

EuroLabNews

THE EFLM BI-MONTHLY NEWSLETTER

EFLM Connects National Societies of Clinical Chemistry and Laboratory Medicine and Creates a Platform for all European "Specialists in Laboratory Medicine"

Greetings from the new EFLM President, Prof. Michael Neumaier



Dear Colleagues,

On behalf of the Executive Board and the office of EFLM, I take the opportunity to wish you all a successful year in 2018. We have very much appreciated your input and encouragement in the projects that EFLM has pursued over the last couple of years. It is certainly remarkable, how EFLM has developed in the few years of its existence so far, and the signs are that it will

continue to advance in the future.

I particularly mention this, as EFLM - with 40 Full Member National Societies the largest Regional Federation in IFCC - represents a challenging mix of concepts and strategies towards laboratory medicine be it in health care, in education and science.

To be continued on page 2

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The EFLM Newsletter is published bi-monthly

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Foreword

by Harjit Pal Bhattoa, Editor EFLM EuroLabNews



The maiden issue of 2018 is kicked off by the greetings and vision of the newly elected EFLM President, M Neumaier. Past EFLM President Sverre Sandberg, Regional Federation Representative from EFLM since 2017 in the, IFCC Board emphasizes the importance of Regional Representation. M Neumaier expresses gratitude to R Lichtinghagen, former Chair of the Committee

for Education and Training (C-ET) for his efforts in furthering the C-ET, and AM Simundic introduces the promising incoming Chairperson of the C-ET, Daria Pašalić. In the Hot Topics column, J Hoffmann highlights new hematology analyser parameters and their clinical relevance. Attention is drawn upon a stinging reality of the scientific world by exposing a predator journal targeting our community by H Jahnke, CCLM Managing Editor. The EFLMLabX project is summarized by E Homšak, Chair of WG-CPE, (Exchange of practical knowledge and skills in Laboratory Medicine). The MedTech Europe Code of Ethical Business Practice Survey is brought to our attention by the WG-CPE; dear readership do participate to this precious survey with your inputs. MS Graziani, Chair of the Communications Committee provides an update on EFLM publications. News from National Societies of France and Croatia give us an insight into their activities; Hungarian, Italian and Swiss Societies report changing of the guard. Call for nominations for various WGs may be of interest to EFLM members eager to forward our mission. Stimulating meetings are mentioned in the Calendar of Events.





While we can perceive this heterogeneity as interesting and stimulating, it appears important to develop sustainable ideas of how we want our profession to be seen in these times of rapid technological changes, inter-connectedness, digitization and digitalization that are taking hold everywhere in medicine. Like other medical disciplines, we can readily identify that an improved networking, professional harmonization and exchange as well as an efficient recruitment of young academics will be the major recipes for successful activities in order to master these challenges. Speaking of such, I would like to draw your attention to the 2nd EFLM Strategic Conference entitled **“The End of Laboratory Medicine as we know it? Handling disruption of Laboratory Medicine in Digital Health”** to be held on 18 and 19 June 2018 in Mannheim, Germany. As Mannheim can be reached from Frankfurt airport by train within 35 min., you may consider to attend the Strategic Conference and to participate in the discussions. The program is finalized and will be available on the webpage soon.

Finally, I wish to thank on behalf of the Executive Board our fellow colleagues – currently more than 170 officers working in honorary capacities, who are enthusiastically engaged in the various task and working groups within the EFLM committees. Particular thanks go to the chairs that are doing a tremendous job, and it is encouraging to see an increasing interest of young members to participate in topics addressing various important laboratory medicine, often with the explicit support of their national societies. Also, members of the EB that have visited national meetings, regularly come back with the strong impression of an increasing interest in EFLM affairs. I therefore want to specifically encourage you to consider joining an EFLM group, where you find an issue that you might be interested in contributing to and supporting EFLM. Remember you can ask your National Society to recommend you as a corresponding member to any Working Group (but only one corresponding member from each country) Let me close with again wishing a successful year in 2018 to you and a continued favourable development of EFLM for all of us.

Michael Neumaier
EFLM President

NEWS FROM THE EFLM EXECUTIVE BOARD

A new IFCC Board with regional representations

by *Sverre Sandberg*, EFLM representative

From 2018, the IFCC will have an Executive Board completely changed from the previous arrangement.

