

ESTP Newsletter 2019 (1)



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President's Column

Dear ESTP members,

2019 is in full swing and it has been a busy winter for all of us, but I hope you had some relaxing days with family and friends over Eastern. I would like to highlight some activities which took place during the winter and some future activities and challenges.

At the Global Toxicologic Pathology President Group Meeting held in January prior to the JSTP annual meeting in Okinawa, Japan, Charlotte Keenan gave an update on the progress of The International Harmonization of Nomenclature and Diagnostic Criteria (INHAND) efforts. The supplement Nonproliferative and Proliferative Lesions of the Rat and Mouse Endocrine System and Special Sense Organs has been published in *J Toxicol Pathol*. The Hematolymphoid System is in the final stages and also the non-rodent species (dog, monkey, mini pig, fish and rabbit), along with ocular toxicity of non-rodent species are all advancing. This is very good news since the INHAND publications are becoming widely accepted by agencies as a reference for terminology and SEND. The new president of the JSTP preceding Dai Nakae will be Hiedki Wanbuchi. The STP/ACVP coalition has initiated discussions to have a global "workforce" survey to build not only on the Coalition Survey but also to serve as a follow-up to recently completed surveys by us the ESTP and ACVP.

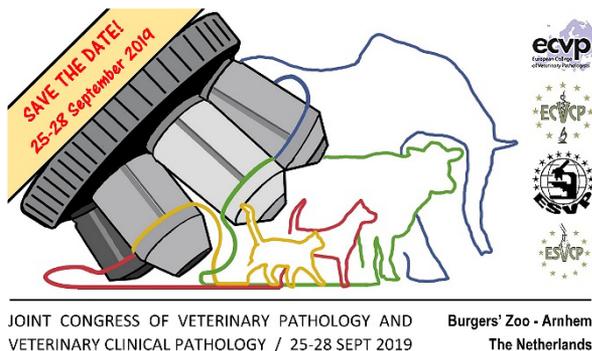
At the ESTP Board F2F meeting in Hannover in February, offers from seven different professional congress organizers from various countries (Germany, Italy, Greece and The Netherlands) were intensely discussed. The Board unanimously decided for Pauwels from the Netherlands. The negotiations are ongoing with the plan to start with the organization of the ESTP 2021 congress. The Cutting Edge Pathology congress 2020 in Torino,

Italy will be organized by an Italian professional congress organizer with support of the local organizing committee headed by Prof Enrico Bollo and Prof Bartolomeo Biolatti in collaboration with the SOC of the ESTP co-chaired by Raffaella Capobianco and Pierluigi Fant and the ECVP/ESVP SOC. I am sure it will be a great success.

The registration for the 17th ESTP congress (September Cologne, Germany) has opened and the Scientific Organizing Committee co-chairs Björn Jacobsen and Sibylle Gröters together with the SOC team have put together an outstanding program with the title "Digitalization meets Pathology". This year the European Society of Teratology (ETS) meeting will be held in parallel with joint sessions on Wednesday. Additionally, the joint social events will give us further opportunity to meet and network with ETS colleagues. There will also be a half-day IATP Satellite Symposium on "New Approaches and Practices in Reproductive and Developmental Toxicology – Role of the Toxicologic Pathologist". Please find the updated program and more information later in this newsletter and on the ESTP home page <https://www.eurotoxpath.org/>.

Since "Digital Pathology" is a hot topic of great interest to all of us and as it will inevitably be a part of our future, the 7th ESTP International Expert Workshop "Towards Regulatory Acceptance of Digital Toxicologic Pathology" will be held directly after the congress. I hope to see many of you in Cologne, so please consider to attending the meeting.

The ESTP will sponsor one Key Note Lecture at the next joint ESVP-ECVP-Veterinary Clinical Pathology congress, September 25 – 28, 2019, in Burger's Zoo in Arnhem in The Netherlands. In addition to an ESTP poster one of our members will give a presentation including a short introduction to our profession, followed by an example of toxicological pathology as well as an outlook on future perspectives regarding career in the industry.



