

# ASIO NEWSLETTER

AUGUST 2013

EDITORS: PRIYA VENKATAKRISHNAN, SACHIN BHUSARI, PRASAD KRISHNAN, LAKSHMI SIVARAMAN, SHIRISHA CHITTIBOYINA, MAMTA BEHL.



## President's Message



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Happy Summer! Hope you are enjoying outdoor activities and time with your family. I am happy to provide an update on the 2013-2014 agenda that was outlined in our May Newsletter. The Board of Directors (BODs) has confirmed various committees and their membership (list attached in this newsletter). It is refreshing to see many new volunteers in the committees. Congratulations, welcome, and thanks to the chairs and members! Committees will meet regularly and chairs will provide periodic updates to BODs. It is not easy to start working on next year's goals when current year's annual meeting is just done. I am, however, encouraged by the enthusiasm and progress so far.

Scientific Proposal Review committee reviewed seven proposals that sought ASIO's sponsorship and promptly submitted the comments to SOT. Awards committee has updated the award description and has initiated outreach efforts to increase visibility for International Student Award and Young Scientist Award. Sponsorship committee has updated Sponsorship Request letter and plans to contact current and new sponsors as soon as possible. Webinar committee is determined to conduct at least one webinar by end of this year.

Outreach committee with the goal of promoting awareness among K-12 kids of Indian origin on toxicology is in touch with SOT for initiating its efforts. Endowment committee has collected information from SOT regarding creation of new funds and working on a plan to initiate the effort. We are actively participating in the Special Interest Group-Collaboration Group (SIG-CG) meetings and contributing ideas on how to showcase the SIGs in a more visible, strategic and global manner.

Membership committee is tasked to add 100 new members this year. Taking advantage of Dr. Dharam Singh's generous offer to sponsor new members for the first year, 64 new ASIO members are being added so the goal of the membership committee is already more than halfway met!

**ASIO OFFICERS****2013-2014****President:**

S. Satheesh Anand

[Satheesh.S.Anand@DuPont.usa.com](mailto:Satheesh.S.Anand@DuPont.usa.com)**Vice President:**

Sachin Devi

[sdevi@lecom.edu](mailto:sdevi@lecom.edu)**Vice-president elect:**

Sudheer Beedanagari

[beedanas@bms.com](mailto:beedanas@bms.com)**Secretary/Treasurer:**

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[singh.jatinder@gene.com](mailto:singh.jatinder@gene.com)**Councilors****Past President:**

Saryu Goel

[saryu.goel@gmail.com](mailto:saryu.goel@gmail.com)

Mamta Behl

[mamta.behl@gmail.com](mailto:mamta.behl@gmail.com)

Lakshmi Sivaraman

[Lakshmi.Sivaraman@bms.com](mailto:Lakshmi.Sivaraman@bms.com)**Post-Doctoral Representative**

Sainath Babu

[biosainath@gmail.com](mailto:biosainath@gmail.com)**Student Representative**

Shirisha Chittiboyina

[schittib@indiana.edu](mailto:schittib@indiana.edu)***President's message Contd...***

Our past president, Saryu Goel, was invited to talk on "International Guidelines and Clinical Drug Metabolism Studies" at many research and contract organizations in India. During his talk, Saryu has promoted ASIO and convinced many to sign up for ASIO membership. BOD thanks Saryu for his efforts. Please also note that one can become an ASIO member (paying only \$15 yearly for membership) without having to become an SOT member first. Also, the first SIG or specialty section membership is free for students and post-docs who are already SOT members. I encourage members to pass the word around and encourage all non-members to become ASIO members.

ASIO remains as vibrant and energetic as ever, thanks to hard working BODs and volunteers. While we are going strong, there is still room for improvement. So, I would like to hear your feedback on current activities and ideas for new activities. I strongly encourage members to volunteer for ASIO activities. The more, the merrier! Thank you for making ASIO a great organization within SOT.

