ESTP Newsletter 2022 (2)

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Administrative Assistant to the ESTP EC

Coming up in 2022	
June 19-23	STP 41st Annual Symposium – Toxicologic Pathology of the Hematopoietic System (Austin, Texas) LINK
July 5-14	BSTP Continuous Education Symposium CES6: Male reproductive system Virtual meeting (Virtual) LINK
September 6-10	ESVP-ECVP Congress (Athens, Greece) LINK
September 6-10:	Annual Symposium of the European Division of the Davis-Thompson Foundation, Non-human Primate Pathology Workshop (Athens, Greece) LINK
September 13-16	**ESTP: 19th European Congress of Toxicologic Pathology: Think female: Toxicologic pathology of the female reproductive system (Maastricht, Netherlands) LINK** **If you have not yet registered: Early Bird Registration is open until June 30th! Poster Abstract submission is also possible until midnight June 30th.**
October 17-19:	RITA Panel Meeting (Hannover, Germany) LINK
November 10-11:	BSTP 37th Annual Scientific Meeting /Digital Pathology and Mouse Pathology Workshop (Harrogate, UK) LINK

President's Column

Dear ESTP members,
It's already the time to write what is my last contribution to the ESTP newsletter as the Chairman.
The past two years went so fast… the peculiar situation we've all faced and the absence of meetings in person made this term quite unique. Having said that, it did not stop the ESTP executive committee to continue working for the members, and it helps us to further move toward new ways of working and to modernize our society.

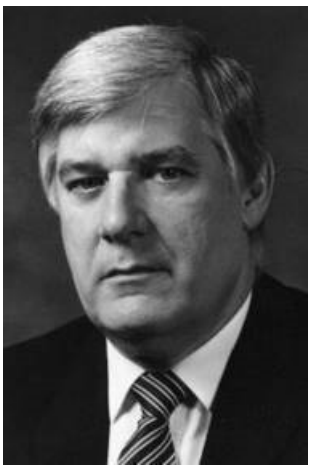
Virtual meetings and AGAs, webinars, acquisition of a TEAM license, creation of an ESTP LinkedIn account, we are now fully embracing the digital era and are ready for the future.
The society, however, would not be able to function properly without all the volunteers in the various committees, and would not be able to provide annual meetings, workshops etc.
We are still actively looking for candidates for the September elections. Being part of the executive committee is a very interesting task, usually not so demanding in time, and allowing the members to give back to the whole society and allowing it to continue providing high level

educational content. So please, there is still time to nominate yourself and being part of the future of the ESTP.

Looking forward to seeing you in Maastricht, in the meantime have a peaceful summer!

Kind regards,
Franck
Franck Chanut
ESTP Chairman

In memoriam Professor Dr. med. Dr. h.c. mult. Ulrich Mohr



On March 30, 2022, our honorary ESTP member, Professor Mohr, died at his home in Hannover, Germany, where he has lived with his family since 1976. He was buried in the family grave on April 13, 2022. Professor Mohr was born in 1931 in Frankfurt/Main and grew up in Frankfurt/Main and Munich.
After graduating from high school, he studied medicine in Munich, received his doctorate there (1958) and habilitated (1967) at the German Cancer Center in Heidelberg.
His path to scientific success started here with the experimental proof of transplacental carcinogenesis.
In 1968 Prof. Mohr was appointed a full university professor and director of the Institute for Experimental Pathology at the Hannover Medical School. He held this position until 2000 when he retired. At that time his deep interest was in research of agents supposed to be carcinogenic to humans, in rodents for exploration and *in vitro* models with respiratory tissue. In 1981, Prof. Mohr was awarded with the German Research Prize for his work on the effects of PAHs on cell and organ cultures *in vitro*. He also paid particular attention to medical student training in histopathology. In addition to his duties at the Medical School Hannover, in 1982, he was a founding father of the Fraunhofer Institute of Aerosol Research in Hannover, which is located next to the university campus. After his retirement from the Hannover Medical school, Professor Mohr was a co-founder of the CULTEX labs (2007), which offered alternative techniques for exposure of cells to airborne pollutants, so that he could further pursue his scientific interests.

