

# ESTP Newsletter 2016 (4)



*Editor Zuhal Dincer (zuhal.dincer@novartis.com)*

## President's column



Dear ESTP members,

This is my first President's Column and it's a great pleasure for me to write it. Just returning from a wonderful and scientifically outstanding ESTP event in Barcelona, I would like to come back to our membership and first of all to say thank you to all of you.

It already has been two years ago that I was elected by the membership as incoming chairman for the period 2016-2018, following Frederic Schorsch (2012-2014) and Jenny McKay (2014-2016). I will do my very best in the next 2 years that the ESTP prosper furthermore and has its place in the international community of ToxPath Societies. With the Annual General Meeting in Barcelona Frederic Schorsch (past-chairman) finally left the ESTP Executive Committee, but Jenny McKay is still member now as past-chairman. I would like to thank both of them for the tremendous work they did in the past years for our society!, not only as chairmen, but also taking some other responsibilities within the society. Another name all of you know is Matthias Rinke; he served as treasurer for our society since 2006 and stepped

down now at the same time with his retirement. He always had a very close look to our financials and our new treasurer Kuno Würsch will step into well-organized accounts. Matthias, many thanks to you and welcome Kuno! Also welcome to the board to Anna-Lena Frisk, who is our chairman-elect for the next two years.

The 14<sup>th</sup> ESTP Meeting in Barcelona together with the 5<sup>th</sup> ESTP Adversity Workshop was a raving success. With 210 participants to the Congress and numerous invited speakers, the topic of "Adverse or Not Adverse – Assessment and Consequences" was very well covered. Before the official start of the congress, an IATP-sponsored ½ day symposium on "Juvenile Toxicity" took place. Again my sincere thanks go to the "Scientific and Local Organising Committees", especially Anna-Lena Frisk and Thierry Flandre for taking care of this congress with outstanding scientific sessions which gave us new aspects on adversity. A congress report is available in this newsletter written by Kevin Keane: Many thanks Kevin! The face-to-face discussions of the 5<sup>th</sup> ESTP Adversity workshop, organized by Barbara Lenz (scientific lead), Gabi Pohlmeyer-Esch, Xavier Palazzi and Wolfgang Kaufmann were held directly after the Congress. 23 invited international recognized experts, including pathologists from regulatory authorities of USA, Japan and Europe, brought new thoughts on the topic of "Adversity of lysosomal storage". First impressions are given in this newsletter, and a more detailed report will be given in the winter issue.

The next congress in 2017 will take place as a Cutting Edge Joint Meeting with the ECVS/ESVP in Lyon, France.

During the next two years, I will keep you updated through the ESTP homepage and the ESTP Newsletter of the actual work and topics of the Executive Committee. Additionally, I would appreciate any feedback from the membership to me and the EC regarding our work, new ideas you have and any support for our work. As a non-

profit organization we need everybody of you for a growing society!

During the AGM in Barcelona you get already an impression of some of our work, especially the “new” Society Journal, which will be distributed pretty soon; discussion about the membership fee and also about the ESTP survey. All these topics will be reported in detail in the following newsletters.

For now, I would like to come to an end and wish you all, your colleagues and families a wonderful time for the last months of the year!

Best regards



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### **14<sup>th</sup> ESTP Congress in Barcelona** **20<sup>th</sup> – 23<sup>rd</sup> September 2016** **- Voting on Adversity -**

Beautiful Barcelona, Spain hosted approximately 200 attendees from around the world for a very successful 14th European Congress of Toxicologic Pathology at the Avenida Palace Hotel in the city centre on the 20<sup>th</sup> to 23<sup>rd</sup> of September 2016.



