# ESTP Newsletter 2019 (2)



Editor Emmanuelle Balme (emmanuelle.balme@boehringer-ingelheim.com)

#### **President's Column**

Dear ESTP members,

The time flies and the summer stands in full bloom. I hope all of you had nice and relaxing holidays or will have soon. I would like to highlight some activities, which took place during the spring and early summer, and some future activities and challenges still ahead of us.

At the Global Toxicologic Pathology President Group Meeting held in June at the STP annual meeting in Raleigh, North Carolina, USA, Charlotte Keenan gave an update on the progress of the International Harmonization of Nomenclature and Diagnostic Criteria (INHAND) efforts. The Hematolymphoid System is scheduled to be published in issue 7 of Toxicologic Pathology this year. The minipig is currently out for membership review and the rabbit will go out for review next month. The aim is to finish the review period for the non-rodent species on goRENI this year, with the hard copy publication in late 2019 or in early 2020. Furthermore, the imminence of a very significant retirement cliff in toxicological pathology was discussed. Considering that, 60 % of toxicological pathologists in Europe is anticipated to retire within the next 15 years, and there is an alarming decline in numbers of veterinary students enrolling in the postgraduate training programs preparing for the ECVP/ACVP Boards in Europe. The problem is not restricted to Europe and the crucial point is that we probably need to inform veterinary students before they graduate from veterinary school in order to make them consider pathology and toxicological pathology as a career opportunity. Additionally to our effort of sponsoring lectures and giving talks at the ESVP/ECVP general meeting, the ESTP has designed a flyer informing about the possibility to make an internship in the industry to be distributed at national and international veterinary pathology meetings. It was mentioned that CRL offers 15 internship programs and

80% of interns go into toxicologic pathology. Having internship programs in industry can be very effective. We will also continue trying to improve our collaboration with the ECVP and ESVP since training must be done at the university level.

Another important topic to share is that the negotiations with our future professional congress organizer Pauwels from the Netherlands is underway and the collaboration is planned to start with the organization of the ESTP 2021 congress.

The early bird registration for the 17th ESTP congress (September 17-20, 2019 Cologne, Germany) has closed but there is still time to register for "Digitalization meets Pathology" and the half-day IATP Satellite Symposium on "New Approaches and Practices in Reproductive and Developmental Toxicology – Role of the Toxicologic Pathologist". There are also seats still available for the 7th ESTP International Expert Workshop "Towards Regulatory Acceptance of Digital Toxicologic Pathology" which will be held directly after the congress. Please find the updated program and more information on the ESTP home page https://www.eurotoxpath.org/.

Before I end, I would like to remind you to consider contributing to the official Journal of our Society *Toxicologic Pathology*. It is the leading journal in our field with broad influence amongst toxicologic pathologists, regulatory authorities and academicians, and our input is crucial for the consistence and high standard of the journal.

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

I wish you a wonderful relaxing summer and hope to see you in Cologne!

Best regards,

Anna-Lena Frisk ESTP Chairman Anna-lena.frisk@bayer.com

### OBITUARY on Prof. Dr. Georg Krinke



Prof. Dr. Georg Krinke studied Veterinary medicine in Czechoslovakia, today Czech Republic and Slovakia. Through his engagement and enthusiasm, he gained a vast experience in toxicological and experimental pathology with a special interest in neuropathology working at Geigy, Ciba Geigy, Novartis, Syngenta, RCC, Harlan, and Anapath in Switzerland. He has over 100 publications mainly on neuropathology.

It is my very sad duty to inform you on behalf of our society that our colleague and friend Prof. Dr. Georg Krinke passed away in June after a short illness. In 2000, he was one of the last chairmen of the GTP, the predecessor organization of the ESTP, and over all the years an internationally well renowned scientist, toxicological pathologist and neuropathologist.

I have had the pleasure to know Georg since my early beginnings, starting as an unexperienced toxicological pathologist at BASF Toxicology Labs in 1987. In my new position, I was challenged to build up a lab for neurotoxicological pathology to meet US EPA requirements on special strategies for the examination of the nervous system. To learn more about neurotoxicology, I went to the International Neurotoxicology Association meeting in Sitges, close to Barcelona in Spain in 1989, where I first met Georg. On the bus bringing us to the wonderful Joan Miro Museum, we discussed how to plan a proper examination of laboratory animals to investigate potential neurotoxicants and to best detect any impact on the central and peripheral nervous system.