The IFCC Executive Board now comprises the President, Past President, Secretary, Treasurer and a Corporate Members Representative, plus the IFCC Regional Federations Representatives. This means that there will be representatives from the African Federation of Clinical Chemistry (AFCC), 15 countries; the Arab Federation of Clinical Biology (AFCB), 12 countries; the Asia-Pacific Federation of Clinical Biochemistry and Laboratory Medicine (AFCB), 18 countries; the Latin-American Confederation of Clinical Biochemistry (Colabiocli), 22 countries; the North American Federation of clinical chemistry and Laboratory Medicine (NAFCC), 2 countries and the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM), 40 countries. EFLM represents most countries and is the absolutely largest of the Regional Federations. The relationship between each Regional organisation and IFCC is not completely clear, but is often regulated by a Memorandum of Understanding (MoU); EFLM has a MoU with IFCC signed in 2015.

In 2017, I was elected as the Regional Federation Representative from EFLM. Since I have worked for nearly 10 years in EFLM, the two latest as President and now as Past President, and also have a long experience from Committees and Task Forces in IFCC, I know both organisations fairly well and will contribute to the promotion and development of IFCC to be enable it to meet the challenges of laboratory medicine in a rapidly changing world. We have to avoid duplicating activities in IFCC and EFLM and the other Regional Federations, and we have to strengthen the cooperation between the Regional Federations. I hope to be able to bring with me some of the positive energy and the dynamic thinking that we have in EFLM into this new IFCC Board.

EFLM Executive Board 2018-2019

We wish to the new EFLM Executive Board the best success for the incoming years and take this opportunity to thank the outgoing Executive Board members, Prof. Mauro Panteghini for the great contribution to the growth of EFLM during his presidency and Prof. Grazyna Sypniewska, EB Member-at-Large, for the always prompt support and dedication to EFLM activities.

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The EFLM Board (2016-2017) at the annual meeting together with the C-Chairs and with the newly elected Members in Milan (IT), December, 8-9 2017 to exchange reports, ideas and plans.
Clockwise from the left: M Panteghini, G Wieringa, MS Graziani, R Lichtinghagen, G Sypniewska, W Huisman, M Neumaier; H Storm, JT Guimarães, AM Simundic, T Zima, G Lippi, S Sandberg.



HOT TOPICS IN LABORATORY MEDICINE

New hematology analyzer parameters and their clinical relevance



by Dr. Johannes J.M.L. Hoffmann, H3L Consult, Nuuenen, the Netherlands

Over the last few decades, the field of hematology analyzers saw rapid development due to technological progress. This not only is evident in increased throughput, smaller blood sample volumes and advances towards full automation, but also the number of parameters measured by these analyzers has grown tremendously. Nowadays it is not unusual for

high-end analyzers to measure 60, 70 or even more parameters. In addition, various analyzers offer the so called cell population data (CPD), which are the raw measurement data of the cells analyzed. Nevertheless, only part of the measured parameters are formally reportable, because manufacturers and regulatory bodies seem to be reluctant in investigating, verifying and approving the utility of newer and non-traditional parameters.

Irrespective of being formally reportable, the main issue with many new parameters is their clinical relevance and if there are indications for clinical utility, the scientific proof is often weak. The single area with solid proof of clinical utility is of extended red blood cell parameters, in particular mean reticulocyte hemoglobin concentration (or mass). The nomenclature is confusing, as all manufacturers use different terms: CHr® (Siemens), Ret-He (Sysmex), low hemoglobin density (Beckman Coulter) and MCHr (Abbott). Despite lack of an international standard and hence comparability of the measured values, their clinical value is pretty well established. MCHr is the parameter of choice for estimating actual iron incorporation in patients with various kidney disorders and in conditions of chronic or acute inflammation [1]. Its clinical utility is so powerful that MCHr should actually be the first parameter for investigation iron status, rather than conventional biochemical assays. The hematology laboratory professionals clearly have a job to do in educating clinicians making more use of this valuable parameter.

Regarding platelet parameters, most modern hematology analyzers do report platelet volume distribution width (PDW) and plateletcrit (PCT), although there is no good evidence that these parameters have clinical relevance for patients. The reason for including these parameters seems to be competitive considerations by manufacturers rather than their clinical utility. In contrast, there is an avalanche of publications on

perceived utility of mean platelet volume (MPV), but its clinical relevance can still not be regarded as an established fact. Most studies suffer from lack of adequate pre-analytical control. Pre-analytical effects are partially inevitable (use of EDTA as an anticoagulant), partially they are theoretically avoidable (lag time between blood draw and analysis), but few investigators have taken the effort of strictly standardizing their procedures. And from the manufacturers' side there is the influence of analytical technology: differences in methods inherently generate different MPV results, making inter-laboratory comparison impossible. MPV standardization is subject of international investigations, but a stable reference material that can be successfully analyzed with both impedance and optical technologies cannot be anticipated within a few years. As long as MPV measurements are not meticulously standardized, all MPV results obtained so far are of questionable relevance; many studies on MPV in various disease states will need to be critically reviewed and possibly repeated once reliable, standardized technology and operating procedures can be applied. The same dilemma of technology - or even analyzer-specific results - is true for investigating platelet maturity parameters [2-4].