Anna-Lena Frisk and Thierry Flandre were the chairpersons of a dedicated team of 20 ESTP members of the scientific and local organizing committee who produced an informative, educational, and even entertaining event. The theme of the meeting was “Adverse or Not Adverse - Assessment and Consequences” where speaker after speaker would apply their interpretation of the new best practice recommendations on adversity to their favourite

toxicologic pathology data. Many of the speakers went a step further and used an audience participation voting system which allowed real-time voting on diagnoses, interpretations, and whether or not a finding is considered adverse. While we did not tabulate the results of individual votes, it is fair to say that many of the initial votes were dispersed across many choices. However, further discussion and information sharing would invariably produce a consensus position that most, but usually not all, would agree upon.



The first day of the congress started with a half-day continuing education session on juvenile toxicity sponsored by the International Academy of Toxicologic Pathology. This well-attended session stressed the complexity of designing juvenile toxicity studies and that pathologist who intend to read these studies need to put dedicated study into this subspecialty. Rodents, minipigs, and primates were discussed and their unique organ development and maturation patterns were compared.

The opening keynote address by Vince Meador set the theoretical framework for the entire congress by highlighting and merging the recent best practice publications on determining adversity into three practical segments: how to determine adversity, how to communicate adversity, and how to use adversity in assessing potential human risk. The afternoon continued with a series of talks on the respiratory system starting with tox findings in the nose and working our way down into the lungs.

The keynote address for session two by Thomas Rosol emphasized a mechanistic approach to understanding toxicity and adversity in the thyroid gland. This and subsequent talks reminded the audience that while it may be easy to observe histological finding, such as thyroid hyperplasia, it can be very difficult to determine the mechanistic causes and assign relevance to human risk.

Session three on the kidney was possibly one of the more contentious topics for the congress to agree upon adversity. The keynote address by Kendall Frazier

highlighted that this tissue is full of conundrums with rodent-specific background findings that can readily obscure the human-relevant toxicity findings. Subsequent talks also emphasized that translation of nonclinical kidney findings and drug induced kidney injury is an ongoing challenge which is progressing due to recent advances in renal biomarkers.

Session five on the lympho-hematopoietic system included a keynote address on clinical pathology considerations by Lindsay Tomlinson. This may have been one of the more agreeable sessions, maybe because it started off with the premise that clinical pathology findings in isolation are not considered adverse. We always need to know if there is a functional (i.e. histological) correlation. More interactive cases were presented and more votes were taken and it appeared that the audience was starting to gel in their adversity assessment approaches.

Session six was a logical conclusion to the congress where the regulatory aspects of addressing adversity were discussed. Sabine Francke's keynote address and subsequent speakers all agreed that the recently published best practices paper should be your guide when communicating adversity to regulatory agencies. A rigorous, scientific approach to understanding the pathophysiology of a finding with data-backed assertions on their adversity will always be the gold standard.

The congress concluded with the 5<sup>th</sup> International Expert Workshop on "Adversity of Lysosomal Accumulation". This event included 20 experts who making multiple presentations and interpretations of lysosomal accumulation after which they welcomed questions and even challenges from the audience. The venues encouraged vigorous debate and in the end general guidelines were agreed upon about how to make this adversity determination.



*Casa Milà, also known as "La Perera", constructed beginning of the 20<sup>th</sup> century by Antoni Gaudí*



*La Sagrada Família*

Experiencing Barcelona's vibrant street life, excellent tapas bars, and beautiful beaches completed the picture for what was certainly a very productive meeting.

**Kevin Keane**

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## **2016 ESTP Awards**

### ***Chirukandath Gopinath Lecture Award***

During our annual congress, the following awards were given: The Chirukandath Gopinath Lecture Award sponsored by the British Society of Toxicological Pathology in tribute to one of the founder members of the BSTP whose name is recognized by toxicological pathologists all over the world. This lecture award was handed over by Dr Gopinath himself to **Frieke Kuper** for her outstanding contributions in the field of toxicologic pathology. She gave a keynote lecture entitled "Pattern recognition in complex systems to address adversity of effects on lymphoid organs and tissues". She elegantly demonstrated the usefulness of a



principal component analysis to integrate and visualize multiple parameters in evaluating treatment-related changes of the immune system.



### ***The Charles Capen Trainee Award***

The Charles Capen Trainee Award, given by the International Academy of Toxicologic Pathology (IATP), to a pathology, toxicology or toxicologic pathology trainee. This award recognizes Dr Charles Capen and his legacy as a researcher, teacher, and mentor to the pathology and toxicology communities spanning more than four decades. The recipient of this year's IATP Charles Capen Award was **Mohamed Shaalan**, originating from Egypt and currently pursuing a doctoral degree in University of veterinary medicine, Vienna, Austria. He received the award Darlene Dixon for his poster work entitled "Silver nanoparticles: assessment of bactericidal activity against *Aeromonas salmonicida* and *in vitro* cytotoxicity using the MTT assay in three different fish cell lines".

### ***IFSTP Award***

IFSTP (International Federation of Societies of Toxicologic Pathologists) has established a trainee award for PhD students training in toxicologic pathology. The IFSTP funds an award in the amount of \$750 – USD, which may be used by the successful student for travel or registration costs to attend the ESTP conference. The 2016's IFSTP travel award, handed over by Hans Harleman, went to **Antonietta Alvarado**, a pathologist originating from Venezuela, who currently is preparing a PhD thesis in carcinogenesis at the University of Tras-os-Montes and Alto Douro in Portugal.at the University Vila Real, Portugal. Antonietta presented a poster entitled "A possible antitumoral effect of exercise-training on lesions induced by 1-methyl-1-nitrosourea in a rat model".

### ***SFPT Poster Award***

Sébastien Laurent and Erio Barale handed over two poster awards, a monetary prize of €1000,- each, sponsored by the French Society of Toxicologic Pathology (SFPT).

The Best Poster award offered to a young colleague went to **Rossella Defazio**, Patrizia Griffini, Daniela Spagnolo, Ana Criado, Laura Piccoli and Philip Gerrard from Aptuit, Italy, for their poster entitled "Histological and immunohistochemical characterization of Sunitinib efficacy on A498 human renal cell carcinoma xenografts in athymic nude CD-1 female mice".



A second SFPT Best Poster Price was given to **Rajanikanth Maganti**, Xiaoping Hronowski, Amin Kamel, Ivan Stone, Eric Tien, Peter Juhasz, Kevin Guckian, Jim Fikes and Evelyne Polack from Biogen, US, for their work "Investigating small molecule liver toxicity by Matrix-Assisted Laser Desorption/Ionization-Image Mass Spectrometry (MALDI-IMS)".

### ***ESTP Thesis Award***

Every other year, doctoral theses or PhD-theses on any aspect of toxicologic pathology, laboratory animal pathology or experimental pathology are considered for the ESTP-sponsored Thesis Award, consisting of a first (€ 2000,-), second (€ 1500,-), and third (€ 1000,-) prize plus one year free ESTP membership. With this endowment it is attempted to promote cooperation between Universities and industry and to interest young scientists in toxicological pathology and related fields.

The ESTP thesis awards' 1<sup>st</sup> prize went to **Helen Booler** for her thesis "Pathology mechanisms in the dystroglycanopathies", at the Royal Veterinary College, London, the 2<sup>nd</sup> prize to **Sara Francesca Santagostino** for her work "Aquatic pollution and biological monitoring of the marine environment: toxicology, histopathology and ecological risk of selected fish species", at the Università degli studi di Milano and the 3<sup>rd</sup> prize was received by **Jana Keller** for her thesis "Biokinetics and inhalation toxicity of cerium dioxide and barium sulfate nanoparticles after 1,4,13 and 52 weeks of exposure" at the Justus-Liebig-University, Gießen.