*Together, Everyone Achieves More (TEAM)*

S. Satheesh Anand

***ASIO 30<sup>th</sup> year Anniversary  
- Down the memory lane: Call for  
articles, past photos***

We are all aware that ASIO officially formed as a SIG within SOT in 2006, and some of us know that we have had meetings at Indian restaurants for a while prior to 2006. But, what many of the new members do not know is that 'Indian toxicologists get-together' used to happen in someone's hotel room at SOT meetings for a long time. Talking to various senior members, we have learnt that first such get-together of Indian toxicologists at SOT happened in 1982-1983 time frame. So, the BOD has decided to celebrate 30<sup>th</sup> year anniversary of the 'get-together' this year and dedicate our November newsletter for this purpose!! **We request senior members to send pictures, stories about those 'get-togethers' and invite members to send ideas for celebrating this 30<sup>th</sup> anniversary.**

***Please send Photos and articles to:***Mamta Behl: [mamta.behl@gmail.com](mailto:mamta.behl@gmail.com)Sachin Bhusari: [bhusaris@gmail.com](mailto:bhusaris@gmail.com)

## *ASIO Past President Delivers Educational Seminar In India*



**Dr. Saryu Goel was awarded a plaque in appreciation for sharing his expertise on drug development with the staff and students at Meerut Institute of Engineering & Technology, Meerut, India.**

*Left to Right: Lt. Gen. J. M. Garga (Retd.), B.E., M.E., Director General, Meerut Institute of Engineering & Technology (MIET); Saryu Goel, D.V.M., Ph.D., DABT., Associate Director, Department of Preclinical & Competitive Intelligence, Supernus Pharmaceuticals, Rockville, MD, USA; Shri Vishnu Saran, B.E., Chairman, MIET.*

Dr. Saryu Goel, on behalf of Association of Scientists of Indian Origin (ASIO), a special interest group of Society of Toxicology (SOT), USA, shared his experience and expertise in development of innovative drugs (herbals, small molecules and biologics) with minimal risk for improved health and longevity of people to the market. Dr. Goel began his talk by appreciating the opportunity and assistance from Dr. Muralidharan G., Chief of Technical Operations & Dr. Krishannappa H., Head-Toxicology, Advinus Therapeutics; Dr. Nageshwara Rao, Head-Business Development & Dr. Anand Eswaraiiah, Head-Clinical Development & Regulatory Affairs, Clinigene International Ltd.; Dr. Pralhad Patki, Head-Medical Services & Clinical Trials, & Dr. Rangesh Paramesh, Head-Drug Discovery, Himalaya Herbal Healthcare in Bangalore; and Dr. Sunil K. Singh, Professor/Head-Biotechnology & Sunil K. Goel, Professor, Electronics and Communication Engg., Meerut Institute of Engineering and Technology (MIET) in Meerut in making the arrangements to meet with the students, scientist and professors at respective institutions. Some of the discussions were focused on the importance of learning from junior and senior staff and colleagues, within and outside the respective institutions.

Dr. Goel shared his experience on interactions with regulatory agencies and encouraged companies to think creatively to reduce the time and cost of drug development. He encouraged companies to share a well thought-out plan with supporting data with the agencies and obtain a buy-in during routine interactions (pre-IND, end of Phase II, pre-NDA meetings or Special Protocol Assessment [SPA]) during product development. He stressed that this will enhance the ultimate success or early termination of the program, saving time and resources to develop drug candidates and increase overall profitability for the company while minimize the cost of marketed drug. Dr. Goel also shared his knowledge on the guidelines and objectives of conducting drug metabolism studies. Also, he shared the impact of information obtained from such studies on the future drug development program. He gave an insight into the design and conduct of clinical metabolism studies and the difference between herbal and pharmaceutical drugs.