Georg showed an interest in all issues regarding nervous system examination and diagnostics, shown in the many brilliant papers he published in peer-reviewed journals as well as in his long-term contributions to harmonize the diagnostic nomenclature. However, his very special interest was the peripheral nervous system, in particular techniques to detect impacts on the nerve fiber structures, e.g. nerve fiber teasing.

He was one of our best, always supportive and helpful, with a critical mind, applying an academic, ambitious approach, but also with a sense for pragmatic solutions, which is important for our needs in an industry laboratory environment reading slides and evaluating lesions. Georg contributed significantly and with a high engagement to the IARC publication activities in the 1990s and to the INHAND nomenclature published in 2012, and he was still actively commenting on diagnostic terminology changes in 2019. His scientific reputation was widely recognized in our international pathologist community. His advice, sought by many, and his critical and constructive contributions were highly appreciated. Georg was a great mentor to bring me, the "greenhorn", close to the fascinating field of neuropathology. He invited me to join him for his contribution "Neoplastic changes in the central nervous system" for the "ILSI Monographs on the Pathobiology of Aging Animals: Pathobiology of the aging mouse in 1994", and I learnt a lot. In 1996, he asked me to prepare a lecture on "Developmental Neurotoxicity" for the ILSI nervous system histopathology seminar in Hannover. I had no clue, like a jump into cold water. However, I had a mentor who supported me and trusted in me, and I gained insight in an area, which has significantly grown more important for us neuropathologists by the years. Georg also edited the book "The Rat" in the series of "The Handbook of Experimental Animals" which was published in 2000. This publication aimed, as Georg wrote in his preface, "to provide accessible practical information for researchers and technicians backed by sound theoretical wisdom". Georg showed this wisdom: not only in the scientific field of neuropathology and toxicology but also in his humanity and high social competence, a modest and kind character with discrete humor and an open-minded attitude.

This is what comes to my mind in this sad moment of parting. Our thoughts are with his wife and family. Farewell Georg, we will miss you!

### Wolfgang Kaufmann

### ANNOUNCEMENT AND INVITATION to ESTP Annual General Assembly

Dear ESTP Members,

On behalf of the ESTP Executive Committee and ESTP Chair, Anna-Lena Frisk, I would like to cordially invite you to our next Annual General Assembly which will take place during our annual meeting in Cologne (Germany), on 19th September 2019 (11.00 - 12.45 local time).

The exact address for our AGA is: *Maternushaus Kardinal-Frings-Straße 1-3* 50688 Köln Germany

If you have not yet registered for the meeting, we cordially invite you to find the necessary information on our website and register as soon as possible.

The agenda for the AGA has been sent to all ESTP members by e-mail. Besides general topics and administrative topics, the Executive Committee and other Committees will update you with recent activities and future plans and strategies of our Society, including congresses, seminars, workshops, international collaboration and more. We will make sure that you receive the annual reports from the various councillors, committees and working groups prior to the Assembly by separate e-mail(s).

We are very much looking forward to welcoming you in Cologne.

Best regards,

Gabriele Pohlmeyer-Esch ESTP Secretary Gabriele.pohlmeyer-esch@boehringer-ingelheim.com

### UPDATE

## 7<sup>th</sup> ESTP International Expert Workshop: "Towards regulatory acceptance of digital toxicologic pathology"

Dear ESTP Members,

Our 2019 workshop entitled "Towards Regulatory Acceptance of Digital Toxicologic Pathology" kicked off at the end of March after a list of experts had been put together.

Five teleconferences were held so far, and 3 more are planned until September in preparation for the face-to-face

meeting that will take place right after the ESTP annual meeting in Cologne, September 20-21, and whose practical planning is well underway.

Our preliminary discussions focused on sharing opinions and experience, to support progress and acceptance of digital technology/imaging in the field of toxicological anatomic pathology.

The topics that were discussed so far are:

- the need and scope for a validation process of the digital pathology workflow (including magnification of scanning, color calibration, monitor specifications, scanner stacking...);

- the definition of raw data in the context of whole slide imaging (WSI), and the differences between validation and qualification;

- the regulation of scanners as class 2 medical devices.

The experts also shared the range of Digital Pathology applications they are currently using, as well as the challenges observed in their academic, diagnostic, industry (agro-chemical- pharma-devices-CRO), and consulting working environment.

The next preparatory conferences will focus on quality and regulatory aspects, as well as the existing certification for digital pathology.