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## 5th ESTP International Expert Workshop on "Adversity of Lysosomal Accumulation" - Update -

Dear ESTP Members,

The Face-to-Face Expert Discussion of our current workshop took place immediately after our Annual Meeting, at the congress venue in Barcelona. The workshop comprised 23 members, among which six participants from international regulatory agencies. Presentations covered case examples of compounds causing phospholipidosis, iron accumulation and alpha2u-globulin accumulation as well as of oligonucleotides, pegylated drugs and other chemical entities. The participation of a chemist and of an investigational toxicologist helped us to shed light on biochemical and mechanistic questions. All presentations were well received by an audience of 28 additional scientists. There were QA sessions which allowed the audience to contribute actively, and four sessions of expert discussion.



The achievements of the workshop are currently summarized by the organizing team and will be further discussed and refined at workshop teleconferences, with the aim to submit an internationally endorsed publication to *Toxicologic Pathology* within the next half year or so.

We would also like to use this opportunity to re-invite all ESTP members to send us topics they wish to be covered by future workshops and/or to volunteer for active participation.

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## ESVP-ECVP Congress in Bologna, Italy

Far over 300 people attended the Joint Meeting of the ESVP and ECVP in Bologna, taking place from 7th to 10th September. The university conference venue was at walking distance from the superb historic city center. Keynote lectures about advances on emerging diseases, lymphoma and neuropathology were on the program.

**Two new formats were introduced at this conference:** Selected posters were presented in several poster flash sessions in the auditorium, with 5 posters presented per 30 minutes slot. The poster presenter summarized the poster in a few minutes with 1 or 2 powerpoint slides and answered questions from the audience.

The second new format was proposed by Achim Gruber from Berlin and his team: In a Science Slam Session 3 presentations were given in a more entertaining way, detached from the regular format. The idea was to present topics highly relevant for veterinary pathology community, not necessarily coming from own research, with a view over the fence.

An evening workshop, organized by neuropathologists from Hannover and Berne was held to discuss correlation between clinics, neuroimaging and neuropathology of the CNS disease.

Further a very instructive workshop about the role of a peer reviewer for the *Veterinary Pathology* journal, entitled "Helpful Advice or Disparaging Critic?". It was given by Editor-in-Chief Jeff Caswell and Editor for Europe Andrea Gröne.

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## Classic Examples in Toxicologic Pathology XXIV – ANNOUNCEMENT –

For many of us, the "Classic Examples" in Hannover are an important date in the calendar: it is the first important scientific meeting and the first occasion in the year to meet colleagues and friends. Our next year's seminar will be held on Friday and Saturday, February 03 and 04, 2017. As in the past, it will be jointly organized by the Hannover Graduate School for Veterinary Pathobiology, Neuroinfectiology, and Translational Medicine (HGNI) and the Department of Pathology of the University of Veterinary Medicine in Hannover and the

ESTP. It will take place at the Department of Pathology of the University of Veterinary Medicine in Hannover, Bünteweg 17.

Examples of toxicologic pathology will be presented and discussed by the participants. Our preliminary program for next year includes presentations on the following topics:

- \* Glucagon-like peptide I agonists
- \* Cathepsin C inhibitors
- \* Pyridoxine-induced sensory neuropathy
- \* NMDA receptor antagonists
- \* Fluorosilicone
- \* CDK 8/19 kinase inhibitors
- \* Antibody-drug conjugate
- \* The zebrafish: a good model to study toxicity?
- \* Reverse transcriptase inhibitors

During the seminar, the participants will have the possibility to examine the lesions by themselves: We will provide microscopes for all participants. Sixty sets of glass slides will be provided for in maximum 120 participants. In addition, all slides to be shown, and also those from which the full set of recuts cannot be prepared, will be digitalized and demonstrated with a beamer during the seminar. Registrants will have on-line access to the digital slides some weeks prior and after the seminar.

All ESTP members will be informed by e-mail when the seminar is open for registration.

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On behalf of Organising Committee:

Prof. Dr. Wolfgang Baumgaertner

Prof. Dr. Ulrich Deschl

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