Dr. Goel discussed the process of 'Contract Research Organization' selection, study initiation and delivery of a comprehensive data package to withstand thorough review by worldwide regulatory authorities. His major message to the audience was as follows: 'In any collaboration, the majority of effort is upfront. The success depends on thinking-through the entire process and specification for the final product before the award of the contract and initiation of the project. In such a scenario, when executed effectively, the success rate is immensely increased'.

Dr. Saryu Goel also introduced ASIO-SOT organization to the audience in India during his presentation and encouraged them to become members with first year free membership and take advantage of the opportunity it gives to foster collaboration with fellow toxicologists/scientists from around the globe and particularly, the USA. As a result of this effort, more than 50 new applications have been received by the ASIO. The ASIO-SOT organization acknowledges with *sincere thanks to Dr. Dharam Singh*, a veteran of ASIO-SOT and a philanthropist, who graciously agreed to pay the first year membership fee for new members.

## *Dr. Vishal Vaidya honored by Burroughs Wellcome*



Dr. Vishal Vaidya, Assistant Professor, Laboratory of Kidney Toxicology and Regeneration, Assistant professor of Medicine and Environmental Health, Harvard Medical School and Harvard School of Public Health, USA.

NIEHS Outstanding New Environmental Scientist (ONES) awardee Vishal Vaidya, Ph.D., is one of six North American scientists selected to receive 2013 Burroughs Wellcome Fund (BWF) Innovation in Regulatory Science Awards.

Dr. Vaidya is an assistant professor of medicine and environmental health at Harvard Medical School and Harvard School of Public Health. He also directs the laboratory of kidney toxicology and regeneration in the renal division of Brigham and Women's Hospital, with a research emphasis on discovery and evaluation of biomarkers for early detection of kidney injury, and investigating the molecular mechanisms of kidney tissue repair.

With grant support from his 2012 NIEHS ONES award, his group currently studies fibrinogen signaling in kidney tissue repair. The BWF award will give Vaidya's group \$100,000 per year, for the next five years, to map the biology of a toxic kidney cell. His goal is to advance regulatory science, by transforming kidney safety assessment using tools and technologies at the interface of quantitative systems pharmacology.

In a message to NIEHS and NTP Director Linda Birnbaum, Ph.D., about the award, Dr. Vaidya credited NIEHS support with helping make the award a reality. "The ONES grant set the ball rolling for me two years back and now I am just having lot of fun in science."

In addition to his ONES award, Dr. Vaidya was the recipient of an NIH Pathway to Independence Award, from NIEHS, in 2007. He was also a summer intern at NIEHS during graduate school. Dr. Vaidya completed postdoctoral training in the renal division of Brigham and Women's Hospital, supported by a grant from the National Kidney Foundation, in 2005, prior to his faculty appointments at Harvard.

Dr. Vaidya is an active member of the Society of Toxicology (SOT) and the recipient of a number of SOT awards. In 2012, he received the group's Association of Scientists of Indian Origin (ASIO) Young Investigator Award. The ASIO, on behalf of all its members, would like to congratulate Dr. Vaidya on this fantastic achievement!

*This story was adapted from NIEHS official newsletter E-factor August 12, 2013 edition*

## *Regulatory Toxicology in India- Present status and future prospects*



Dr. G.B. Jena, Assistant Professor,  
Faculty for Risk Assessment & Intervention Studies  
Department of Pharmacology & Toxicology,  
National Institute of Pharmaceutical Education & Research  
(NIPER), SAS Nagar, Punjab India -160062  
[gbjena@niper.ac.in](mailto:gbjena@niper.ac.in)

Present civilization needs a safe and healthy environment for better sustainability. India is one of the fastest-growing pharmaceutical markets in the world. Several CROs and pharmaceutical companies are providing R&D services on different aspects of toxicological sciences under the OECD principle of Good Laboratory Practices. India is presently facing several impending threats due to the indiscriminate use of pesticides, ground water contamination, changes in life style and increase in industrial pollution. To protect the human health and the environment from the toxic insults, chemical safety and the stringent regulatory requirements are critical.