Hematology analyzers work by registering electronic signals generated by multiple detectors that assess various cellular constituents. As a consequence of small variations in electronic hardware components each individual instrument has its own characteristic "optical fingerprint" of raw measurement data. Using flexible algorithms and individual calibration factors, analyzer software subsequently transforms these raw data into reportable results of cell counts and other cellular parameters. In this way, analyzers of the same make and type usually produce identical results for reportable parameters, despite that their raw data do vary. Several recent studies suggest that Leukocyte CPD may be useful in certain clinical conditions [5-7]. As mentioned, CPD represents raw measurement data and as such, they are dependent on the typical "optical fingerprint" of the analyzer used. Published CPD studies are based on single-center and often single-instrument designs. So far it has not been demonstrated whether findings from CPD studies can be transferred to other instruments, other analyzer brands or other laboratories. The dependency on an individual instrument may form a serious limitation for widespread use of CPD results. Therefore it is necessary to perform CPD studies that run blood samples in parallel on different instruments of the same type and on different brands of analyzers. Also inter-individual biological variation in CPD needs to be studied in more detail before CPD data can be applied in patient care [8]. Probably the most critical unmet clinical need related to laboratory hematology is the early detection of bacterial infection or sepsis. Most laboratorians agree that clinicians tend to overestimate the importance of blood smear microscopy as an indicator of infection. The poor accuracy of microscopic classification of band neutrophils and the high imprecision of band counts, even in the hands of experienced morphologists, make it evident why band counts have very limited, if any, clinical utility [9]. Can hematology analyzers help? In view of how analyzer technology currently estimates bands and/or derives left shifted granulopoiesis, substantial improvement in this field is simply unthinkable. An approach using CPD might provide better results than band counts or left shift flags [5, 7, 8]. CPD still relies on neutrophils to change their morphology and granular content upon activation by microorganisms, events that are not occurring in the very early stage of infection. Therefore and due to the technological limitations addressed above, it remains to be seen if CPD are solid enough for broad clinical application. A more viable solution will require different technology, likely using immunological principles. It has been convincingly demonstrated that increased expression of the CD64 antigen by neutrophils is superior to all other infection markers [10]

and it would mean a substantial step forward towards early infection detection if a convenient neutrophil CD64 assay can be incorporated in future hematology analyzers.

In summary, not all hematology analyzer parameters that can be measured are clinically useful and conversely, clinical needs are not satisfactorily covered by currently available parameters. Industry and professionals have to cooperate for improving the performance of hematology analyzers and developing new parameters that meet patient needs.

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Scientific publishing in the "predatory" era

by Heike Jahnke, CCLM Managing Editor

Over the past several weeks, the Editors of Clinical Chemistry and Laboratory Medicine (CCLM) and many other scientists of the community have been receiving calls for papers from a journal entitled Journal of Clinical Chemistry and Laboratory Medicine. This open access journal, recently launched by OMICS Publishing Group, deliberately uses this journal name to cause confusion with the long-standing journal Clinical Chemistry and Laboratory Medicine, published by De Gruyter. De Gruyter has been using the name: Clinical Chemistry and Laboratory Medicine for their journal since 1998. The predictable intention of these calls for papers is to mislead potential authors to get their papers for this predatory journal, and to make money by charging them a publication fee only upon acceptance of an article. Because the Editor-in-Chief and Associate Editors of CCLM consider this behavior unethical they have recently published an Editorial on this topic:

<https://www.degruyter.com/view/j/cclm.ahead-of-print/cclm-2017-1079/cclm-2017-1079.xml>

CHANGE OF GUARD AT THE EFLM

Gratitude to Ralf Lichtinghagen Ex-Chair of the Committee for Education and Training (C-ET)

by Michael Neumaier, EFLM President

Ralf Lichtinghagen has finished 2 years as chair of the Committee for Education and Training (C-ET). During his term he has concentrated on expanding on running projects as well as establishing new areas relevant for the EFLM education and training agenda. The C-ET has gained a high profile and recognition through the work of recent years that has started with Prof. Elizabeta Topić and has lately been successfully extended by Prof. Ralf Lichtinghagen.