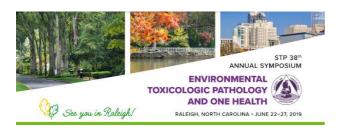
These themes will be reviewed and synthesized at the coming workshop, and a publication in *Toxicologic Pathology*, for which we will seek endorsement by all major societies in the field, will follow shortly.

Organizing Committee: Vanessa Schumacher <u>Vanessa.schumacher@roche.com</u> Erio Barale-Thomas <u>Ebarale@its.inj.com</u> Pierluigi Fant <u>Pierluigi.fant@crl.com</u> Xavier Palazzi Xavier.palazzi@pfizer.com

Expert panel:

Alain Piton (QA consultant), Bethany Williams (NHS), Catherine Botteron (pathology consultant), Daniel Roth (Swiss Medic – helped by Thomas Lucotte, ANSM), Deon Hildebrand (GSK), Elena Riccardi (IDEXX), Elizabeth Neyens (pathology consultant), Famke Aeffner (Amgen), Heike Antje Marxfeld (BASF), Jeff Engelhardt (Ionis Pharma), Jihei Nishimura (PMDA), Jonathan Carter (Covance), Julie Boisclair (Novartis – helped by Pierre Moulin), Justin Vidal (Charles River, pathology consultant), Laetitia Elies (Bayer), LuAnn McKinney (FDA), Peter Hall (UCB), Peter van Meer (EMA), Robert Klopfleisch (Berlin University), Serge Rousselle (Alizée Pathology), Thomas Forest (Merck).

### STP 38<sup>th</sup> Annual Symposium June 22-27, 2019 – Raleigh, North Carolina



This year's STP-Annual Meeting took place at the Raleigh Convention Center from 22<sup>nd</sup> to 27<sup>th</sup> June 2019.

The meeting started on Saturday with the NTP Satellite Symposium "Pathology Potpourri", chaired by Susan A. Elmore, NIEHS/NTP, Research Triangle Park, NC. The interactive symposium provided an excellent opportunity of continuing education on interpreting pathology slides. The topics reached from lesions of aging mice, to Phthalate induced findings, to the question of how many oocytes/follicle are regarded as normal in canine ovaries, just to mention a few. All presentations were very informative, and the friendly atmosphere facilitated a lively and open discussion.

On Sunday, participants had the opportunity to take part on several continuing education courses with the following topics:

- 1. Data Interpretation, Visualization, and Statistics for Nonclinical Toxicity Studies, chaired by Michael Logan (AbbVie, Highland Park, IL) and Susan G. Emeigh Hart (VenatoRx Pharmaceuticals Inc., Malvern, PA).
- Medical Device Safety Assessment: The Frontiers of Safety Assessment Pathology, chaired by Maureen T. O'Brien (Charles River Laboratories, Frederick, MD) and Serge D. Rousselle (Alizée Pathology, Thurmont, MD).
- Cardiac Effects Commonly Encountered in Drug Development: Mechanisms and Clinical Relevance Sponsored by the American College of Toxicology (ACT), chaired by Matthew M. Abernathy (Eli Lilly & Company, Indianapolis, IN) and Donald N. Jensen (US FDA/CDER, Silver Spring, MD).
- 4. Otic Toxicologic Pathology, chaired by Kenneth A. Schafer (StageBio, Greenfield, IN) and Bradley L. Njaa (Kansas State University, Manhattan, KS).

I attended the course on otic toxicologic pathology, which provided a very good overview of the comparative anatomy, histology and physiology of the external, middle, and inner ear. Furthermore, common target sites in the ear as well as regulatory considerations for otic toxicology studies were discussed. The annual symposium with the focus of "environmental toxicologic pathology and one health" started on Monday. The symposium started with a key note lecture held by Linda S. Birnbaum (NIEHS/NTP, Research Triangle Park, NC). Dr Birnbaum presented the newly reestablished 2018–2023 NIEHS Strategic Plan, addressed how toxicologists can deal with new challenges regarding environmental health and highlighted the interconnection of humans, animals, and the environment, and the critical need to further the understanding of this interconnection.