I would like to thank Barbara Lenz and Thomas Lemarchand who ended their terms as associated editors for the ToxPath Journal, and welcome Matthias Rinke, Giovanni Pellegrini and Hans Harleman and wish them success.

Before I end, I would like to remind you to consider sending your interesting histopathological cases to the Guess What Committee, as well as actively take part in the discussion of the mystery cases. Please have a look at our homepage for more information (<https://www.eurotoxpath.org/guesswhat/index.php>).

Please do not hesitate to contact me, I highly value feedback from our members and would welcome suggestions and ideas for future activities from the membership. I would gladly answer any of your questions. Finally I would like to encourage everyone to volunteer and to continue to support our Society.

I wish you a wonderful spring time!
Best regards,

Anna-Lena Frisk
ESTP Chairman
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ANNOUNCEMENT
17th ESTP Congress
September 17-20, 2019 – Cologne, Germany



Dear Colleagues and Friends,

The European Society of Toxicologic Pathology (ESTP) is pleased to invite you to the 17th EUROPEAN CONGRESS OF TOXICOLOGIC PATHOLOGY at the Maternushaus in Cologne, Germany, from September 17 to 20, 2019. The ESTP is also pleased to announce that the 47th European Society of Teratology (ETS) meeting will be held in parallel with sessions together on Wednesday, September 18, 2019. The joint Welcome Reception and Congress Dinner will give ESTP and ETS members greater opportunity to meet and network.

The theme of the 2019 Congress is “Digitalization meets Pathology,” with focus on digitalization, image analysis, computational pathology, and other advanced technologies.

Digitalization has become increasingly integrated in toxicologic pathology in recent years and has profoundly impacted the practice of modern toxicologic pathology. With this year’s theme, our vision is to give colleagues an insight into the latest achievements and where the journey may lead us.

The scientific program is organized to cover different aspects of digitalization including an introductory overview of the different areas within digitalization and computational pathology, as well as the practical and technical aspects of digital slide management, platform architecture, and workflows for viewing digital slides. Sessions on image analysis, artificial intelligence including machine and deep learning, as well as critical discussions on the regulatory aspects of these methodologies are planned. There will also be a session on various other Advanced Technologies.

Plenary lectures, oral presentations, case studies, and a poster session will provide opportunity for formal and informal interactions with colleagues and friends. Contract research organization services, innovative equipment and technologies, new publications, and others will be featured at the trade exhibition.

On September 17, 2019, there will be the half-day International Academy of Toxicologic Pathology (IATP) Satellite Symposium on “New Approaches and Practices in Reproductive and Developmental Toxicology – Role of the Toxicologic Pathologist.” This symposium will cover application of micro-CT in reproductive and developmental toxicology studies, current approaches for sampling and evaluation of the female and male reproductive tracts in studies, including juvenile studies, and emerging mechanistic *in vitro* models of embryonic implantation and organ-on-a-chip technologies in reproductive toxicology.

The social program, open to all registered participants, will include the Welcome Reception at the Maternushaus, and the Congress Dinner at the "Wartesaal am Dom" located in the old waiting hall of the historic train station of Cologne.

We look forward to welcoming you in Cologne!

On behalf of the ESTP,

Björn Jacobsen and Sibylle Gröters
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ANNOUNCEMENT

**7th ESTP International Expert Workshop:
"Towards regulatory acceptance of digital
toxicologic pathology"
September 20-21, 2019 – Cologne, Germany
(Face-to-Face workshop)**

BACKGROUND and GOAL:

The European Society of Toxicological Pathology is a professional society that has organized various workshops focused on practical issues to help and guide their membership.

The ambitious goals of this 7th ESTP workshop are:

- to define a set of minimal requirements needed to grant future regulatory acceptance for the use of digital toxicologic pathology workflows in R&D;
- to review whole-slide scanner validation, acceptable data/metadata formats, digital slide transfer, processing, evaluation/analytics, storage, viewing, annotating and archiving processes;
- to compare with current practices in diagnostic medical radiology and pathology;
- to discuss practical limitations of digital pathology (eg: resolution, technical requirements, archiving costs).

A list of experts has been put together and 8 preparatory teleconferences have been programmed until the face to face workshop that will be held in Cologne on Sept 20-21, right after the ESTP annual congress.