Before joining EFLM, Ralf Lichtinghagen had been a prominent figure in the German Society for Clinical Chemistry and Laboratory Medicine (DGKL) for many years, last serving in the Executive Board of the DGKL. Having started his own education in Clinical Chemistry in 1991 as a young PhD graduated from Rhein-Ruhr University Bochum, Germany, Prof. Lichtinghagen has developed into a leading expert on matters of professional education, and so EFLM gladly appointed him chair of C-ET. During his term, Ralf

has identified and emphasized the critical importance of harmonization of the EFLM syllabus for education as one prerequisite for visibility and success of the EFLM. It is very clear that Clinical Chemistry/Laboratory Medicine has to move - within a reasonable time - towards a consented form and context of professional education as a major strategic goal. In order to collect, structure and integrate concepts and materials for continuous education, Ralf has agreed to take on the challenge of founding a specialized Task Group „Syllabus“. TG-Syllabus will prepare future revisions of the EFLM syllabus and provide education and training courses at the level of specialist in laboratory medicine.

The Executive Board of EFLM is happy that Prof. Lichtinghagen has taken over this task and wants to thank him for the valuable contribution in appreciation of the tremendous work he has accomplished as chair for C-ET within such a short period of time. For his successor, Prof. Daria Pašalić, Ralf leaves a very good foundation to start her new term and build upon this groundwork.



Introducing Prof. Daria Pašalić, Chair C-ET

by Ana-Maria Simundić, EFLM President-Elect

EFLM Executive Board has appointed prof. Daria Pašalić as the next chair of the Committee for Education and Training (1st term of office 2018-2019). Prof. Pašalić has joined EFLM in the beginning of 2016 when she was first nominated as a corresponding member and in 2017 a full-member of C-ET Working Group on Congresses and Postgraduate Education (WG-CPE).



Prof. Pašalić is a skilled, highly committed and hard-working person, who has already been deeply involved in many educational activities in the Croatian Society of Medical Biochemistry and Laboratory Medicine (CSMBLM) during the past several years. Prof. Pašalić currently holds a position of a vice-President of the CSMBLM, she is also the chair of the CSMBLM working group for Molecular Diagnostics as well as the new recently appointed Editor-in-chief of the journal *Biochemia Medica*.

She is also the National representative of the CSMBLM in EFLM and IFCC. Prof. Pašalić graduated at the Faculty of Pharmacy and Biochemistry, University of Zagreb in 1993, where she received her Master of Science degree in 2000, and PhD degree in 2004. Since 1996 she is employed at the Department of Medical Chemistry, Biochemistry and Clinical Chemistry at the Zagreb University School of Medicine. Her research fields included genetic association studies, genetic expression and regulation and molecular diagnostics of different multifactorial disorders as cardiovascular disorder, metabolic syndrome, obesity, hypolipoproteinemia's, gastrointestinal disorders as well the association of the environmental exposure to heavy metals and other pollutants.

Professor Pašalić is the author or coauthor of many scientific papers, conference proceedings and several University Handbooks, Laboratory Manuals and student scripts.

EFLM Executive Board is confident that prof. Pašalić will be a valuable and worthy successor to the former chairs and will contribute fresh energy and new ideas along the fruitful and will challenging path of her predecessors.

Vacancies in EFLM functional units

EFLM Working Group "Guidelines" – deadline to send nominations: 20 February 2018

Clinical practice guidelines relating to laboratory diagnostic testing are increasingly produced with the aim of standardizing practice and improving patient care based on the best available evidence. EFLM has a specific Working Group on this topic, the WG on Guidelines which is responsible to maintain the repository of guidelines issued by EFLM National Societies with the double aim to initiate assembling joint European Guidelines produced by EFLM and to identify critical areas that will be used for the development of EFLM guidelines. The WG is chaired by Prof. Michel Langlois (Belgium). We are calling for nominations for 1 Full Member position.

EFLM Working Group "Congresses and Post Graduate Education" – deadline to send nominations: 20 February 2018

The Committee of Education and Training (C-ET) plays the major role in development and support of educational activities in Laboratory Medicine for all members of EFLM. Under this Committee, the WG "Congresses and Post Graduate Education" is in charge of providing and support the postgraduate education, evaluating bids for EuroMedLab Congresses and maintaining the EFLM Speakers Bureau. Moreover the WG is responsible for EFLM auspices and recently has developed a new important project "EFLMLabX" to provide a new tool for European Specialists wishing to acquire additional knowledge and skills in other laboratories (<https://efmlabx.eflm.eu>). The WG is chaired by Prof. Evgenija Homsak (Slovenia). We are calling for nominations for 1 Full Member position.