Scientific sessions covered the topics:

- 1. Toxicology and Pathology of Air Pollution (Co-Chairs: Jack R. Harkema, Michigan State University, East Lansing, MI, and Mark Cesta, NIEHS/NTP, Research Triangle Park, NC).
- 2. Toxicologic Pathology of Workplace Agents (Co-Chairs: Ann Hubbs, NIOSH, CDC, Morgantown, WV, and Peter Spencer, FRCPath, Oregon Health & Science University, Portland, OR).
- Toxicity Assessment Paradigms in Regulatory Pathology (Co-Chairs: Deepa B. Rao, US FDA, CDER, Silver Spring, MD, and John C. Lipscomb, US EPA (retired), Cincinnati, OH).
- 4. Endocrine Disruption and Reproductive Pathology (Co-Chairs: Jeffrey C. Wolf, DVM, DACVP, EPL, Inc., Sterling, VA; and Darlene Dixon, DVM, PhD, DACVP, NIEHS/NTP, Research Triangle Park, NC).
- Pathology in Ecological Research with Implications for One Health (Co-Chairs: Wanda Haschek-Hock, University of Illinois, Urbana, IL, and Mac Law, North Carolina State College of Veterinary Medicine, Raleigh, NC)
- 6. Integration of Big Data Technologies with Toxicologic Pathology (Co-Chairs: Charles E. Wood, Boehringer Ingelheim Pharmaceuticals, Inc., Ridgefield, CT, and Matt Martin, Pfizer, Inc., Groton, CT).

All scientific sessions took benefit from very interesting topics, presented by excellent speakers and lively and informative discussions.

Several lunch time sessions and a mystery slide session on environmental toxicologic histopathology further improved this informative meeting.

### Maike Huisinga

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### **Guess What! - Where are you going?**

When we started the "Guess What!" section many years ago we had the idea to present 3 or 4 cases a year. Fast it became clear that this idea was too ambitious since first, the amount of work for preparation is quite high and second, suitable cases were only rarely provided. Thanks to those that contributed, some did even several times. Meanwhile, we have 25 cases in our archives that are available to be looked at any time. They could be a source of knowledge but we do not know how frequently this option is used.

The last Case 25 was on our homepage for more than a year. It was posted on June 18, 2018 but it took until October 23, before the first diagnosis was sent in. Despite several reminders by our Honorary Secretary and encouragement of colleagues by presenters at several meetings, the total number of answers remained by 5. Yes, you have read correctly: FIVE.

We were kind of desperate. Of course, we asked ourselves what was wrong with this case. Was it too easy? We do not believe so. When we decided for this case, we saw the dilemma and the challenge to have so many different lesions in this aged organ and wondered how to name them. How to record them in a study in order to not overdiagnose. Thus, we expected a good and extensive discussion, but got none. To make it clear: The purpose of "Guess What!" is not and never has been to provide an easy and "true" solution. We expect the input from our community of pathologists worldwide and indeed, there is more participation from colleagues from foreign countries than from our members. No, the Guess What! team is not brighter than others. Only together we can come to a diagnosis which is as close as possible to the "truth".

Are there other reasons for the low participation? Yes, we admit, the quality of the provided pictures was limited. They are small and cannot be enlarged. But instead sending us a note and asking for better resolution or higher magnifications we did not receive any respective comment. Silence among the community. We have implemented the anonymous sending function right from the beginning, knowing that there are colleagues that are ashamed of themselves if they do not give the "right" answer or have the fear to be blamed by us, the Guess What! team. It can be used also for comments. As pathologists we have to give an opinion on lesions every minute in our daily work, we have to make decisions. Shouldn't this be possible in an educational game as well?

If you say you have too little time to think about the case and answer due to heavy workload? Okay that might be an acceptable argument. In contrast, no interest in the provided cases would be disappointing for us. Actually, if we see the numbers of accesses to the Guess What! section on our website we can recognize a negative trend. Coming from 4000-5000 page hits before case 20 and continuously and accelerating going down since then, we had only 765 hits for case 25, with more interest for Figure 1 than for Figure 2. If this trend continues, we have to consider stopping our activities which to our opinion would be a pity.

Thus, please give us feedback what we can do better to make the Guess What! section attractive again. Currently, we are thinking about the possibility of providing scanned slides on the website. However, sending those cases to us might be a problem. Not all potential providers of cases have a scanner and most colleagues are not allowed to send slides especially from GLP studies to be scanned in. Nevertheless, we would like to have a living Guess What! and need your input. We will find a way.

#### Come and visit us at:

<u>https://www.eurotoxpath.org/guesswhat/index.php</u> and send us a message, we are keen to learn about your thoughts.

### Matthias Rinke, Rupert Kellner and the Guess What! Team

For correspondence:

