

EUROPEAN SOCIETY OF PATHOLOGY NEWSLETTER

Summer 2017



TAKE A
LOOK
INSIDE

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MESSAGE FROM THE PRESIDENT OF THE ESP

By Prof. Pierre Bedossa



Dear Colleagues, Dear Friends,

The European Society of Pathology has now reached its cruising attitude in a safe environment. Thanks to its various instruments, the Society is now growing in a very sustainable way. The 29th ECP in Amsterdam is ready to start. We, at ESP, are all aware that it will be a decisive moment. Indeed, after a very successful Congress in Cologne, Amsterdam's ECP will be scrutinized from all parts of the pathology world. The successful recipes of the previous congress have been re-conducted and implemented thanks to the effort of the Scientific Committee, the Dutch Society of Pathology, our working groups and the National Societies. The program looks terrific with renowned key note lecturers, slide seminars, short course, etc. For this purpose, the ESP working groups have designed attractive sessions with recognized maestros in their respective fields. As in the previous ECP, there will be a special course for IT and another one for molecular biologists. No doubt that everyone will find what he/she is looking for. I take this opportunity to thank the hundreds of speakers and Chairs for their efforts. Without their dedication, ECP will not be at this level of perfection. My thanks go also to our sponsors that contribute for years to organize the ECP in excellent conditions. No doubt that the charming and lively city of Amsterdam will also play a key role in attracting pathologists from many parts of the world.

Offering learning and teaching opportunities is one of the major goals of ESP. With ESCOP courses and the Giordano's fellowship which are training programs that are running now

smoothly, we will start soon the ESP Junior Academy. This program will start in 2018 and will fill a gap in the field of research teaching. The Junior Academy is targeting young pathologists who are strongly interested and/or involved in research. They will have opportunities to get together for a couple of days, hear conferences from major scientists, learn how to develop a research career, what are the tricks and opportunities of such a curriculum and discuss their own scientific projects with senior pathologists. Be alert, you will hear about very soon.

Also, important for the visibility of ESP are our communication instruments and after the renewal of our website, the education portal is now launched. It is a living database that will progressively be enriched and will constitute an important tool for teaching and learning. Any contribution is welcome. With Prof. Daniela Massi, Virchows Archiv is in strong hands again but its success fundamentally relies on you. Do not hesitate to contribute by sending your manuscripts that will be reviewed quickly by dedicated and fair reviewers.

We are entering into an important and strategic period for the Society. My mandate as ESP President will end after the Amsterdam meeting where I will hand over the responsibilities to Dr. Dina Tiniakos. According to the Statutes of the ESP, the new President-Elect will be presented at the next General Assembly as well as a new Secretary and nomination of 3 new Council members. I take this opportunity to thank Prof. Ilmo Leivo, who handled ESP Secretary with dedication for the past years. My thanks go also to the members that will leave the Council, Prof. Holger Moch, Prof. Gordan Vujanac and Prof. Ales Ryska. Thanks also to Prof. Han van Krieken our Past-President whose mandate as Working Group Chairperson will terminate at Amsterdam. I will have the honor to replace him for this task, while Prof. Fatima Carneiro will stay as Chair of the Advisory Board as stated in our Bylaws.

The settlement of ESP is now strong. I guess that some of you may have had contact with our staff and appreciated their responsiveness and commitment. Having travelled at least once a month to ESP headquarter in Brussels during my presidency, I can testify that going there is getting a big breath of fresh air. If you have the opportunity to pass in Brussels, at Rue Bara 6, ring the bell just to say hello. You will surely be impressed!

I wish you a pleasant reading of the ESP newsletter.

See you in Amsterdam!

EDITOR'S MESSAGE

By Prof. Gordan Vujančić



Dear colleagues

Our Summer Newsletter is with you now.

The ESP President is informing us about the exciting Congress in Amsterdam and the efforts that many people put into making it such a promising event.

And then, in addition to now well-established ESP educational activities such as the ESCOP courses and Giordano's fellowship, a new activity is about to be launched in 2018 – the ESP Junior Academy, which should attract the research orientated young pathologists over our Society. More on this to follow soon. Another piece of good news is that the Educational Portal has been finally launched and we encourage you to visit it, and use it for teaching and learning, and would be very happy to hear any suggestion on how to improve it. Finally, there is an update on coming changes in the ESP Council and offices.

Prof. Folkert van Kemenade, the Chair of the ECP LOC, is assuring us that they are ready to welcome

all participants, and is giving some practical suggestions about the ECP host city, how to get around, what to do and how to explore a beautiful city of Amsterdam.

Prof. Daniela Massi, as a new Editor-in-Chief of our journal *Virchows Archiv*, has done a very interesting analysis of the articles published in the journal and is suggesting ways and asking for your views how to improve the journal even further. And, as always, the easiest way to do it is to submit your best papers there!

Dr. Ying Chen, President of the Norwegian Society of Pathology, is giving a short history of the Society which was founded nearly 100 years ago, and its current role in training, education, and quality improvement of pathology and the health system in general.

Dr. Maria Rosaria Raspolini and Dr. Antonio Lopez-Beltran are reporting on a very successful Course on 'Genito-Urinary Tract Tumors: An Update in the Era of Personalized Therapy' organised by the Gynaecological and Uropathological Working Group in Florence in May.

It is nice to read that another successful ESCoP Course was held in Belgrade (Serbia), on "The Pathology of the Pancreas and the Bile Duct System", and Prof. Vasiljevic is hoping to continue with it with the further support from the ESP.

Another educational activity was the 2nd meeting of the Pannonian Working Group of Gastrointestinal Pathology, organised in Ljubljana (Slovenia) and Dr. Cord Langner and Prof. Nina Zidar confirm that it was well attended (over 100 participants) and created a nice atmosphere of friendship.

Selection of the most interesting papers published recently is presented in *Analecta Medica* by Dr. Loukas Kaklamanis. Prof. Metka Volavšek presents recently published pathology books and provides a list of pathology meetings around of world.

We hope you'll find some time to read the Newsletter and we welcome any suggestions, criticisms and comments which may help us improving it. See you in Amsterdam in September.

CONTACTING AMSTERDAM 2017

Message from Prof. Folkert van Kemenade, ECP LOC President



It's approaching fast now... a short period wherein you can recharge yourself with science, professionalism, colleagues and Amsterdam. The door is still closed but will open soon. Your society has chosen for you the RAI congress venue in

Amsterdam. This venue is huge and the pathology congress will only be part of the entire complex (make sure you attend the right congress!). While you are recharging yourself in the congress from work, please feel free to enjoy that you are dismissed, for a couple of days admittedly, from daily routine, toil and trouble. Moreover, it's in the embracing context of Amsterdam, alluring you to escape.

The organizing committee is donning the last touches to a very broad programmatic canvas that can provide everybody with vistas of their choice. No less than nine parallel sessions will be there, illustrated by the famous 'colour coded programme' or a Sudoku-like oil paint palette, that will demand your own decisive touch to compose a personal route through the congress in time and place. Hopefully, you choose from one or more keynote lectures, from focused lectures, workgroups sessions, poster sessions, E-posters (my favourite) and of course, some sponsors stands. See the latest high-end scanners, support tools to speed up the diagnostic pathology, deep learning algorithms to assist you in mitosis counts and, of course, the newest of the newest on immunohisto- and cytochemistry.

