Cancer Pathogenesis
Chirag J. Patel	Sunday, March 22	8:15 AM – 12:00 Noon	Exposome Bioinformatics: EWAS and Beyond
Moiz Mumtaz	Sunday, March 22	8:15 AM – 12:00 Noon	Regulatory Drivers and Available Resources
Chandramallika (Molly) Ghosh	Sunday, March 22	8:15 AM – 12:00 Noon	Toxicology and Regulatory Considerations for Combination Products
	Wednesday, March 25	12:00 PM – 1:20 PM	Role of Toxicologists in a Federal Organization
Niranjan S. Goud	Sunday, March 22	1:15 AM – 5:00 PM	Methods in Assessing the Biocompatibility of Medical Devices.
Salman R. Khetani	Sunday, March 22	1:15 PM – 5:00 PM	Developing Microengineered Models of Liver Toxicology.
Kapil Pant	Sunday, March 22	1:15 PM – 5:00 PM	Microvascular Systems on a Chip
Saber M. Hussain	Sunday, March 22	1:15 PM – 5:00 PM	Is Synthetic Biology the Future of Toxicology?
Mausumee Guha	Sunday, March 22	1:15 PM – 5:00 PM	Strategies in Investigative Toxicology in a Pharmaceutical Setting
Anumantha Kanthasamy	Monday, March 23	9:15 AM – 12:00 PM	Role of the Divalent Metal Manganese in Protein Misfolding and Cell-to-Cell Transmission of Protein Aggregates via Exosomes in Cell Culture and Animal Models of Neurodegenerative Diseases
Jashvant D.	Monday, March 23	9:15 AM –	Gestational Age-Dependent Fetal Exposure to Xenobiotics: The Role of

Unadkat		12:00 PM	Placental Transporters
Brinda Mahadevan	Monday, March 23	12:10 PM – 1:30 PM	Adaptive Leadership: Anticipating, Initiating, and Responding to Change
	Monday, March 23	2:00 PM – 4:45 PM	Infant Formula Nutrition: Regulatory and Safety Evaluation of Ingredients
	Wednesday, March 25	12:00 PM – 1:20 PM	Role of Toxicologists in the Nutrition Industry
Rakesh Dixit	Monday, March 23	2:00 PM – 4:45 PM	Balancing Safety and Efficacy of Novel Immune System Agonists to CEA and OX40 Targets
Urvashi Rangan	Wednesday, March 25	12:00 PM – 1:20 PM	Developing a Successful Risk Communication Program by Leveraging Social Media—Consumer Reports: An NGO Perspective
Sudheer Beedanagari	Wednesday, March 25	12:00 PM – 1:20 PM	What Toxicologist Do You Wanna Be? The Role of Toxicologists across Diverse Organizations
Raja Mangipudy	Wednesday, March 25	12:00 PM – 1:20 PM	Role of Toxicologists in the Pharmaceutical/Biotechnology Industry.
Aravind Subramanian	Wednesday, March 25	1:30 PM – 4:15 PM	Using the Library of Integrated Network Based Cellular Signatures (LINCS) to Characterize the Mechanism of Action of Small-Molecule Therapeutics
Bindu Nanduri	Wednesday, March 25	1:30 PM – 4:15 PM	Strengths and Weaknesses of Mouse Models in Studies of Immunological Effects of Drugs and Chemicals
Srikanth S. Nadadur	Thursday, March 26	9:00 AM – 11:45 AM	Comprehensive Analysis of Nano Silver Toxicity Profiles: Known, Unknown, and Surprises!

Join us as an ASIO Member. Participate and lead ASIO-SOT initiatives!

Please join Association of Scientists of Indian Origin Special Interest Group of Society of Toxicology. ASIO Members get an opportunity to be involved in our creative and enthusiastic initiatives throughout the year.

Be an ASIO member today and enjoy numerous benefits. Just log on to our website: <http://www.toxicology.org/isot/sig/asio/membership.asp>

SOT – STOX SYMPOSIUM 2014: An overall synopsis - by Dr. Gopala Krishna

As a major milestone towards fostering relationship between ASIO-SOT and STOX, Dr. Gopala Krishna and Dr. Y.K. Gupta put together a symposium which was co-funded by SOT and STOX organizations and included as part of 2014 STOX meeting conducted on 10th December 2014 at Chennai, India. The symposium titled “**Global Pharmaceutical Testing Strategies for the 21st Century**” includes following ASIO-SOT members:

1. Gopala Krishna, PhD, MBA, DABT, FATS. Supernus Pharmaceuticals, Rockville, MD, USA



Dr. Gopala Krishna

2. Y. K. Gupta, MD. All India Institute of Medical Sciences, New Delhi-110029, India



Dr. Y. K. Gupta

3. B. Bhaskar Gollapudi, PhD. Exponent® Inc., Midland, MI 48640, USA



Dr. Bhaskara Gollapudi

4. Sudheer Beedanagari, PhD. Bristol-Myers Squibb Company, New Brunswick, NJ, USA



Dr. Sudheer Beedanagari

5. Manoj Aggarwal, Ph.D. Dow AgroSciences, Oxfordshire, Abingdon, OX14 4RN, UK



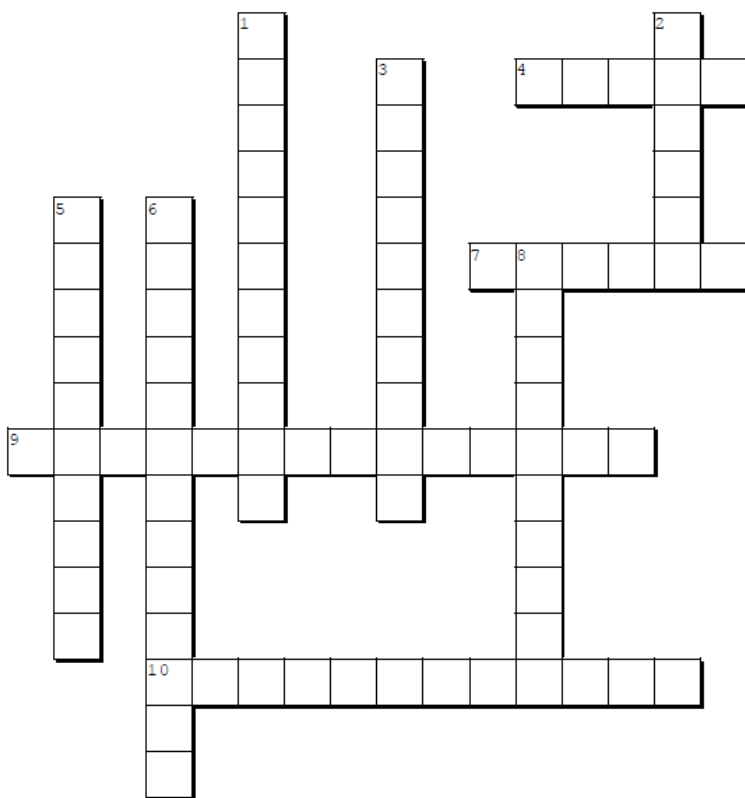
Dr. Manoj Aggarwal

The theme of the symposium:

- With the technological advancement of nonclinical science over the last century, the global regulatory testing strategies are constantly changing
- To be compliant with the global standards for exchange of nonclinical data extremely important to understand such requirements
- This symposium was proposed to address and deliberate such a need so we are all on the same page and showcase the state-of-the-art from both the scientific and regulatory perspectives and be current to meet and/or exceed the expectations of the 21st century
- The organizers have identified global experts on the topic who shared their expertise and provided an opportunity to the participants to ask questions and learn from each other
- Subject matter experts in the Asian subcontinent from the government, industry, pharmaceuticals, pesticides and environmental chemicals and other areas attended and shared their thoughts

Dr. Krishna discussed 'Global pharmaceutical testing strategies for the 21st century with a focus on 3Rs' as well as provided valuable information about 'How to create an integrated "win-win" outsourcing strategy'. Dr. Gollapudi focused on 'New approaches and changing regulatory requirements in genetic toxicology'. 'Role of toxicogenomics in 21st - century toxicology research' was presented by Dr. Beedanagari. A 'Hazard-led, tiered approach for human health risk assessment for agricultural pesticide sprayers' was discussed by Dr. Aggarwal of Dow Agrosiences. Symposium was concluded with an enthusiastic panel discussion. The symposium was well-received as an opening session of the annual STOX meeting with excellent attendance and active participation. Dr. Krishna also served as Chairman of Young Scientist Award Session and served as a judge for poster presentations. Drs. Gollapudi and Aggarwal were also invited speakers in an additional workshop at this meeting: New Tools and Approaches in Pesticide Regulatory Toxicology and Human Safety Assessment. If you need additional information on the collaborative effort, please contact Dr. Gopala Krishna at gkrishna@supernus.com. Dr. Krishna encourages each ASIO-SOT current and future members to seek membership in STOX. For this please contact STOX secretary Dr. Sarathchandra at sarathchandrag@tanuvas.org.in

CrossTox-3



CrossTox3 – by Vivek Dadhania

Down

1. The drug that can be used to treat poisoning by mercury, lead, and arsenic
2. The city where the headquarter of the Society of Toxicology (SOT) is located
3. The antidote for the opioids poisoning
5. Who gave the statement that 'The Dose Makes the Poison'
6. Name of the plant from which the pyrethrins are derived
8. One of the toxic metabolites of ethylene glycol poisoning

Across

4. Target organ for acetaminophen toxicity
7. The word (plural) which is used for the toxic compounds of biological origin
9. Potential adverse health effect of alcohol
10. The powerhouse of the cell

Please send your answers to: asio.sot.newsletter@gmail.com

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