In 1978, Professor Mohr initiated and organized the annual ILSI Histopathology Seminars, which for nearly two decades provided training in laboratory animal pathology in Europe, the US and Japan, as a combination of oral presentations and glass slide seminars given by experts from all over the world. He also edited and co-edited a number of books essential in the field of toxicologic pathology with worldwide acceptance, such as the IARC WHO Monographs on “Pathology of Tumours in Laboratory Animals” – “Vol I Tumours of the Rat”, “Vol 2 Tumours of the Mouse” and “Vol 3 Tumours of the Hamster”, ten volumes of the "International Classification of Rodent Tumours, Part I - the Rat", and the textbook of the "International Classification of Rodent Tumours, the Mouse", as well as "Pathobiology of the Ageing Rat" and "Pathobiology of the Ageing Mouse". He was the editor of several monographs in the field of Inhalation Toxicology. His work contributed greatly to the training and continuing professional education of our membership.

As director of the Fraunhofer Institute of Toxicology and Aerosol Research, Professor Mohr initiated in 1987, jointly with representtatives of chemical and pharmaceutical industry, the RITA project, a database of peer reviewed spontaneous tumors occurring in laboratory animals. The RITA project was one of the main

drivers in establishment of internationally harmonized diagnostic criteria for neoplasms in rodents (INHAND), and which has been used intensely to the benefit of our membership.

Professor Mohr was the co-editor of the journal "Experimental Pathology", and later editor in-chief of the journal "Experimental and Toxicologic Pathology", which was the official journal of the GTP for many years. He was author or co-author of more than 600 scientific publications and supervisor of more than 90 doctoral theses and 21 habilitations.

Professor Mohr received honorary doctorates from the University of Buenos Aires (Argentina), Barcelona (Spain), Kirov (Russia) and Chiang Mai (Thailand). In 2000, in recognition of his outstanding contributions to our society, Professor Mohr became honorary member of the GTP, which was transformed to the European Society of Toxicologic Pathology in 2002.

With Professor Mohr we have lost a scientist with outstanding contributions to the education in laboratory rodent pathology. Furthermore, and even more important than his scientific achievements, Ulrich Mohr was a warm hearted, approachable personality. His direct and positive attitude to help and support was always a personal guidance for young scientists. We will miss this outstanding scientist, teacher, mentor, and fellow human being!

Thomas Nolte,
Heinrich Ernst,
Paul-Georg Germann,
Susanne Rittinghausen

ESTP Mission and Vision- thank you for your contribution!

Twenty-one years after its foundation, the ESTP council has started an initiative to review and renew the Mission and Vision statements of our society. For this, we have asked you all for your input and opinion. Many thanks to all those who have taken the time to share your views with us! Here is an early snapshot of the results:

While most respondents seemed to be happy with the work of the ESTP, there were some strong suggestions on what to focus in particular. These included a greater focus on training and engaging early career pathologists, digitization, and general societal topics like sustainability. A stronger engagement with other professional groups was also on the wish list.

Motivating young pathologists to enter the profession and bringing some “fresh blood” to the active group in ESTP involved in organising events was foremost in many respondents’ mind. In fact, we are working on this- watch this space at the next AGM!
Another critical point is communication. Are you hearing enough from us, and is the content of the communication, right? Respondents wanted to hear more about the activities of our various work streams. Other topics on the agenda include future areas for work streams, our communication strategy, and a closer relationship with other professional organisations besides pathology societies.
The questionnaire was only the first step. In the next months, the Mission and Vison task force will develop these ideas further until we have both a proposal for new M&V statements and an action plan to put them into practice. For all those who are interested in being part of this, please contact our secretariat at estp-vision-mission@posteo.de [1)]! For those who haven’t responded yet, the questionnaire is still open until the 30th June and can be accessed HERE. WE look forward to hearing from you!

1) Please note, there was no automatic email from the questionnaire to us; if you have indicated that you would like to be involved, please use the email address above.