Now, back to the alluring embrace. It's very important that you move from the venue from time to time to see Amsterdam or its surroundings (any other destination is never far away in this small country with its dense public transportation system).



Entry gate to the East Indies House in the centre of Amsterdam, Oude Hoogstraat 24.

There is one disappointment I have to share with you: the new metro line in Amsterdam won't be running yet! So, you have to do with the existing underground, tram, bus or bike. You'll manage.



Airport Schiphol can be very crowded these days. Don't be disheartened but luggage can take 20

minutes to arrive. And once you have made it through customs, the next barrier will be reaching town or the venue. By taxi (expensive in this part of Europe) this is almost 20 km and quite pricy: count on at least 40 Euro's. Don't be allured by hustlers in Schiphol that suggest taking you to their own 'special taxi'. Ignore this at all cost! Better: take public transport. You can reach the congress venue by public transport just as easy: take a train from Schiphol NS station (see picture with ticket vending machines) to "Amsterdam RAI" (it's an omnibus: get off at the second stop; don't take the express: it will shuttle you past the proper station). If your hotel, however, is in the city, you can also take the train to "Amsterdam central station". But remember: the venue is south of the centre and is directly connected to Schiphol via another line.

And when you stuff your backpack, suite case or duffel, you might think of money (Euro), food



(French fries with mayonnaise) and plugs for your phone or computer. Plugs like in the picture are all right. Check before you leave if you have to

authorize credit- or debit cards at for use in the Netherlands. Rest assured: clean socks, toothpaste etc. are easily obtainable. We hope to welcome you September 2nd - 6th on the 29th European Congress of Pathology. Contact to pathology for patient care.

REPORT FROM VIRCHOWS ARCHIV

By Prof. Daniela Massi



Dear ESP members, dear friends,

With the support of the most prominent pathologists in Europe and worldwide, *Virchows Archiv* is contributing to the progress of science publishing original scientific research of interest to a broad interdisciplinary readership. Our mission is also to maximize the

impact of published research and to make scientific results rapidly and widely available worldwide.

The new 2016 Impact Factor is 2.848 (up from 2.627 for 2015 IF) and the journal ranks 20/79 in Pathology, up from 25/79. The top 15 most-downloaded articles published in *Virchows Archiv* between January - end of April 2017 are listed below. Their topics reflect our focus and distinct identifiable target on contemporary and cutting-edge precision oncology. It is interesting to note that 8/15 articles were published under Springer's Open Choice option and that 8 of 15 contributions were in the Category of Review articles.

Table 1. The top 15 most-downloaded articles published in *Virchows Archiv* between January – end of April 2017

1. Ovarian borderline tumors in the 2014 WHO classification: evolving concepts and diagnostic criteria
2. Testing for ROS1 in non-small cell lung cancer: a review with recommendations
3. Assessment of the PD-L1 status by immunohistochemistry: challenges and perspectives for therapeutic strategies in lung cancer patients
4. Molecular pathological classification of colorectal cancer
5. Abstracts of the XXXI International Congress of the IAP and 28th Congress of the ESP
6. Integration of next-generation sequencing in clinical diagnostic molecular pathology laboratories for analysis of solid tumours; an expert opinion on behalf of IQN Path ASBL
7. NF-κB in development and progression of human cancer
8. Autopsy after transcatheter aortic valve implantation
9. Pulmonary mucinous adenocarcinomas: architectural patterns in correlation with genetic changes, prognosis and survival

10. The enteric nervous system and the musculature of the colon are altered in patients with spina bifida and spinal cord injury
 11. Breast carcinoma subtypes show different patterns of metastatic behavior
 12. TNM staging of foregut (neuro)endocrine tumors: a consensus proposal including a grading system
 13. Quality assurance in pathology in colorectal cancer screening and diagnosis—European recommendations
 14. Medication-associated gastrointestinal tract injury
 15. Microsatellite instability in pulmonary adenocarcinomas: a comprehensive study of 480 cases
- 2) If the research was fully- or part-funded by a research funder which mandates Open Access publication, the author can specify this and the paper will be made open access (via PubMed Central) one year after the article's print publication (it will remain behind a subscription wall during that first year)
 - 3) *Via* the Springer Compact agreement, corresponding authors from participating institutions can publish their article Open Access at no cost in *Virchows Archiv*. The only stipulations are that the article must be an Original Article, Review Article or Brief Communication, and that it must be the corresponding author who is based at a participating institution and not simply a member of the author list.

Publishing **Open Access** has been shown to increase dissemination and usage levels (Fig. 1).

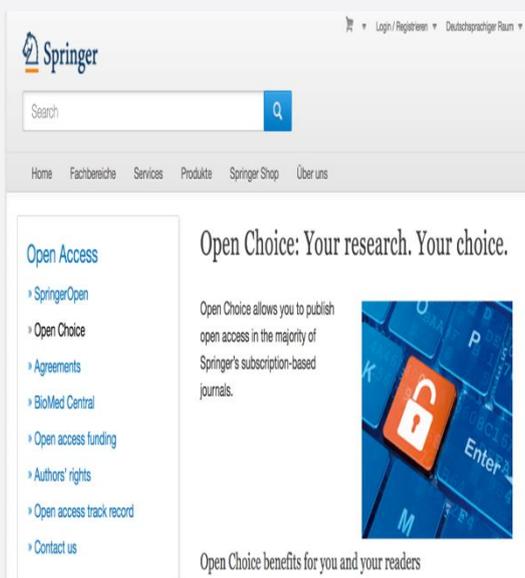


Figure 1. Open Choice at Springer

Overall, 139 articles were published via Open Choice in the *Virchows Archiv* up to May 23rd 2017. In brief, there are 3 ways in which an author can publish their article Open Access within *Virchows Archiv*:

- 1) With an Open Choice fee of €2,200 / US\$3,000

The current country agreements are for: UK (91 Institutions across England, Scotland, Wales and Northern Ireland), the Netherlands (VSNU & KNAW groups, encompassing 38 institutions), Austria (37 Institutions), Sweden (40 Institutions) and the Max Planck Institutions (83 Institutions across Germany, Italy and The Netherlands) (Fig. 2).

I would like to underline that recent developments implemented by Springer on their web platforms help to increase *Virchows Archiv's* worldwide distribution, access and visibility. **ShareIt** provides authors with shareable links to view-only versions of their papers, links that can be posted anywhere, including social networks, institutional repositories, the author's own website and scholarly collaborative networks (Fig. 3).

It is interesting that 8/15 most-downloaded articles are **Review** articles. Our editorial team is working hard to solicit invited Reviews and I encourage you to submit your proposals. Authors with the intention to write a Review article might contact us and submit an outline of the intended review article, since, as a rule, review articles are by invitation.

