



Association of Scientists of Indian Origin

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President's Message

Dr. Mayur Mitra

November 2017

Dear ASIO members,

I hope everyone has had a very successful and productive 2017. As we approach the year end, I would like to reflect on a few achievements/new initiatives for ASIO this year. First, I would like to thank **Calvert Labs** for their generosity as they have come forward as a sponsor of our year-round activities. I would personally like to thank **Dr. George Thomas** for leading this effort from the Calvert Lab's side. Second, in the spirit of giving equal opportunity to all our members, we changed our process of organizing the ASIO webinars. This year, instead of reaching out to a particular ASIO member, we sought webinar applications from our membership at large. I am happy to announce that this endeavor has been very successful. **Dr. Sudin Bhattacharya** will be presenting his work on computational toxicology as part of the webinar, which will be held on the 15th December 2017 ([Register Here](#)). We were also able to secure funding from SOT for this event, which is a competitive process. Third, we all have our passions and engagements outside of our professional life. In an effort to connect with our members at a personal level, we have instituted a series entitled 'Get To Know Your Fellow Members'. I hope you enjoy reading and learning about **Adhithiya Charli** as we kick-off this series in the current newsletter.

Along with the preparation for the holiday season, we are also kicking-off preparations for the next **ASIO-SOT Annual Reception** to be held on 12th March 2018 in San Antonio, TX. Mark your calendars; we are brainstorming ideas to make the annual reception even more fun and attractive! Additionally, there are a couple imminent deadlines that we need to be aware of at this time. First, the deadline for the **ASIO Award Application** is 15th December 2017. Second, we are looking for enthusiastic and dynamic toxicologists from government, academia, and industry to join the ASIO board of directors (BOD). The deadline for nomination or self-nomination for **ASIO BOD Officer's Ballot** is 31st December 2017. I would urge our membership to self-nominate or nominate their fellow members/colleagues/friends for the esteemed Senior Toxicologist and the Young Investigator awards as well as for the ASIO BOD elections.

As always, I am thankful to the current BOD officers and volunteers for their hard work and perseverance throughout the year. I look forward to working with you all and contribute significantly to the growth of our organization

Thanks and regards,

Mayur Mitra, President, ASIO-SOT

mitram2@gene.com



**Priyanka
Trivedi, PhD
Sr Scientist
Pfizer**

Dr. Dharm
Singh
Postdoctoral
Fellow Best
Abstract Award

What does this award mean to you?

I am pleased, honored, and humbled to receive the ASIO award and to join past recipients who I have long admired and respected. This award not only provided me with recognition of my work but also complemented my research in the field of renal toxicology. This award will boost my professional and scientific development. I believe that such awards strengthen my determination to contribute significantly for advancing toxicology science.

How does your research contribute to the mission of the SOT?

The research work that was recognized focused on discovering therapeutic targets and signaling mechanisms of kidney diseases. We identified Phospholipase D4 (PLD4) as a novel therapeutic target to treat kidney fibrosis. Mechanistically, we showed that PLD4 facilitates fibrogenesis by modulating innate & adaptive immune responses, downregulating neutrophil elastase and inducing MAPK signaling pathway. We believe that our findings further advance our understanding of the pathogenesis of chronic kidney diseases and will enormously contribute to creating a healthier world.

What are the benefits of ASIO participation, from a postdoc perspective?

ASIO provides us with a good platform to network with expert toxicologists, and this also helps in making a career decision. There lies a great opportunity in serving ASIO by being a member of various ASIO committees. This, in turn, teaches us leadership, teamwork, and communication skills.

Your advice to fellow students and postdocs for winning ASIO awards!

The first step towards winning ASIO award is to apply for it, which I believe many researchers miss. If you are planning to apply for this award in the upcoming meeting, then now is the time to start preparing for it. Make your award application succinct and concise. You may consider including a pictorial representation summarizing your findings. Good luck with your application!



Adhithiya Charli
Graduate Student
Iowa State University

Dr. Laxman Desai
Graduate Student Best
Abstract Award

What does this award mean to you?