New EFLM Working Group "Laboratory Medicine Credit Points" – deadline to send nominations: 25 February 2018

Laboratories of Clinical Chemistry employ high-level specialists, which have different educational backgrounds, frequently determined by traditions in the different countries. Some of them are physicians by basic training, others, including pharmacists and scientists like chemists and biochemists. There are also specialist educational training program tailor-made for becoming specialist in laboratory medicine. Irrespective of the educational backgrounds, the specialists frequently participate in the same programs and courses for continued professional development (CPD). With the aim to establish and run an EFLM system to allocate credit points for educational events, we are pleased to inform you that a new EFLM Working Group (WG) has been created under the Education and Training Committee: the WG "Laboratory Medicine Credit Points". The WG is chaired by Dr. Patrick Twomey (Ireland). We are now calling for nominations for:

3 Full Member positions and 1 Young Scientist Member (<35 years old at the time of the nomination).

The terms of reference for each WG are available at www.eflm.eu For all the above mentioned positions, the term of office will be for 2 years ending on 31 December 2019. The position could be renewable for other two more terms if the work for the Group is deemed essential at that time. The work is mainly conducted by e-mail and teleconferencing, the WG usually meets once per year.

Procedure for applications: each EFLM National Society Member in good standing with the membership fee can submit one nomination using the form circulated to the National Society's representatives to be sent back to silvia.cattaneo@eflm.eu. A brief plan of the applicant's contribution to the aims and objectives of the relevant Working Group has to be included in the form. Together with the application, a short CV should also be submitted underlining the qualifications and prior experience and publications in the relevant area. Candidates have to be officially recommended by their National Society through a formal letter of support. Applicants who are not selected as full members may be eligible for corresponding membership.

Survey of the EFLM Working Group on Congresses and Postgraduate Education: MedTech Europe Code of Ethical Business Practice Survey

by Evgenija Homsak, Chair EFLM WG on Congresses and Postgraduate Education

Dear Colleagues,

We would like to invite you as a Member of an EFLM National Society to participate in an EFLM WG-CPE survey related to the MedTech Europe Code of Ethical Business Practice, which prescribes high standards for participation of IVD industry in Third Party Organized Educational Events in terms of charitable donations, educational grants, scholarships and fellowships.

The survey aims to investigate the previous and current practice in terms of cooperation between professionals or professional societies and IVD industry, as well as the future plans under incorporation of the MedTech Europe Code.

The invited Health Care Laboratory Professionals and/or Academic Professionals are kindly asked to provide some basic information about their experience and opinion about future practice in IVD industry financial support of Third Party Organized Events.

We kindly ask you to fill in the questionnaire by the 18th February 2018. It will take no more than 5 minutes.

To answer the questionnaire, please click here <https://survey.eflm.eu/index.php/117927?lang=en>.

EFLM project "Exchange of practical knowledge and skills in Laboratory Medicine" – EFLMLabX (<https://efmlabx.eflm.eu/en>)

by Evgenija Homšak, EFLM WG-CPE, Chair

In many EFLM countries there is a need to acquire additional practical knowledge and skills in different fields of Laboratory Medicine (LM); this can happen during the period of specialisation or even, more generally, during the professional life of a Specialist in Laboratory Medicine. These skills may be obtained in other laboratories in their country or abroad. Until now there were no official and open possibilities to find a link to such additional but very important education, especially for young trainees, but also for all other European Specialists of Laboratory Medicine (EuSpLM), who want to share the knowledge of LM on different level. Under the umbrella of EFLM, as a main and central European professional organization, there is now an option which could help to address this problem: the project "**Exchange of practical knowledge and skills in Laboratory Medicine**" which the Working Group for Congresses & Postgraduate Education (WG-CPE) is developing.

The aim of this project is:

- to create a database of medical laboratories, which are ready to offer additional practical education and training for skills in practice and research science in a different field of Laboratory Medicine.
- to create links between the medical laboratories and European Specialists in Laboratory Medicine searching for training so that Specialists can:

- achieve higher level of experience on different field of laboratory diagnostics;
- share the knowledge and experience among practice in different lab-institution;
- expand contacts between experts;
- get the opportunity to be part of a team research and writing scientific papers;
- get the opportunity to find new potential co-workers.