Open Access

Open Access at Springer

- **Open Choice** – Springer’s Open Access option available across all hybrid journals. Fee of €2,200 / \$3,000, CC-BY 4.0 licensed
- **Springer Compact (Institutional Agreements)** –
 - Covers Original Articles, Review Papers, Brief Communications and CME Papers (does vary slightly per country agreement*)
 - Corresponding Authors from qualifying institutions will have Open Choice fee covered
- **UK Agreement**
 - 91 institutions across England, Scotland, Wales and N. Ireland
- **Max Planck Agreement**
 - 83 institutions across Germany, Italy and The Netherlands
- **Dutch Agreement**
 - VSNU & KNAW groups, encompassing 38 institutions
- **Austrian Agreement**
 - 37 institutions
- **Swedish Agreement**
 - 40 institutions

*Max Planck agreement covers only Original Articles and Reviews
**data accurate as of February 24th, 2017

Figure 2. Open Access – Current Country Agreements

Recently, the number invited Reviews focusing on new WHO terminology and recent advancements on diagnosis and treatment of tumour entities from different organs is increasing. Through Reviews, *Virchows Archiv* provides state of the art coverage of timely issues in pathology

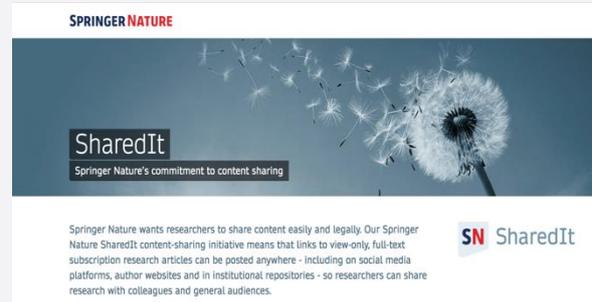


Figure 3. SharedIt at SpringerNature

The Annual review papers are by invitation only in the context of a full review issue. Our Editorial Team is working now on the following:

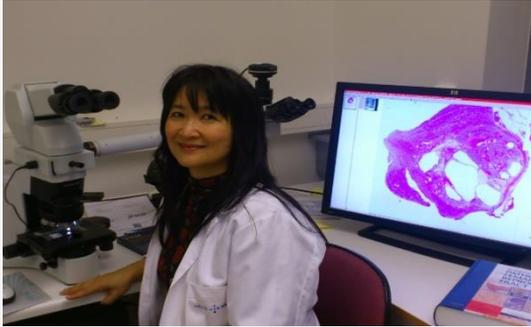
- ARI 2017: Molecular pathology in the era of Precision Medicine
- ARI 2018: Inflammation in the GI Tract
- ARI 2019: Tumor Immunology/Immunotherapy/immunogenomic

Last, I kindly remind you *Virchows Archiv* publishes **Invited Editorials**. Reviewers are now asked to express their opinion on whether they think the manuscript they are reviewing is worthy of an invited editorial – Editors should inform the Editor-in-Chief and our Editorial Team will then identify a suitable individual to write the Invited Editorial, that could also be the Reviewer himself/herself. Invited Editorials will primarily be for Original Articles, but this is not a set rule; other article types may be appropriate and should be handled on a case-by-case basis. Invited Editorials should put the results of the related article in perspective and outline future directions.

As the official journal of the *European Society of Pathology*, you are kindly encouraged to submit your contributions in *Virchows Archiv*. We count on you!

NORWEGIAN SOCIETY OF PATHOLOGY

Dr. Ying Chen, President



The Norwegian Society of Pathology (Den norske patologforening, DNP) was founded in 1923, by Dr. Francis G. Harbitz (1867-1950). Dr. Harbitz, a leading figure in the Norwegian medical society, and head of the pathology department at the National Hospital (Rikshospitalet), went on as the chairman of the Society for 12 years.

The founding of the Norwegian Society of Pathology was closely related to the developments within the pathology field elsewhere in Scandinavia. After meetings in the Swedish cities of Uppsala (1917) and Lund (1919), the first Scandinavian Pathology Congress, was held in Stockholm, in 1921. Two years later, in 1923, the newly founded Norwegian Society hosted the second Scandinavian Pathology Congress, in Christiania (later renamed Oslo).



The second Scandinavian Pathology Congress, Christiania 27-28 August 1923.

Only nine Norwegian pathologists attended the Congress in 1923, some of whom were actually microbiologists.

In 1923, Norway had three pathology departments: two in the capital Christiania, and one on the west coast in Bergen. Two years later, another department was established in Trondheim. By 1970, Norway only had six pathology departments, and the workload was critically high. Thus, twelve new departments were opened between 1971 and 1981.

The Society is one of the medical associations under the Norwegian Medical Association (Den norske legeforening, DNLF) to which the membership of the Norwegian Association of Pathology, is automatically linked. Since the last ESP survey of European pathology, the number of Norwegian pathologists have increased from 102 in 1984, to 386 in 2017, including 100 residents.

The multitasking Professor Dr. Jan Vincents Johannessen, who previously served as ESP president from 1983-1985, developed the current logo of the society, in relation to the 75th jubilee.

The overall aim of the society is to promote and encourage the advancement and dissemination of knowledge of diagnostic pathology, its practice and scientific development in Norway. The society has an advocacy role and is actively involved in politics and shaping relevant health policy.



At the 75th jubilee in 1998, a new logo was created by a former president of the ESP 1983-85: Professor Dr Jan Vincents Johannessen.

The board, which has been chaired by Dr. Ying Chen since 2012, in addition to the chairman, the board consists of a deputy chairman, treasurer, secretary, two members, and a deputy member.



Current board members from left to right: Drs. Ingvild Lobmaier (treasurer), Ingrid Lott (secretary), Rolf Bruun Bie (member and chairman of the education committee), Ok Målfrid Mangrud (member and chairman of the quality assurance committee), Ying Chen (chairman), Elisabeth Wik (member and chairman of the research committee), and Tor Vikan Rise (deputy member).

Three of the board members also serve as a chairman of the course and education committee, quality assurance committee, and research committee, respectively. The society also includes 15 subspecialty working groups for the areas of: gastrointestinal, gynaecological, urological, neurological, breast, melanoma, dermatological (other than melanoma), lymphoid and haematological, lung and ear-nose-and throat, renal (non-neoplastic), bone and soft tissue, perinatal and placental pathology, as well as molecular pathology, cytology, and autopsy. The aim of these groups is to maintain and improve quality through up to date recommendations and guidelines. The working groups also have an educational role and regularly organise courses in their respective areas.

GYNAECOLOGICAL WORKING GROUP AND UROPATHOLOGICAL WORKING GROUP

Dr. Maria Rosaria Raspollini Dr. Antonio Lopez-Beltran



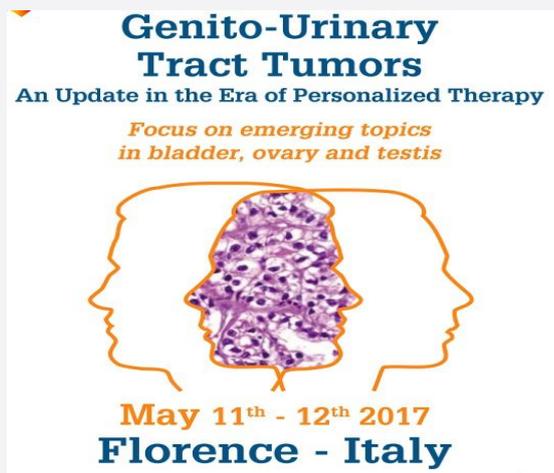
Dear colleagues and dear friends,

In Florence, on 11-12 May, expert pathologists met to present the latest news and to discuss the emerging topics in bladder, ovary, and testis tumors. The course entitled “Genito-Urinary Tract Tumors: An Update in the Era of Personalized Therapy. Focus on emerging topics in bladder, ovary, and testis” was organized under the auspices of the European Society of Pathology and the Italian Society of Pathology. The course was following a series of joint uropathology and gynaecopathology sessions in the framework of the last European Congresses of Pathology and the previous first joint gynaecological and uropathology course held in Florence on December 2014.