ESTP Congress in Maastricht, 13th-16th of September 2022: An update of this LIVE event!

The period of holidays is approaching fast and will quickly be followed by the ESTP Congress in Maastricht in September. Therefore, the Scientific Organizing Committee of the congress would like to give a short update. As you have probably heard, the professional congress organization (formerly in the hands of Solution Office) is now taken over by Pauwels Congress Organisers, which are located in Maastricht. With their help a new website for the ESTP, ESVP and ECVP has been launched. On this website you can find all the information of the congresses of the ESTP, ESVP and ECVP. We would certainly recommend to have a look (Home | ESVP-ECVP-ESTP congress (esvp-ecvp-estp-congress.eu)).

We believe that the program of this year's ESTP Congress (entitled: "Think Female") will provide an excellent mix of scientific subjects in the area of female reproductive organs, disease, carcinogenicity, animal models, new techniques, endocrine testing and regulatory perspectives. In addition, some interactive mystery cases will be presented and in the INHAND lecture some aspects of fish pathology will be covered.

We are very happy to announce that the Maronpot Guest Lecture and the Chirukandath Gopinath award will be granted to two well recognized speakers presenting at the congress. Besides these awards also a poster and publication award will be granted during the congress.

If this is not reason enough to register for the congress in Maastricht, we would like to add that Maastricht is one of the most beautiful cities of the Netherlands containing beautiful historic districts and contemporary architecture. Besides many boutiques in the old town, there are very good restaurants and cozy bars to meet with the many colleagues that will be present at the congress.

Tot ziens in Maastricht
The Scientific Organizing Committee

Early career pathologists networking lunchbreak Maastricht 2022

Dear colleagues, dear young pathologists,
as you know our profession is in the face of a tremendous change, experienced colleagues will retire, younger colleagues are desperately needed to replace the retired colleagues.

Young veterinarians seeking to become a pathologist undergo extensive training, but in many cases toxicologic pathology is only covered briefly, if at all, in this training phase. After years of training and the board examination our young colleagues decide in which field of pathology they want to proceed. Many have not had the possibility to get to know the field of toxicopathology. The ESTP installed many years ago the role of the Councillor of the younger generation to bridge the gap between training and working in industry and to give the younger generation a voice in the ESTP executive board.

In my role as Councillor of the Younger generation I am aiming to set up a network of young pathologists from different branches of toxicologic pathology (pharmaceutical industry, chemical industry and CRO) and different countries. The aim of this network is to better connect pathologists in an early career phase (less than 10 years in industry) and to provide a platform for discussion of challenges and opportunities in this career phase.

The kick-off of this network will be the Early career pathologist lunch break at the ESTP Maastricht congress in 2022. If you are an early career pathologist interested in networking with other early career colleagues, please join us on Wednesday September 14th at 12.15.

Best regards,

Simone Tangermann

9th ESTP International Expert Workshop

„Assessment of the biological/toxicological relevance of clinical pathology changes “

Final webinar

In an effort to better align the positioning of clinical pathology findings in reports and regulatory documents amongst the global clinical pathology toxicologic pathology community, a new (9th) ESTP International Expert Workshop had been formed at the beginning of 2021, to discuss the inconsistent utilization of terms such as “biologic relevance” and “toxicologic relevance”.

Twenty-four international experts in (toxicologic) clinical pathology spanning the pharmaceutical and chemical industries, contract research organizations, and regulatory authorities met for 12 preparatory videoconferences to address the discrepant use of these and similar terms.

Videoconferences combined individual presentations and group discussions. Topics included biologic variation, appropriate comparisons, statistics, reporting, anatomic pathology correlations, nonstandard biomarkers including immunophenotyping, indirect (secondary) clinical pathology findings, and a weight-of-evidence approach.

On the 5th and 6th of April, 2022, results of these preparatory VCs were presented to a registered audience of more than 150 international scientists in an interactive webinar format, consisting of two half-day parts with short presentations, expert discussion rounds and Q&A sessions involving the audience.