In India, there is an urgent need to promote both graduate and post graduate programs in different areas of toxicology. National Institute of Pharmaceutical Education & Research (NIPER), for the first time in the country started a fulltime MS Regulatory Toxicology (Pharm.) course. NIPER is also the first Government Center to get OECD GLP certification and it has a state-of-art National Toxicology Centre to carry out different pre-clinical toxicity tests as well as to give hands-on-training to the students. Indian Institute of Toxicological Research, Lucknow, a constituent laboratory of CSIR provides multidisciplinary research approaches in toxicology with a clear mandate of implementation of regulatory toxicology for safety evaluation of industrial and environmental chemicals/products. Central Drug Research Institute, Lucknow, another CSIR constituent laboratory conducts pre-clinical toxicity studies in the area of systemic toxicology, reproductive toxicology, genetic toxicity, immunotoxicity, local toxicity and carcinogenicity under schedule-Y guidelines of Indian Drug and Cosmetic Rules for different NCEs.

Many private organizations such as Advinus Therapeutics, Jai Research Institute, International Institute of Bio-Technology and INTOX provide OECD GLP compliant toxicity studies in India. Of course, toxicology is a very young discipline in India, but the demand of toxicologists is very huge. There is a shortage of qualified toxicologists in India and to meet these challenges the number of courses/training programs in toxicology is on the rise. A post graduate/doctorate in toxicology can find job opportunity in pharmaceutical, chemical, agricultural, cosmetic and other health care sectors, academic institutions, government agencies, toxicology R&D centers or become a freelance consultant.

One of the fundamental responsibilities of the scientists is to explore the need of toxicological evaluation for the real cause, not just for the sake of compliance. Guidelines must be complied, adverse health effects have to be introspected, regulatory requirements must not be exaggerated, and the final decision has to be taken based on the weight of evidence approaches and within the real risk/benefit frameworks. Finally, the future of any discipline depends on our integrated perception that the subject of 'toxicology' is vital and essential to protect public health, environment and to increase the global economy.



## *Meet the Winners of ASIO-SOT Awards 2013*



Aditi Verma  
Graduate student, Centre for Neuroscience,  
Indian Institute of Science, Bangalore, India

Winner of the International Student travel award

### *A few words about me.....*

I am a second year graduate student at the Centre for Neuroscience, Indian Institute of Science, Bangalore, India. I have a Bachelor's degree from St. Xavier's College, Ahmedabad, India in Zoology and a Master's degree in Life sciences from Jawaharlal Nehru University, New Delhi, India.

Under the guidance of Prof. Vijayalakshmi Ravindranath, I am working on the implications of alternative splicing in Parkinson's disease. I am currently studying differential alternative splicing in L-type calcium channel and its implications in PD.

### *How did I come to know about ASIO award.....*

I came to know of the award through the SOT annual meeting website.

### *How did the award help me.....*

I have presented my preliminary results at the 52<sup>nd</sup> annual meeting of Society of Toxicology. The travel award by ASIO helped me tremendously in traveling to San Antonio from India to attend the SOT meeting.

Attending the meeting was an exhilarating experience for me as I could communicate my findings to a larger audience and could benefit from the expertise of many proficient researchers. The ASIO family was also very cordial in receiving me and made me feel comfortable and at home in a foreign land.

## *Meet the Winners of ASIO-SOT Awards 2013*



Dr. Amarendra Ajay  
Post-doctoral Fellow  
Harvard Medical School

Winner of Dr. Dharm Singh Postdoctoral  
fellow Best Abstract Award

### *A few words about me...*

I obtained my B.Sc. in Biotechnology from Patna University and then I pursued my M.Sc. in Biotechnology from IIT, Bombay. Following that I joined 'National Centre for Cell Science' in Pune to start my Ph.D. in Cancer Cell Biology where I worked on chemotherapy mediated toxicity to cancer cells and its molecular signaling.

After completing my Ph.D., I moved to USA, Harvard Medical School, for my postdoctoral fellowship where my research work focuses on understanding the molecular mechanisms of kidney toxicity and regeneration.

### *How did I come to know about ASIO award.....*

I came to know about the ASIO award from the SOT website.

### *How did the award help me.....*

This prestigious award provided me in getting recognition to my research work. My ASIO award was published in the newsletter of Brigham and Women's Hospital, my work place, which gave me more recognition and new opportunities for networking with my colleagues. Thus, I got more motivation to work and move forward in my career.

### *What it means to me to receive this award from ASIO.....*

The award means really a lot to me. I thank ASIO award committee for selecting me for this award. It was good to meet fellow toxicologists of Indian origin at ASIO annual reception. I interacted with them to get future directions, which would have been impossible without ASIO.

## *Meet the Winners of ASIO-SOT Awards 2013*



**Dr. Ravinesh Mishra,  
Baddi University of Emerging Sciences & Technology,  
India**

**IUTOX and EUROTOX award Winner**

Dr. Ravinesh Mishra received an SOT/Astra-Zeneca Award Fellowship by IUTOX Committee to attend & present his research findings at the 2013 SOT Annual Meeting in San Antonio, TX. This selection was based on his outstanding scientific accomplishments. Dr. Mishra also attended ASIO annual reception held during SOT meeting and met and interacted with ASIO members. Dr. Mishra was also awarded a travel fellowship from EUROTOX, to attend and present his research at EUROTOX 2013 meeting held in Sept 2013 in Interlaken, Switzerland.

### *Opportunity Announcement SOT Global Senior Scholar Exchange Program*

The 2014 Society of Toxicology Global Senior Scholar Exchange Program will fund two Senior Scholar toxicologists to attend the SOT Annual Meeting and spend up to four weeks with one or more Hosts from established toxicology programs in academic, government, or industry organization(s) worldwide. The Host will in turn visit the Senior Scholar's institution. The primary goal is to increase toxicology capacity in developing countries by providing professional opportunities for senior scientists through relationships supported by SOT. The Senior Scholars are expected to build on this opportunity by strengthening toxicology within their universities and countries. *The program provides up to \$15,000 for each pair, with up to \$10,000 travel support for the Senior Scholar and \$5,000 for the Host. Support is not provided for equipment, laboratory supplies, or renovations.* For more information contact: [bettye@toxicology.org](mailto:bettye@toxicology.org)

**Deadlines: Senior Scholars from developing countries in Latin America, Africa, or Asia**

**Intent to Apply Form:** August 15, 2013

**Full Application:** September 16, 2013

**Hosts from established academic, government, or industry organizations worldwide**

**Intent to Apply Form:** September 16, 2013

**Full Application:** October 15, 2013



## *ASIO 2013-2014 Committees List*

### 1. ASIO Reception Committee:

- Vice President – **Sachin Devi**-Chair
- VP-Elect - - **Sudheer Beedanagari** –Co-chair
- All BOD officers

### 2. ASIO Sponsorship Committee:

- Vice President - **Sudheer Beedanagari** -Chair
- President –**Satheesh Anand**
- Past President- **Saryu Goel**
- Secretary/ Treasurer- **Jatinder Singh**
- Volunteer – Rajendra Kumar Singh

### 3. ASIO Endowment Committee:

- Volunteer- **Binu Philip** –Chair
- President –**Satheesh Anand**
- Volunteers – Raja Settivari

### 4. ASIO Awards Committee:

- Senior Councilor- **Mamta Behl**-Chair
- VP-Elect –**Sudheer Beedanagari** - Co-Chair
- Ambuja Bale - Bale.Ambuja@epa.gov
- Sharmilee Sawant -
- Sharmilee.P.Sawant@kcc.com

### 5. ASIO Membership Committee:

- Secretary/ Treasurer- **Jatinder Singh**-Chair
- Volunteers: Priya Venkat, Vijay Kale, Durga Tripathi, Shubhra, Prathap Kumar, Senthil, Prasad, Udayan Apte

### 6. SOT Proposal Review Committee:

- VP-Elect –**Sudheer Beedanagari** - Chair

### 7. ASIO Newsletter Committee:

- Volunteer- **Sachin Bhusari** - Chair
- Junior Councilor- **Lakshmi Sivaraman**
- Senior Councilor- **Mamta Behl**
- Student Rep- **Shirisha Chittiboyina**
- Volunteers: Priya Venkat, Prasad Krishnan

### 8. ASIO LNL/ Coffee Hour Committee:

- Student Rep- **Shirisha Chittiboyina** -Chair

### 9. ASIO Webinars Committee:

- Post-doc Rep- **Sainath Babu**–Chair
- Student Rep- **Shirisha Chittiboyina** -Co-chair
- President –**Satheesh Anand**

### 10. ASIO Website Committee:

- Volunteer- **Vikrant Vijay**- Chair
- Volunteer- Rajendra Kumar Singh,

### 11. Outreach – K12 and STOX/AoT:

- Sunny Uppu and Sainath
- Mamta, Satheesh, and Sudheer



## *HAPPY INDEPENDENCE DAY*

ASIO conveys its best wishes to all its members and fellow scientists on the U.S. Independence day July 4<sup>th</sup> and Indian Independence day August 15<sup>th</sup>. It is a day to remember the sacrifices of great men and women of history and also cherish the gift they left for us.

### *Join us as an ASIO Member.....*

*Please join us in our 2013 membership drive by encouraging your friends and colleagues who are of Indian origin to become ASIO members, if they haven't done so already. Also, for those who are currently members of ASIO, please continue to support ASIO organization by renewing your annual membership.*

*You can renew your ASIO annual membership online when you pay your annual SOT membership dues, simply by checking ASIO membership listed under SOT-SIG membership section. The membership is free for students and postdocs, and costs only nominal fee for associate and full SOT members. For more information on ASIO organization or how to become ASIO members please visit:*

<http://www.toxicology.org/isot/sig/asio/membership.asp>

*Good news to Toxicologists in India!! SOT has discounted membership for scientists (\$50), students and postdocs (\$10) from developing countries including India ([www.toxicology.org/ms/SOT\\_DevelopingCountries.pdf](http://www.toxicology.org/ms/SOT_DevelopingCountries.pdf)).*

*Sincerely,*

*ASIO 2013 Committee.*

### *SOT Continuing Education Classes Online*

SOT and the Continuing Education (CE) Committee invite ASIO Special Interest Group (SIG) members to register for online continuing education courses offered by **CEd-Tox**. Currently, there are 32 online courses available for viewing and many other courses are available from the 2009-2013 Annual Meetings. These courses offer a great, low-cost way for toxicologists to expand professional development and to stay current in the field of toxicology.

**Additionally, scientists in developing countries may be eligible for complimentary free access to these courses** (contact SOT HQ for more information or to determine if a country is eligible for this complimentary access program). **Graduate Student and Postdoc members of SOT must avail this great opportunity as they receive these courses for free!**

Please consider utilizing the online CE courses opportunity to stay connected with latest developments in the field of toxicology in a great, low-cost way!

■ *Diamond Sponsors*



*Syngene*

The Syngene logo consists of the word 'Syngene' in a blue, italicized, sans-serif font, enclosed within a light gray rounded rectangular border.

■ *Gold Sponsors*



■ We would also like to take this opportunity to thank all of our endowment sponsors for their continued support over the years.

**Endowment Sponsors:**

**Dr.Laxman Desai- Toxikon**

**Dr.Hairhara Mehendale**

**Dr.Dharm Singh**

■ **Become a sponsor:** Contact *Sudheer Beedanagari* at [beedanas@bms.com](mailto:beedanas@bms.com) to learn more about how your sponsorship can help strengthen and contribute to the continued growth and success of ASIO.

<http://www.toxicology.org/isot/sig/asio/index.asp>