Professors Rodolfo Montironi, George Netto, Glenn McCluggage, Xavier Matias-Guiu, Sigurd Lax, Maurizio Colechia joined Antonio Lopez-Beltran and Maria Rosaria Raspollini (the organisers) to update the knowledge in bladder, testis and ovarian pathology.

The 2016 WHO news in bladder and testis pathology, the pitfalls in diagnosis of early invasive disease, the unusual variants in bladder tumors, the molecular genomic advances and the immunotherapy promise in urothelial malignancies, the origin of high grade serous carcinoma, the morphologic and molecular features of the most common type of ovarian carcinoma, the update in

challenging topics such as the ovarian metastases, the ovarian sex cord-stromal tumors and the germ cell tumor of the ovary, and the common and the rare testicular tumors were presented and discussed in a pleasant atmosphere. More than one hundred attendees coming from all European countries and from extra-European countries took part to the meeting and participate to the lively discussion following the lectures and the case presentations by the Faculty.



Before the scientific activities, Prof. Marco Santucci, Treasurer of the ESP, kindly gave the welcome address of our Society and Prof. Donatella Lippi opened the Course with a lecture entitled "The sage princess, Anna Maria Luisa de Medici and the Medici legacy" recalling the role of the Medici family in the medical advances at that time.

The course was held in the beautiful setting of the Istituto degli Innocenti. The Istituto, formerly the first European orphanage and children's hospital, is a world heritage building designed by the famous architect Brunelleschi in the XV century in the centre of the city in a marvelous square near piazza del Duomo.

The beauty of the place and the warm spring of Florence created a pleasant scenario around the high level of the scientific sessions.

We look forward to welcoming you for a new edition of the European Course next year dealing with different genitourinary and gynaecological tract tumours.

ESCoP BELGRADE 2017

Prof. Jovan Lole Vasiljevic



The Ninth Belgrade European School of Pathology (ESCoP) Course took place from 26-27 May 2017 in Belgrade.

The topic of the Course was "Pathology of the Pancreas and the Bile Duct System", and Prof. dr. Guenter Kloepfel and Prof. dr. Giuseppe Zamboni gave a series of excellent lectures and presented as many as 50 slide seminar cases (some cases were presented by the participants).

There were 35 participants, including 25 who paid the Course fee, and another 10 for whom the local organising committee paid. The participants highly appreciated an opportunity to be taught by the distinguished experts and very actively followed the Course.



Prof. dr. Guenter Kloepfel (on the right) and Prof. dr. Giuseppe Zamboni

They once more emphasised how valuable these Courses are to their practice since attending in-

ternational courses abroad has always been difficult due to limited financial support they get from their hospitals.

We hope to continue with these Courses in the future and hope that the ESP will keep supporting them.

PANNONIAN WORKING GROUP OF GASTROINTESTINAL PATHOLOGY

Dr. Cord Langner

Prof. Nina Zidar



The 2nd Meeting of the Pannonian Working Group of Gastrointestinal Pathology took place in Ljubljana (Slovenia), on 7-8 April 2017. The meeting was organized by the Institute of Pathology, Faculty of Medicine, University of Ljubljana, and was endorsed by the Slovenian Society of Pathology and Forensic Medicine and the Austrian Society of Pathology.

Central topic was the pathology of the anus and rectum. In a systematic approach, all aspects of disease were covered, such as anal cancer (including precursor lesions), rectal cancer (including early and advanced lesions as well as regression grading following neoadjuvant treatment) and also non-neoplastic lesions, such as inflammatory bowel disease, sexually transmitted disease of the rectum mucosa and endometriosis. Talks on Hirschsprung's disease and the pathology of the perianal skin completed the program, which included also several fascinating case presentations, preferably done by residents from the Pannonian countries.

The first day of the meeting was dedicated to an interactive seminar with the topic "Biopsy diagnosis of neoplastic and non-neoplastic lesions of the digestive system". Cases were presented by Prof. Giuseppe Zamboni (Verona, Italy) and Dr. Cord Langner (Graz, Austria).

In all, more than 100 pathologists and also many pathology residents from 11 countries participated in the meeting. The atmosphere was marvellous throughout, supported by the great weather at that time in Ljubljana.

We believe the working group meeting helped to strengthen the friendship among the Pannonian pathologists interested in gastrointestinal pathology, but also the friendship with pathologists from the neighbouring countries. This friendship will serve as basis for future meetings and scientific collaborations.

More impressions can be found at the homepage of the European Network of Gastrointestinal Pathology (ENGIP; <http://www.medunigraz.at/engip/pannonian-wg-of-gi-pathology>).

ANALECTA MEDICA

Dr. Loukas Kaklamanis



Stem cell divisions, somatic mutations, cancer etiology, and cancer prevention

C. Tomasetti, L. Li, B. Vogelstein

Science 2017; 355, Issue 6331, PP. 1330-1334 DOI: 10.1126/SCIENCE.AAF9011

Cancers are caused by mutations that may be inherited, induced by environmental factors, or result from DNA replication errors (R). We studied the relationship

between the number of normal stem cell divisions and the risk of 17 cancer types in 69 countries throughout the world.

The data revealed a strong correlation (median = 0.80) between cancer incidence and normal stem cell divisions in all countries, regardless of their environment. The major role of R mutations in cancer etiology was supported by an independent approach, based solely on cancer genome sequencing and epidemiological data, which suggested that R mutations are responsible for two-thirds of the mutations in human cancers.

All of these results are consistent with epidemiological estimates of the fraction of cancers that can be prevented by changes in the environment. Moreover, they accentuate the importance of early detection and intervention to reduce deaths from the many cancers arising from unavoidable R mutations.

Colorectal Cancer Incidence Patterns in the United States, 1974–2013

R.L. Siegel, S. A. Fedewa, *et al.*

J Natl Cancer Inst 2017; 109 (8): djw322. doi: 10.1093/jnci/djw322

Background: Colorectal cancer (CRC) incidence in the United States is declining rapidly overall but, curiously, is increasing among young adults. Age-specific and birth cohort patterns can provide etiologic clues, but have not been recently examined.

Methods: CRC incidence trends in Surveillance, Epidemiology, and End Results areas from 1974 to 2013 (n = 490 305) were analyzed by five-year age group and birth cohort using incidence rate ratios (IRRs) and age-period-cohort modeling.

Results: After decreasing in the previous decade, colon cancer incidence rates increased by 1.0% to 2.4% annually since the mid-1980s in adults age 20 to 39 years and by 0.5% to 1.3% since the mid-1990s in adults age 40 to 54 years; rectal cancer incidence rates have been increasing longer and faster (eg, 3.2% annually from 1974–2013 in

adults age 20–29 years). In adults age 55 years and older, incidence rates generally declined since the mid-1980s for colon cancer and since 1974 for rectal cancer. From 1989–1990 to 2012–2013, rectal cancer incidence rates in adults age 50 to 54 years went from half those in adults age 55 to 59 to equivalent (24.7 vs 24.5 per 100 000 persons: IRR = 1.01, 95% confidence interval [CI] = 0.92 to 1.10), and the proportion of rectal cancer diagnosed in adults younger than age 55 years doubled from 14.6% (95% CI = 14.0% to 15.2%) to 29.2% (95% CI = 28.5% to 29.9%). Age-specific relative risk by birth cohort declined from circa 1890 until 1950, but continuously increased through 1990. Consequently, compared with adults born circa 1950, those born circa 1990 have double the risk of colon cancer (IRR = 2.40, 95% CI = 1.11 to 5.19) and quadruple the risk of rectal cancer (IRR = 4.32, 95% CI = 2.19 to 8.51).