The high number of participants clearly showed the importance of the workshop topic, not only for the toxicologic (clinical) pathology community, but also for toxicologists (study directors, project representatives…).

An initial live survey conducted at the beginning of the webinar showed that more of the audience use toxicological relevance versus biological relevance with the majority utilizing the terms more commonly in the negative context (e.g. “not toxicologically relevant”). Another live survey at the end of the webinar did not note significant changes in the acceptance or avoidance of these terms.

During the webinar, the terms provoked a lot of discussion but were not adopted or endorsed by the expert working group. In addition, it was made clear that any use of terminology to convey the importance of a clinical pathology finding would need additional substantiation as these terms in isolation are vague and lack clear meaning.

Results of the workshop will be presented as posters at this year’s STP and ESTP meetings and will lead to a publication in our society journal, *Toxicologic Pathology*.

Best regards,

Gabi Pohlmeyer-Esch

For the workshop organizers
Monika Keresztes
Gabriele Pohlmeyer-Esch
Lindsay Tomlinson

ESTP 2.0. Pathology Subgroup – Spacial Omics

On the 25th of April 2022 the Pathology 2.0 Spatial omics subgroup presented a webinar as part of the ESTP/BSTP/SFPT and ECVP/ESVP joint webinar activities with the title "Spatial Omics: A new dimension to assess disease mechanisms". More than 100 participants attended the session and gave very positive feedback. These results show the interest by the veterinary pathology community in spatial biology technologies and corroborates the purpose of the subgroup to continue exploring and sharing relevant information related to these.

ESTP 2.0. Pathology Subgroup at the MPS World Summit in New Orleans

The 1st Microphysical Systems (MPS) World Summit took place from the 30th of May until the 3rd of June in New Orleans, LA. Around 500 experts in the field of multi-organ-chips and complex *in vitro* testing methods were present including academic research institutions, representatives from the regulatory institutions, pharma companies, the chemical and cosmetics industry as well as several members of the leading multi-organ chip companies. This opportunity was used by our ESTP/STP Working group: Complex in vitro models (CIVM) & Pathology to connect pathologists with the CIVM/MPS scientists and device engineers.

By contributing our own session (organized by Lindsay Tomlinson and moderated by Daniel Rudmann), we demonstrated in four different talks how pathology should be integrated into the optimization and characterization/qualification of CIVM. This includes understanding the limits/opportunities of current CIVM, physiologic endpoints that translate to *in vivo* evaluations, interpretation of readouts and synergistic communication between experts of the different disciplines.

The PhD student Luisa Bell from Roche presented five end-to-end high throughput histotechnique workflows for different CIVMs ranging from three dimensional spheroids and organoids to microfluidic chips with further histological applications such as immunohistochemistry and -fluorescence assays. This will ideally guide other CIVM end-users to establish their own histological analysis pipeline for morphological model characterization and validation. In addition, our session presented two case examples in which a histological assessment was key for the CIVM assay establishment. Julia Kühnlenz from Bayer CropScience demonstrated the relevance of combining pathological and metabolic readouts to best characterize a thyroid-liver-organ-chip. Within this context, the emulation of the *in vivo*-like follicular cell-organization of the thyroid model was key to simulate a thyroid hormone synthesis *in vitro*. Consequently, only a histological assessment of the morphology could give insight into the dysfunctional follicles of the early thyroid models evaluated which didn't provide an *in vivo* tissue architecture. In a second example, Randolph Ashton presented a neural Rosette Arrays™ Assay for quantitative high-throughput screening of human developmental neurotoxicity and teratogenicity that utilizes morphological features as decisive pathological readouts (e.g. rosette area, CNS morphogenesis).

Figure 1: Randolph Ashton, Daniel Rudmann, Luisa Bell & Julia Kühnlenz at the MPS World Summit in New Orleans, LA

All in all, we hope that this session raised awareness in the CIVM community to efficiently combine molecular pathology and bioengineering techniques. It was a pleasure to finally connect in person again and experience the life in and around New Orleans. We would like to build on this momentum and contribute a session next year in Berlin (Germany), the location for the 2nd MPS World Summit!