As a graduate student, I feel this award provides me the impetus to continue with good quality research and also instills in me the confidence to continue my work.

How does your research contribute to the mission of the SOT?

The ASIO is one of the most recognized special interest groups in SOT. So encouraging graduate student through such awards gains a lot more student participation at the ASIO annual meetings at SOT and also helps in increasing student contributions to the field of Toxicology. This definitely accentuates support from all students at SOT.

What are the benefits of ASIO participation, from a student perspective?

The ASIO being a very well-known special interest group (consisting of members from academia, industry and government career backgrounds), it enables graduate students to identify mentors in their corresponding fields of interest and enhance their networking opportunities.

Your advise to fellow students and postdocs for winning ASIO awards!

This is good opportunity to portray you research and explain it to a diverse group of toxicologists. So I would definitely encourage more students to apply for this award and to attend the ASIO annual reception at SOT.



Sury Vulimiri, PhD, DABT

National Center for Environmental Assessment,
Office of Research & Development, US EPA.

- **Associate Editorship, *Drug & Chemical Toxicology***



Rao Uppu, PhD

James & Ruth Smith Endowed Professor of Environmental
Toxicology, College of Sciences and Engineering, Southern
University-Baton Rouge (SUBR)

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Vivek (Vic) Kadambi, PhD

Vice President, Nonclinical Development (CMC, DMPK and
DSE), Blueprint Medicines

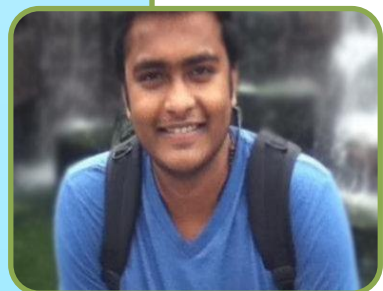
- ***Current nonclinical testing paradigm enables safe entry to First-In-Human clinical trials: The IQ consortium nonclinical to clinical translational database.*** Toxicol Appl Pharmacol. 2017 Nov 1;334:100-109. doi: 10.1016/j.taap.2017.09.006. Epub 2017 Sep 8.



Ramiya Kumar

PhD Candidate, Clemson University

- ***Ronald G Thurman Travel award***, Mechanisms Specialty section



Adhithiya Charli

Graduate student, Iowa State University

- ***Russ and Lora Talbot Research Graduate Scholarship (2017), instituted by Centre for Veterinary Medicine Research Advisory Committee, Iowa State University***
- ***Student achievement award by the Biotechnology Specialty Section (BTSS) at the Society of Toxicology (SOT) for the year 2017.***

Attention! Students, fear not! Attending conferences is a great opportunity to learn and meet people with similar research interests, but attending alone can be a frightening undertaking if it's your first time. I have personally been there, done that! Following is a first-person account of my first SOT Annual Meeting back in 2014 and the lessons I learned from it. These tips and tools might hopefully come in handy if you are planning to attend SOT 2018 in San Antonio:

1. **Staying abreast with the current trends in toxicology**

This one goes without saying, and is more of a meeting prep strategy. We are usually so busy prepping our poster and talks, we forget about the big picture sometimes. The SOT website has some useful links under "Publications and News" including Updates from Tox Sciences, SOT *Comminique*, etc. listing hot topics under discussion by the industry. It is said that Knowledge is Power and knowing the current trends goes a long way when meeting accomplished toxicologists for the first time.

Another strategy which was helpful was to make a list of people you want to meet at the conference. For example, I had read papers from a lab and I was really interested in their work. I found out from the list of attendees that they were coming to SOT and emailed them for a brief meetup before the conference. I found that people were actually very open to such professional meetings and I ended up having a good discussion regarding our work. Moreover, SOT is a huge conference and it's pointless making millions of contacts who won't remember you. It's better to concentrate on meeting high quality individuals with whom you can build valuable relationships. After all, it's all about making connections and making them last.

2. **Don't be afraid to reach out**

The great thing about the SOT Annual Meeting is that it offers a wide range of resources for new comers. Become part of focus groups of your specialization or regional chapters to become more involved. Volunteer for a CE course or reach out to volunteers such as me at ASIO for any assistance during the conference!

3. **Carry your business cards and follow up**

Having your business cards is critical, even if it's your first meeting. It's a simple lesson I learned the hard way- If you don't make it easy for people to contact you, no one will. And lastly, the conference isn't officially over until you have followed up with every person you met at the conference.

**"First
time at
SOT?"**

**Guncha
Taneja**
Post
doctoral
fellow
DILISYM



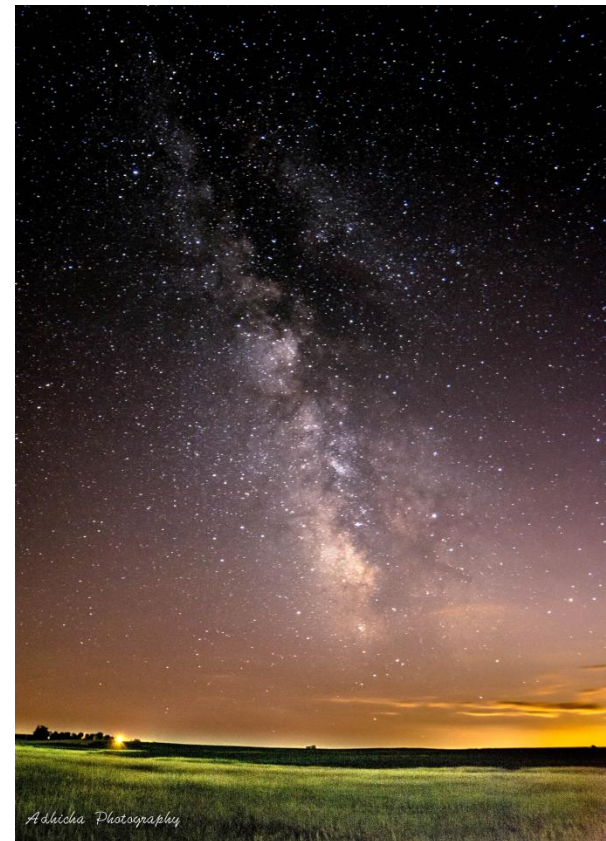
“Life Through The Lens of Adhithiya Charli”

Interviewed and composed by
Vivek Lawana
Graduate student
Iowa state university

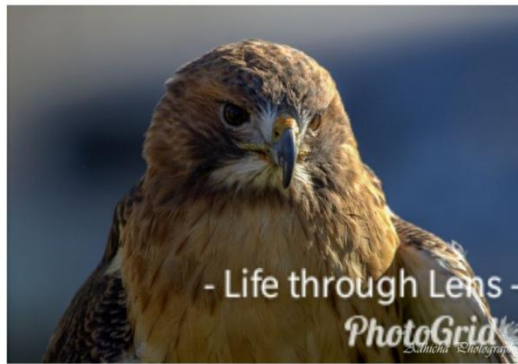
All of us need some non-work related activity to divert our minds from day-to-day chores and these activities slowly become part of our personality and our lives. In search for such talent, I picked to learn more about one of the Laxman Desai graduate student best abstract winner from SOT 2017, Adhithiya Charli. Adhithiya, a current doctoral candidate in interdepartmental toxicology program at Iowa State University and he is originally from Chennai, India.

After completing his bachelors in technology with biotechnology focus, Charli decided to come to US and upon arrival he immediately started working in Dr. Anumantha Kanthasamy for his MS degree. While working in epigenetic research Parkinson’s Disease field, he decided to continue pursuing PhD in same field. He has been active member of SOT and ASIO since 2013 and was a graduate student representative for Biotechnology Specialty Section from 2015-2017.

Besides being an outstanding graduate researcher, Charli holds passion for many arts such as dancing, acting and directing, but one thing that has really motivated him is photography. He terms it as ‘a hobby that turned into a passion’. “I roughly started exploring my skills since early 2015, and since have travelled 41 states in the USA”. As a kid Charli had special affection and interests with wildlife, and so he started testing his photographic skills with wildlife photography, however, in the past year or so he has also captured some breath taking landscape stills, including national parks, glaciers and our Milky Way Galaxy. “I know people like stargazing, but my favorite is galaxy-gazing”.