Conclusions: Age-specific CRC risk has escalated back to the level of those born circa 1890 for contemporary birth cohorts, underscoring the need for increased awareness among clinicians and the general public, as well as etiologic research to elucidate causes for the trend. Further, as nearly one-third of rectal cancer patients are younger than age 55 years, screening initiation before age 50 years should be considered.

Adiposity and cancer at major anatomical sites: umbrella review of the literature

M. Kyrgiou, I. Kalliala, G. Markozannes, *et al.*

BMJ 2017;356 doi: <https://doi.org/10.1136/bmj.j477> Cite this as: *BMJ* 2017;356:j477

Objective: To evaluate the strength and validity of the evidence for the association between adiposity and risk of developing or dying from cancer.

Design: Umbrella review of systematic reviews and meta-analyses.

Data sources PubMed, Embase, Cochrane Database of Systematic Reviews, and manual screening of retrieved references.

Eligibility criteria: Systematic reviews or meta-analyses of observational studies that evaluated the association between indices of adiposity and risk of developing or dying from cancer.

Data synthesis: Primary analysis focused on cohort studies exploring associations for continuous measures of adiposity. The evidence was graded into strong, highly suggestive, suggestive, or weak after applying criteria that included the statistical significance of the random effects summary estimate and of the largest study in a meta-analysis, the number of cancer cases, heterogeneity between studies, 95% prediction intervals, small study effects, excess significance bias, and sensitivity analysis with credibility ceilings.

Results: 204 meta-analyses investigated associations between seven indices of adiposity and developing or dying from 36 primary cancers and their subtypes. Of the 95 meta-analyses that included cohort studies and used a continuous scale to measure adiposity, only 12 (13%) associations for nine cancers were supported by strong evidence. An increase in body mass index was associated with a higher risk of developing oesophageal adenocarcinoma; colon and rectal cancer in men; biliary tract system and pancreatic cancer; endometrial cancer in premenopausal women; kidney cancer; and multiple myeloma. Weight gain and waist to hip circumference ratio were associated with higher risks of postmenopausal breast cancer in women who have never used hormone replacement therapy and endometrial cancer, respectively. The increase in the risk of developing cancer for every 5 kg/m² increase in body mass index ranged from 9% (relative risk 1.09, 95% confidence interval 1.06 to 1.13) for rectal cancer among men to 56% (1.56, 1.34 to 1.81) for biliary tract system cancer. The risk of postmenopausal breast cancer among women who have never used HRT increased by 11% for each 5 kg of weight gain in adulthood (1.11, 1.09 to 1.13), and the risk of endometrial cancer increased by 21% for each 0.1 increase in waist to

hip ratio (1.21, 1.13 to 1.29). Five additional associations were supported by strong evidence when categorical measures of adiposity were included: weight gain with colorectal cancer; body mass index with gallbladder, gastric cardia, and ovarian cancer; and multiple myeloma mortality.

Conclusions: Although the association of adiposity with cancer risk has been extensively studied, associations for only 11 cancers (oesophageal adenocarcinoma, multiple myeloma, and cancers of the gastric cardia, colon, rectum, biliary tract system, pancreas, breast, endometrium, ovary, and kidney) were supported by strong evidence. Other associations could be genuine, but substantial uncertainty remains. Obesity is becoming one of the biggest problems in public health; evidence on the strength of the associated risks may allow finer selection of those at higher risk of cancer, who could be targeted for personalised prevention strategies.

Novel molecular subgroups for clinical classification and outcome prediction in childhood medulloblastoma: a cohort study

E. C. Schwalbe, J. C. Lindsey, S. Nakjang et al.

Lancet Oncology DOI: [http://dx.doi.org/10.1016/S1470-2045\(17\)30243-7](http://dx.doi.org/10.1016/S1470-2045(17)30243-7)

Background: International consensus recognises four medulloblastoma molecular subgroups: WNT (MBWNT), SHH (MBSHH), group 3 (MBGrp3), and group 4 (MBGrp4), each defined by their characteristic genome-wide transcriptomic and DNA methylomic profiles. These subgroups have distinct clinicopathological and molecular features, and underpin current disease subclassification and initial subgroup-directed therapies that are underway in clinical trials. However, substantial biological heterogeneity and differences in survival are apparent within each subgroup, which remain to be resolved. We aimed to investigate whether additional molecular subgroups exist within childhood medulloblastoma and whether these could be used to improve disease subclassification and prognosis predictions.

Methods: In this retrospective cohort study, we assessed 428 primary medulloblastoma samples collected from UK Children's Cancer and Leukaemia Group (CCLG) treatment centres (UK), collaborating European institutions, and the UKCCSG-SIOP-PNET3 European clinical trial. An independent validation cohort (n=276) of archival tumour samples was also analysed. We analysed samples from patients with childhood medulloblastoma who were aged 0–16 years at diagnosis, and had central review of pathology and comprehensive clinical data. We did comprehensive molecular profiling, including DNA methylation microarray analysis, and did unsupervised class discovery of test and validation cohorts to identify consensus primary molecular subgroups and characterise their clinical and biological significance. We modelled survival of patients aged 3–16 years in patients (n=215) who had craniospinal irradiation and had been treated with a curative intent.

Findings: Seven robust and reproducible primary molecular subgroups of childhood medulloblastoma were identified. MBWNT remained unchanged and each remaining consensus subgroup was split in two. MBSHH was split into age-dependent subgroups corresponding to infant (<4-3 years; MBSHH-Infant; n=65) and childhood patients (≥4-3 years; MBSHH-Child; n=38). MBGrp3 and MBGrp4 were each split into high-risk (MBGrp3-HR [n=65] and MBGrp4-HR [n=85]) and low-risk (MBGrp3-LR [n=50] and MBGrp4-LR [n=73]) subgroups. These biological subgroups were validated in the independent cohort. We identified features of the seven subgroups that were predictive of outcome. Cross-validated subgroup-dependent survival models, incorporating these novel subgroups along with secondary clinico-pathological and molecular features and established disease risk-factors, outperformed existing disease risk-stratification schemes. These subgroup-dependent models stratified patients into four clinical risk groups for 5-year progression-free survival: favourable risk (54 [25%] of 215 patients; 91% survival [95% CI 82–100]); standard risk (50 [23%] patients; 81% survival

[70–94]); high-risk (82 [38%] patients; 42% survival [31–56]); and very high-risk (29 [13%] patients; 28% survival [14–56]).

Interpretation: The discovery of seven novel, clinically significant subgroups improves disease risk-stratification and could inform treatment decisions. These data provide a new foundation for future research and clinical investigations.

Cancer-Associated Mutations in Endometriosis without Cancer

M. S. Anglesio, N. Papadopoulos, A. Ayhan, et al. *N Engl J Med* 2017; 376:1835-1848 May 11, 2017 DOI: 10.1056/NEJMoa1614814

Background: Endometriosis, defined as the presence of ectopic endometrial stroma and epithelium, affects approximately 10% of reproductive-age women and can cause pelvic pain and infertility. Endometriotic lesions are considered to be benign inflammatory lesions but have cancerlike features such as local invasion and resistance to apoptosis.