The ultimate deliverable of this initiative will be an ESTP-sponsored communication endorsed by sister professional societies suggesting best practices and alignment across partners on technical pre-requisites, as a preliminary step towards regulatory acceptance of Digital Toxicologic Pathology Workflows.

List of participants (preliminary):

Pierre Moulin, Justin Vidal, Thomas Forest, Jonathan Carter, Laetitia Elies, Catherine Botteron, Heike Marxfeld, Elena Riccardi, Famke Aeffner, Peter Hall, Alain Piton (prep work), Bethany Williams, Daniel Roth, Luann Mckinney, Robert Klopffleisch, Serge Rousselle, Elizabeth Neyens, Deon Hildebrand, Jeff Engelhardt, Peter van Meer, Vanessa Schumacher*, Pierluigi Fant*, Erio Barale-Thomas*, Xavier Palazzi* (*: co-organizers).

ANNOUNCEMENT

**Annual Congress of the French Society of
Toxicologic Pathology (SFPT)
May 23-24, 2019 – Les Ulis, France**

Dear ESTP Members,

The next congress of the French Society of Toxicologic Pathology (SFPT) will take place on May 23-24 in Les Ulis (close to Paris). It will be dedicated to:

"Cell therapy, Gene therapy: from discovery to regulatory considerations."

The presentations will be held in English:

- Visual restoration by retinal prosthesis and optogenetic therapy: validation on non-human primates.
- Gene therapy medicinal products (GTMPs): *ex vivo* hematopoietic stem cell gene therapy.
- Cell and gene therapy: study design and pathologist input.
- Preclinical safety evaluation of AAV-mediated gene therapy: importance of nonhuman primates.
- Preclinical evaluation of hASC (human adipose-derived stromal cells) biodistribution in mice: place of immunohistochemistry and qPCR.
- Cell therapy: understanding the model system to properly assess the risk for tumorigenicity.
- Regulatory approaches for advanced therapies.

Registration is open until May 10. For more information, please visit the SFPT website: https://toxpathfrance.org/gen.php3?id_rubrique=32

On behalf of the SFPT,

Beatrice Gauthier
SFPT Chairman
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Classic Examples in Toxicologic Pathology XXVI

February 15-16, 2019 – Hannover, Germany

The Classic Examples has long been a staple in many people's diary, so it will not come as a surprise that this year's meeting was again very well attended, and filled with a wide range of interesting and engaging presentations. As always our thanks goes to the scientific organisers (Wolfgang Baumgärtner, Ulrich Deschl, Florian Colbatzky and Thomas Nolte) for their limitless enthusiasm and drive to put together such a high standard of meeting every year and of course to the Hannover Veterinary Pathology Department students who assist with the running of the meeting.



The 26th Classic Examples meeting was kicked off by Karrie Brenneman from Pfizer who had flown all the way from Massachusetts, USA to give her presentation on pancreatic toxicity of BTK inhibitors. Although the mechanism is not fully understood, initial work suggests that islet microvascular injury is the inciting event, resulting microscopically in peri-islet inflammation, degeneration and fibrosis with secondary necrosis of surrounding acinar cells. Next, Anna Maria Giusti from Roche gave a very nice overview of T-cell bispecific antibodies and the theory of how they induce immune activation against tumours, as well as specific examples of side effects that can be seen when the targeted antigen is expressed in healthy tissues. Florian Colbatzky and Maria Antonietta Impagnatiello from Boehringer Ingelheim then covered STING agonists and the range of effects that are encountered in lymphoid tissues with the severe increase in cytokines that are triggered by STING activation.

Having never worked with the isolated chicken eye (ICE) test I found the following presentation by Marcel Wijnands from Charles River very intriguing. ICE is an invitro model for potential eye irritancy, where fresh post mortem chicken eyes are exposed to the test article for only 10 seconds and then examined macroscopically as well as microscopically for erosion, vacuolation, necrosis, fibre disorder and stromal cell pyknotic nuclei. Friday was rounded off by Maïke Huisinga and Simone Tangermann

from BASF discussing direct and indirect mechanisms of thyroid gland pathology. With nice examples of short and long term liver-mediated indirect effects and discussion of direct effects including interaction with thyroid hormone receptors, iodine deficiency, and competition of binding to thyroxine binding globulin it was a nice summary of the topic.

Saturday morning started nice and early with a presentation on autotaxin (ATX) inhibitors by Afonso da Costa from Boehringer Ingelheim, with a detailed description of the pharmacological action of ATX and LPA, as well as the wide range of test item-related microscopic findings resulting from treatment in rats. PEG400 and its effect on the GI-tract in the rodent was the next presentation by Marjolein van Heerden from Janssen. With particular focus on intracolonic and rectal dosing of PEG400 this was an interesting talk covering the various effects of this unusual administration route of this class of compound. I always enjoy an insight into a field of drug development into which I have never delved previously and I think it is safe to say that Kevin Keane's presentation (Novo Nordisk) ticked this box for me. Kevin covered what looks like the black art of pancreatic islet beta cell culture and the production of immunoprotective encapsulation devices and how these implants function in vivo, which was all fascinating.

Next, Klaus Weber gave a presentation on a review and PWG that was conducted on an old study of synthetic amorphous silica, which are used in a variety of industrial and consumer products. Klaus impressively told the audience that he has now given more presentations at Classic Examples meetings than he has attended, obviously meaning that he has, in the past, given more than one presentation at a single meeting. I suspect this was a call to all of us to volunteer presentations for future meetings, for which I am sure the scientific organisers are thankful for, but thank you to Klaus for being such a frequent contributor to the meetings. Finally Jeffery Engelhardt from Ionis Pharmaceuticals gave a presentation on intrathecal administered antisense oligonucleotides. The intrathecal route of administration is being investigated since ASOs do not cross the blood brain barrier and also provide rapid distribution across the spinal cord and brain resulting in macrovacuolation of hippocampal neurons and microvacuolation of cortical neurons which have been regarded as non-adverse.

I have always enjoyed attending the Classic Examples, and not just because of the excellent social gathering on the Friday night. Looking back at the provided booklet from the meeting in preparing this article, reminded me how much effort all the speakers make in preparing these notes. They are not just copies of the presentations but full breakdowns of the pharmacology, toxicology and pathology of the covered topic and make excellent reference material for future use so thank you all for this effort.

I am already looking forward to attending again in 2020.

Jonathan Carter
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CALL FOR PAPERS OR THESIS 2019 ESTP Publication Award

The European Society of Toxicologic Pathology was founded in 2002 to promote the importance of toxicologic pathology as an independent, specialized area in Europe. To honor advancements in this field, impactful publications (either theses or papers) are annually awarded by the ESTP. We ask for nominations of impactful Thesis or Publications in the field of toxicological pathology that were published throughout 2018 or 2019. Applications for the award will be evaluated by the ESTP award committee, and the best thesis/paper will be honored with 1.500 Euro. The award will be presented at the 2019 ESTP annual meeting in Cologne, Germany 17-20 September 2019. It is mandatory that the recipient attends the awards ceremony. The admission fee will be waived and travel costs will be covered by ESTP. The recipient will be notified by August.

The dead line for submission will be June 30st, 2019.

Please send your proposals to the head of the ESTP awards committee: Prof Dr. Johannes (Hans) Harleman (johannes.harleman@gmail.com).

CALL FOR VOLUNTEERS ESTP SOC for 2020 Cutting Edge Pathology Meeting in Torino, Italy

Dear ESTP members,

The next joint meeting of ESTP and ESVP/ECVP ("Cutting Edge Pathology") will be held in Torino (Italy) from August 26-29, 2020. The Scientific Organizing Committee of ESTP will start its preparatory activity very soon and is currently looking out for enthusiastic ESTP members willing to take responsibility and contribute to the planning of an exciting meeting. The provisional working topic will be: Biomarkers and organ toxicity.

If you are interested in participating in the SOC 2020, please send an email to the co-chairs of the committee, Raffaella Capobianco rcapobianco@rtc.it and Pierluigi Fant pierluigi.fant@crl.com.

Best regards,
Gabi

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