Adhithiya Photography



“Having some adventure in work is always a fun” said Charli. One of the most memorable moments of his short photography career is being chased by mother bear while taking pictures of her cubs in National Superior Forests. He says that even though such incidents can be life threatening, wildlife pictures must be taken when they are out in wild and not in closed captivity. Charli admits that though this hobby is rather expensive, the support and appreciation from many including his major professor keeps him motivated to try to get better with every click.

Charli also has a portfolio page in National Geographic called as the YourShot profile. He gets his photography inspiration from the work of two renowned artists, Andy Biggs and David Yarrow. And for photographer Adhithiya, being featured in **Nature Conservancy**[®] Magazine is one big feather on his hat, so far.

Having a unique combination of expertise in toxicology and nature photography, Charli wants to help in two ways. First, by taking picture of nature and wildlife in their unadulterated forms, so that future centuries have a context to look back. Secondly, showcasing his pictures in magazines and other social media platforms with tag of ‘beautiful’ to indicate that there are still many spots on earth which are yet not affected by man-made pollutions and we must keep them that way. As a young individual, he thrives to use both of his passions in making a world a better place.



If you have a passion, that keeps you occupied and away from stress please let us know and ASIO will be happy to share some more stories like **Adhithiya's**.

“Regulatory network models of chemical-induced gene perturbation”

Speaker:

Sudin Bhattacharya, PhD
Assistant Professor, Biomedical Engineering,
Pharmacology and Toxicology
Michigan State University

Date: December 15, 2017 **Time:** 12 PM EDT

[Register Here](#)



Abstract:

Tissue-specific network models of chemical-induced gene perturbation can improve our mechanistic understanding of the intracellular events leading to adverse health effects resulting from chemical exposure. The aryl hydrocarbon receptor (AHR) is a ligand-inducible transcription factor (TF) that activates a battery of genes and produces a variety of species-specific adverse effects in response to the potent and persistent environmental contaminant 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). Here we assemble a global map of the AHR gene regulatory network in the mouse liver from a combination of previously published gene expression and genome-wide TF binding data sets. Using various computational methods, we show that genes co-regulated by common upstream TFs in the AHR network show a pattern of co-expression. Specifically, directly-bound, indirectly-bound and non-genomic AHR target genes exhibit distinct patterns of gene expression, with the directly bound targets generally associated with highest median expression. Further, among the directly bound AHR target genes, the expression level tends to increase with the number of AHR binding sites in the proximal promoter regions. Finally, we show that co-regulated genes in the AHR network activate distinct groups of downstream biological processes, with the AHR-bound target genes enriched for metabolic processes and the AHR-unbound target genes primarily activating immune responses in the mouse liver. In summary, this work presents one approach to the reconstruction and analysis of the transcriptional regulatory cascades underlying adverse cellular response using bioinformatic and statistical tools.

While our existing ASIO officers have contributed tremendously, it is time to begin thinking about ASIO 2018-2019 officer elections and the recruitment of candidates! ASIO will have the below listed openings and solicit nominations for the open positions

1. Student Representative (1 year term)
2. Postdoc representative (1 year term)
3. Councilor (2 year term)
4. Vice President-Elect (4 year term)

Please send your nominations indicating the position you are interested and provide your Biosketch to Mayur Mitra (mitram2@gene.com) by December 31, 2017. Early submissions are welcome!

NOTE: Please remember that candidates in the President or Treasurer Chain must be Full, Associate, Retired, or Emeritus members of SOT.

Call for Sponsor

ASIO would like to urge our members to consider making a one-time donation towards the ASIO general funds. The ASIO general funds are used to cover expenses for our year-round activities and the annual reception. Therefore, these funds would go a long way to bring together pre-clinical scientists and companies of Indian origin to serve their common goals. Your contribution to SOT are tax deferred. Please contact Mayur Mitra at mitram2@gene.com if you would like to donate or have questions.

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