Method: We analyzed deeply infiltrating endometriotic lesions from 27 patients by means of exome-wide sequencing (24 patients) or cancer-driver targeted sequencing (3 patients). Mutations were validated with the use of digital genomic methods in microdissected epithelium and stroma. Epithelial and stromal components of lesions from an additional 12 patients were analyzed by means of a droplet digital polymerase-chain-reaction (PCR) assay for recurrent activating KRAS mutations.

Results: Exome sequencing revealed somatic mutations in 19 of 24 patients (79%). Five patients harbored known cancer driver mutations in ARID1A, PIK3CA, KRAS, or PPP2R1A, which were validated by Safe-Sequencing System or immunohistochemical analysis. The likelihood of driver genes being affected at this rate in the absence of selection was estimated at P=0.001 (binomial test). Targeted sequencing and a droplet digital

PCR assay identified KRAS mutations in 2 of 3 patients and 3 of 12 patients, respectively, with mutations in the epithelium but not the stroma. One patient harbored two different KRAS mutations, c.35G→T and c.35G→C, and another carried identical KRAS c.35G→A mutations in three distinct lesions.

Conclusions: We found that lesions in deep infiltrating endometriosis, which are associated with virtually no risk of malignant transformation, harbor somatic cancer driver mutations. Ten of 39 deep infiltrating lesions (26%) carried driver mutations; all the tested somatic mutations appeared to be confined to the epithelial compartment of endometriotic lesions.

Tracking the Evolution of Non-Small-Cell Lung Cancer

M. Jamal-Hanjani, G. A. Wilson, N. McGranahan, et al.
NEJM oa1616288 April 26, 2017 DOI: 10.1056/

Among patients with non-small-cell lung cancer (NSCLC), data on intratumor heterogeneity and cancer genome evolution have been limited to small retrospective cohorts. We wanted to prospectively investigate intratumor heterogeneity in relation to clinical outcome and to determine the clonal nature of driver events and evolutionary processes in early-stage NSCLC.

Methods: In this prospective cohort study, we performed multiregion whole-exome sequencing on 100 early-stage NSCLC tumors that had been resected before systemic therapy. We sequenced and analyzed 327 tumor regions to define evolutionary histories, obtain a census of clonal and subclonal events, and assess the relationship between intratumor heterogeneity and recurrence-free survival.

Results: We observed widespread intratumor heterogeneity for both somatic copy-number alterations and mutations. Driver mutations in EGFR, MET, BRAF, and TP53 were almost always

clonal. However, heterogeneous driver alterations that occurred later in evolution were found in more than 75% of the tumors and were common in PIK3CA and NF1 and in genes that are involved in chromatin modification and DNA damage response and repair. Genome doubling and ongoing dynamic chromosomal instability were associated with intratumor heterogeneity and resulted in parallel evolution of driver somatic copy-number alterations, including amplifications in CDK4, FOXA1, and BCL11A. Elevated copy-number heterogeneity was associated with an increased risk of recurrence or death (hazard ratio, 4.9; $P=4.4 \times 10^{-4}$), which remained significant in multivariate analysis.

Conclusions: Intratumor heterogeneity mediated through chromosome instability was associated with an increased risk of recurrence or death, a finding that supports the potential value of chromosome instability as a prognostic predictor.

SOME RECENTLY PUBLISHED BOOKS

Prof. Metka Volavšek



AJCC Cancer Staging Manual

Amin MB, Edge S, Greene F, Byrd DR, Brookland RK, Washington MK, Gershenwald JE, Compton CC, Hess KR, Sullivan DC, Jessup JM, Brierley JD, Gaspar LE, Schilsky RL, Balch CM, Winchester DP, Asare EA, Madera M, Gress DM, Meyer LR, (Eds.) 8th ed, 1024 pages, 512 illus, ~ 120 €, Springer (2017)

The AJCC Cancer Staging Manual is used by physicians and health care professionals throughout

the world to facilitate the uniform description and reporting of neoplastic diseases. Proper classification and staging of cancer is essential for the physician to assign proper treatment, evaluate results of management and clinical trials, and to serve as the standard for local, regional and international reporting on cancer incidence and outcome.

Significantly expanded and developed by international disease site expert panels, the Eighth Edition AJCC Cancer Staging Manual brings together all the currently available knowledge on staging of cancer at various anatomic sites. In this edition, evidence-based TNM staging is supplemented, as appropriate, by selected molecular markers and newly acquired insights into the molecular underpinnings of cancer. This edition features 12 entirely new staging systems, a wide range of changed or new staging definitions, and a refined emphasis on a personalized-medicine approach. To enhance the print and electronic usability of the cancer staging forms, they are now available exclusively for access and downloading at www.cancerstaging.org.

Fenoglio-Preiser's Gastrointestinal Pathology

Amy E Noffsinger

4th ed, 1264 pages, More than 3,000 high-quality illustrations, ~ 340 €, Wolters Kluver (2017)

With extensively revised content and an expanded contributor list of experts, Fenoglio-Preiser's Gastrointestinal Pathology, Fourth Edition keeps you current in this fast-changing field. This highly regarded text remains your go-to reference on gastrointestinal pathology, with coverage of everything from anatomy, physiology, and histology to the full spectrum of congenital disorders, structural alterations, diseases, injuries, and other entities. This comprehensive reference is an ideal resource for pathologists, radiologists, gastroenterologists, and others interested in gastrointestinal diseases.

Eye Pathology. An Atlas and Text

Ralph C Eagle

3rd ed, 384 pages, 356 illus, ~ 160 €, Wolters Kluver (2016)

Here's a perfect introduction to basic eye pathology that can easily be read and mastered during an ophthalmic pathology rotation. It provides effective, efficient preparation for OKAP examinations or Board certification in ophthalmology, and will also serve as a concise clinical reference in practice. Richly illustrated and masterfully written, this best-selling ophthalmology resource equips you to understand eye pathology.

Differential Diagnosis in Surgical Pathology: Pulmonary Pathology

Rosane Duarte Achcar, Steve D Groshong, Carlyne D Cool

344 pages, 730 illus, ~ 165 €, Wolters Kluver (2016)

Systematically solve tough diagnostic challenges in pulmonary pathology with this new title in the Differential Diagnoses in Surgical Pathology series. This practical reference uses select images of clinical and pathological findings, together with succinct, expert instructions, to guide you through the decision-making process by distinguishing between commonly confused pulmonary lesions. By presenting material according to the way pathologists actually work, this user-friendly volume helps you quickly differentiate entities that have overlapping morphologic features in both neoplastic and non-neoplastic lung pathology.

Atlas of Differential Diagnosis in Breast Pathology

Puay H Tan, Aysegul A Sahin.

625 pages, 1112 illus, ~ 130 €, Springer (2017)

This atlas illustrates the range of breast lesions with detailed correlation of gross and microscopic features. Where relevant, radiological images are incorporated. A description of normal, developmental and physiological breast morphology will serve as introduction to the main content of this

atlas. Classification of tumors is based on the latest World Health Organization Classification of Tumors of the Breast, 4th edition, 2012. As immunohistochemistry is a key adjunctive tool in the workup of breast lesions as well as used in prognostic evaluation of breast cancers, appropriate examples are interspersed among the lesions where pertinent.

Atlas of Infectious Disease Pathology

Bryan Schmitt, (Ed.)

258 pages, 418 illus, ~130 €, Springer (2017)

Infectious diseases may be encountered in nearly every aspect of pathology. This atlas provides an informative reference for the identification of the common and esoteric pathogens, presenting in a wide array of specimen types. The focus of the presented images is on the hematoxylin and eosin-stained appearances of these infections and highlight common special stains that can be used to aid in the diagnosis of the infectious agent. Where appropriate, commentary regarding additional testing such as immunohistochemistry and molecular-based methods is supplied.

The Atlas of Infectious Disease Pathology is organized primarily by pathogen type followed by discussion of the various manifestations that may occur in individual organ systems. The reader will be provided with a comprehensive overview of the histopathology of the majority of infectious diseases encountered in general and subspecialty practice alike.

Human Parasites. Diagnosis, Treatment, Prevention

Heinz Mehlhorn

461 pages, 221 illus, ~80 €, Springer (2016)

This textbook provides an up-to-date overview of the most important parasites in humans and their potential vectors. For each parasite, the book offers a concise summary including its distribution, epidemiology, life cycle, morphology, clinical manifestations, diagnosis, prophylaxis and therapeutic measures. Numerous tables, diagrams and over 200 colorful illustrations highlight the main

aspects of parasitic infestations and present suitable control measures. 60 questions help to test readers' theoretical knowledge of the field. In short, the book is highly recommended for anyone looking to delve into the field of human parasitology. It is intended for students of biology and human medicine, medical doctors, pharmacists and laboratory staff alike. Furthermore, persons who plan to visit or live longer in endemic regions will find essential information on necessary preventive and control measurements.

Advanced Imaging Techniques in Clinical Pathology

Francesco M Sacerdoti, Antonio Giordano, Carlo Cavaliere, (Eds.)

Series: Current Clinical Pathology

165 pages, 53 illus, ~110 €, Springer (2016)

This text provides a comprehensive, state-of-the-art review of the application of image analysis focusing on the techniques which can be used in every biology and medical laboratory to automate procedures of cell analysis and to create statistics very useful for a comprehension of cell growth dynamics and the effects of drugs on them. This textbook will serve as a very useful resource for physicians and researchers dealing with, and interested in, cell analysis. It will provide a concise yet comprehensive summary of the current status of the field that will help guide patient management and stimulate investigative efforts. All chapters are written by experts in their fields and include the most up-to-date scientific and clinical information. Advanced Imaging Techniques in Clinical Pathology will be of great value to clinical pathologists, biologists, biology researchers, and those working in the clinical and biological laboratory arena.

Practical Thoracic Pathology. Diseases of the Lung, Heart, and Thymus

Marie-Christine Aubry, Joseph Maleszewski, Allen P Burke, Borislav Alexiev, Fabio Tavora

1000 pages, 1865 illus, ~ 250 €, Wolters Kluwer (2016)

Extensively revised and expanded, *Practical Thoracic Pathology: Diseases of the Lung, Heart, and Thymus* (formerly *Practical Cardiovascular Pathology*) is a superbly illustrated, one-volume reference to pathology of the thorax. More than 1,000 full-color illustrations, tables, and “practical points” boxes help you arrive at a diagnosis accurately and efficiently. Ideal for both pathology residents and practicing surgical pathologists, this in-depth resource focuses on illustrated practical diagnosis, including differential diagnosis.

Biopsy Interpretation of the Bladder

Mahul B Amin, Jonathan Epstein, Victor Reuter.
3rd ed, 400 pages, 461 illus, ~ 155 €, Wolters Kluwer (2016)

Extensively revised to bring you up to date with new pathologic entities, new treatment methods, and much more, *Biopsy Interpretation of the Bladder, Third Edition* is a highly practical guide to effective diagnostic biopsy of the urothelial tract. Presented in a reader-friendly format, it helps you accurately identify all lesions, tumors, and tumor-like lesions for the bladder – from normal anatomy and histology to a wide range of both common and unusual findings. In addition, exclusive online content includes the fully searchable text, an image bank with 1,500 additional e-figures, and an interactive quiz bank ideal for board exam preparation.

Modern Soft Tissue Pathology. Tumors and Non-Neoplastic Conditions

Editor: Markku Miettinen, (Ed.)
2nd ed, 1070 pages, 1182 illus, ~ 290 €, Cambridge (2017)

Fully updated throughout, the second edition of this bestselling book provides a comprehensive guide to the pathology of soft tissue tumors and tumor-like lesions. Reflecting the latest WHO classification throughout, this new edition incorporates advances in clinicopathologic, biologic and genetic studies. As such, detailed coverage of immunohistochemistry and molecular diagnostics is included for each entity. Soft tissue tumors

are broadly defined to include metastatic melanomas, carcinomas, and lymphoid proliferations in soft tissue, enabling the reader to distinguish between easily confused entities. Chapters are richly illustrated throughout with high-quality colour images, depicting both typical histology and variants of each entity. Each printed copy of this new edition is also packaged with a password, providing online access to the book's text and images. Written and edited by renowned international leaders in the field, this is an essential guide to all diagnostic modalities in soft tissue pathology.

Leong's Manual of Diagnostic Antibodies for Immunohistology

Runjan Chetty, Kumarasen Cooper, Allen M. Gown, (Eds.)
3rd ed, 518 pages, ~ 150 €, Cambridge (2016)

Providing a unique A-Z guide to antibodies for immunohistology, this is an indispensable source for pathologists to ensure the correct application of immunohistochemistry in daily practice. Each entry includes commercial sources, clones, descriptions of stained proteins/epitopes, the full staining spectrum of normal and tumor tissues, staining pattern and cellular localization, the range of conditions of immunoreactivity, and pitfalls of the antibody's immunoprofile, giving pathologists a truly thorough quick-reference guide to sources, preparation and applications of specific antibodies. Appendices provide useful quick-reference tables of antibody panels for differential diagnoses, as well as summaries of diagnostic applications. Expanded from previous editions with over forty new entries, this handbook for diagnostic, therapeutic, prognostic and research applications of antibodies is an essential desktop book for practicing pathologists as well as researchers, residents and trainees.

Diagnostic Pathology: Bone

G Petur Nielsen, Andrew E Rosenberg
2nd ed, 480 pages, 1500 illus, ~ 275 €, Elsevier (2018)

Diagnostic Pathology: Bone was designed for practicing pathologists who need access to up-to-date, comprehensive, and concise bone pathology knowledge in one convenient place. It includes the latest diagnostic information in this challenging subspecialty, while its unique image collection serves as an exceptional educational aid. Authored and updated by experts in the field, *Diagnostic Pathology: Bone* will be an essential guide to understanding bone tumor pathology and diagnosis.

Diagnostic Pathology: Hepatobiliary and Pancreas

Laura Webb Lamps, Sanjay Kakar
2nd ed, 488 pages, 1500 illus, ~ 230 €, Elsevier (2017)

The latest edition of *Diagnostic Pathology: Hepatobiliary and Pancreatic* has been completely updated, boasting new text, images, and terminology to keep you current with the latest knowledge in the field. Designed for both practicing pathologists and pathologists in training, it boasts a concise, organized format and numerous high-quality images to help you quickly address everyday challenges.

Immunopathology in Toxicology and Drug Development. Volume 1, Immunobiology, Investigative Techniques, and Special Studies

George Parker, (Ed.)
670 pages, 255 illus, 250 €, Springer (2017)

This book provides a fundamental understanding of immunopathology and immunopathologic processes, with particular attention to nonclinical toxicology studies. Chapters provide an overview of general immunobiology, cells of the immune system, signaling and effector molecules, and immunopathology assays. A companion volume, *Immunopathology in Toxicology and Drug Development: Volume 2, Organ Systems*, offers summaries of organ-specific immunobiology and immunopathology as well as common responses to xenobiotics.

Immunopathology in Toxicology and Drug Development. Volume 2, Organ Systems

George Parker, (Ed.)
826 pages, 255 illus, ~300 €, Springer (2017)

This book provides a fundamental understanding of immunopathology and immunopathologic processes, with particular attention to nonclinical toxicology studies. Chapters provide organ system-based summaries of spontaneous pathology and common responses to xenobiotics. A companion volume, *Immunopathology in Toxicology and Drug Development: Volume 1, Immunobiology, Investigative Techniques, and Special Studies*, offers an overview of general immunobiology, cells of the immune system, signaling and effector molecules, and immunopathology assays.

Atlas of Pediatric Brain Tumors

Adesina AM, Tihan T, Fuller CE, Poussaint TY, (Eds.)
2nd ed, 349 pages, 142 illus, 120 €, Springer (2016)

This text was created to fill a void in the practice of pediatric neuropathology. It is a practical and well-illustrated book representing a collection of interesting, common and unusual tumors for a diagnostic exercise by the reader. The wide reception of the first edition by the pathology community is testament to its relevance and utility in the pathologic diagnosis of pediatric brain tumors. This edition covers topics ranging from neuroimaging, the use of crush and touch preps during intraoperative consultation, classic histological features of pediatric brain tumors, tumor variants, and a miscellaneous group of challenging tumors. Chapters consist of essential diagnostic information and features highlighting recognized variants and their differential diagnoses. A section on molecular pathology and electron microscopy is also included for each tumor category, along with a list of classic reviews and innovative articles on each of the tumor entities as suggested reading at the end of each chapter. *Atlas of Pediatric Brain Tumors, Second Edition* represents the state of

the art in pediatric neuropathology with easy utility beside the microscope.

FORTHCOMING MEETINGS

Prof. Metka Volavšek



ICPDTLM 2017: 19th International Conference on Clinical Pathology, Diagnostic Techniques and Laboratory...

World Academy of Science, Engineering and Technology (WASET)
June 28 - 29, 2017
London, United Kingdom (UK)

ESMO 19th World Congress on Gastrointestinal Cancer

European Society for Medical Oncology
June 28 – July 1, 2017
Barcelona, Spain

4th International Annual Meeting on History of Pathology and Medicine

History of Pathology Working Group of the European Society of Pathology (ESP)
June 30 – July 1, 2017
Coimbra, Portugal

WASET: 19th International Conference on Clinical Pathology and Diagnostic Techniques

World Academy of Science, Engineering and Technology (WASET)
July 4 - 5, 2017
Singapore

International Pathology Summer School

The Egyptian Committee for Pathology Training (ECPT)

July 8 - 9, 2017
Cairo, Egypt

International Summer School of Renal Pathology 2017

Renal Pathology Society
July 13 - 15, 2017
Bari, Italy

USCAP: Diagnostic Pathology Update

The USCAP
July 16 - 21, 2017
Halifax, Canada

4th World Congress on Breast Pathology and Cancer Diagnosis

August 23 - 24, 2017
Toronto, Ontario, Canada

29th European Congress of Pathology “Pathology for patient care”

European Society of Pathology
September 2 - 6, 2017
Amsterdam, The Netherlands

63rd Annual Meeting of the Paediatric Pathology Society

Paediatric Pathology Society (PPS)
September 7 - 9, 2017
Lisboa, Portugal

Newcastle University Online Postgraduate Programme in Molecular Pathology

Newcastle University and Newcastle Hospitals NHS Foundation Trust, in partnership under the MRC/EPSRC Newcastle Molecular Pathology Node
Postgraduate online learning programme, Start September 2017 or January 2018, bursaries available
Newcastle upon Tyne, United Kingdom

Mayo Clinic Pulmonary Pathology Workshop 2017

September 8 - 9, 2017

Budapest, Hungary

GLIIFCA 2017 Annual Meeting Conference

Great Lakes International Imaging and Flow Cytometry Association (GLIIFCA)
September 22 - 24, 2017
Middleton, United States (USA)

16th Intensive Update Course In PAAF

Spanish Society of Cytology
October 2 - 4, 2017
Madrid, Spain

47th Annual Scientific Meeting of the ASC

The International Academy of Cytology (IAC)
October 13 - 16, 2017
Canberra, Australia

A Weekend with Placentas - A Practical and Small Group Approach to its Pathology

Harvard Medical School, Dept of Pathology
October 14 - 15, 2017
Boston, United States (USA)

4th Annual Course of Academy of Immunohistochemistry. Diagnostic immunohistochemistry for pathologists

Academy of Immunohistochemistry
October 18 - 20, 2017
Krakow, Poland

Contemporary Issues in Urologic Pathology-2017

American Society for Clinical Pathology
October 23 - 26, 2017
Charleston, United States (USA)

Oncologic Pathology-2017

American Society for Clinical Pathology
October 25, 2017 - May 27, 2017
Miami Beach, United States (USA)

Surgical Pathology of the Head and Neck-2017

American Society for Clinical Pathology
October 25 - 28, 2017
United States (USA)

International Academy of Pathology, Hong Kong Division, Fall Scientific Meeting

International Academy of Pathology - Hong Kong Division (HKIAP)
October 27 - 29, 2017
Shatin, China

International CME on Gynecological Pathology Recent Advances and Updates

International Society for Gynecological Pathologists (ISGP)
October 28 - 29, 2017
Chandigarh, India

10th TCS Annual Meeting & Workshop on 'Applications of Flow Cytometry in Health & Disease'

The Cytometry Society, India (TCS)
October 28 - 31, 2017
Thiruvananthapuram, India

A Practical State-of-the-Art Approach to Diagnostic Hematopathology-2017

American Society for Clinical Pathology
October 30 - November 03, 2017
Chicago, United States (USA)

39th Annual Course Current Concepts in Surgical Pathology

Harvard Medical School, Dept of Pathology
October 30 - November 3, 2017
Boston, United States (USA)

57th IAP-Thailand Annual Meeting 2017

International Academy of Pathology - Thailand Division (IAP-TD)
November 1 - 3, 2017
Khet Wattha, Thailand

10th International Course on the Pathology of the Digestive System

International Academy of Pathology - Romanian Division
November 3 - 4, 2017
Bucharest, Romania

83rd Annual Congress of the Swiss Society of Pathology

Swiss Society of Pathology
November 10 – 12, 2017
Thun, Switzerland

27th National Pathology Congress

Çukurovo Pathology Association (CPA)
November 15 - 18, 2017
Antalya, Turkey

29th Conference of International Academy of pathology (IAP) - Arab Division 1st Oman Pathology Society

International Academy of Pathology - Arab Division (IAP-AD)
November 15 - 18, 2017
Muscat, Oman

Basics in Diagnostic Basics in Breast Pathology

Vincent Academy of Pathology (VAP)
November 29 - December 1, 2017
Linz, Austria

Basics in Diagnostic Basics in Gynecologic Pathology

Vincent Academy of Pathology (VAP)
December 4 - 6, 2017
Linz, Austria



**29th European Congress
of Pathology**

Pathology for Patient Care

2 – 6 September 2017
Amsterdam RAI, The Netherlands

www.esp-congress.org