In 2015 the EFLM WG-CPE started with a survey on the need and interest for practical training in Laboratory Medicine among EFLM countries. In the period March 16 – May 18 2015, 146 responses from different (28) EFLM countries and different laboratories were received. 128 of them answered only to the questions on the needs while 87 answers were complete. **A Majority (91%) of responders were interested in visiting other laboratories outside their country to learn/gain practical experience. A Majority (87%) of responders were willing to offer practical education/training on different topics, method skills or simply offering visits of the laboratory.** A lot of potential offers (37%) already had regular courses that can be attended by trainees from other countries. It was interesting to note that the maximum length of the training period acceptable by the majority of the institutions to offer, is nearly the same as we got from responders needs (1-2 month/s). The majority of institutions were willing to accept 1-2 trainees per year, and 56%



Among the potential 81 laboratories/institutions offering training in the survey, the WG-CPE selected 10 laboratories from different EFLM countries to participate as starting offerers/providers in this project.

We now invite further EuSpLM, trainees, specialists and especially the laboratories/institutions in Europe to apply to become a user or provider/partner of EFLM in this very important educational project. More and all important information about the project can be found on the EFLM website at <https://efmlabx.eflm.eu/en>.

Join the project and take the opportunity to be better Specialist in Laboratory Medicine!

of potential offers were willing to accept them for such training education as free of charge.

Following the good response and positive results that the WG-CPE had from the survey, the EFLM Executive Board encouraged the WG-CPE to start the creation of the first pilot version of the EFLMLabX-website with the information on the practice/education that could be gained/offered in different laboratories/institutions and the possibility to search for them. Training opportunities in the database can range from visiting, general specialist training, to gaining skills necessary for specialized measurement methods or systems (introduction of new IVD systems), research methods provided by groups in laboratories and practical courses in laboratory medicine related topics. In cooperation with Slovenian IT firm PublikMarket a dedicated website EFLMLabX program was developed and placed within the frame of the main EFLM website. The program offers the possibility to search with a dropdown menu (by country, institution, type of practice, field of diagnostics, period of time, methods, sub-methods) and apply to the above mentioned offer and to establish direct links and communications between both providers and users /applicants of practices. Each new provider/offerer will sign the Contract of partnership with EFLM and will be responsible for editing and updating all data about institution and their actual practices. At the end of each concluded practice, each applicant/participant will receive Certificate of attendance.

Who and why should apply as user:

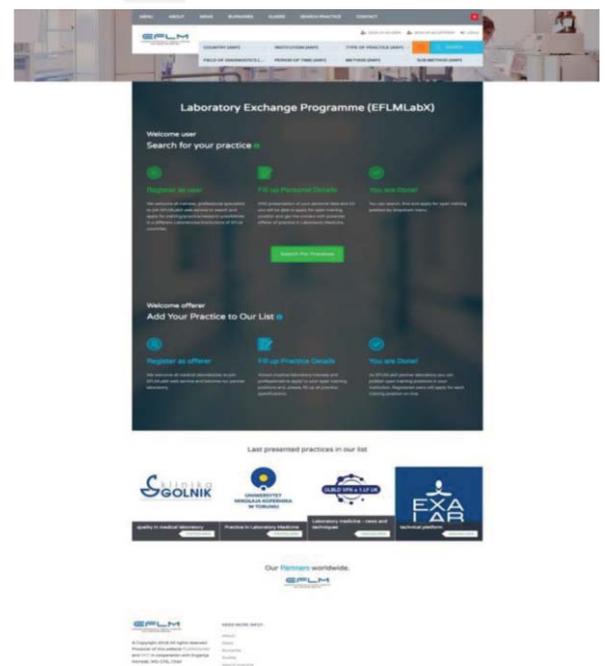
Trainee fellows, young specialists and any Specialists in Laboratory Medicine from any EFLM country to gain new skills, to be potential co-workers, to get more knowledge and experience about different methods, IVD products/systems not present in their labs, to make new experiences and establish new contacts and opportunity for research work.

Who and why should host as offerer:

National institutions and any medical laboratories in any EFLM country providing a good level of practice to share with other Specialists in Laboratory Medicine good models of achieved lab practice and expose these models to a wide audience in Europe.

To support this important exchange of knowledge and skills in LM, especially for young trainees, we would like to create the foundation for Bursaries, that will be supported by IVD partners. With bursaries would be possible to cover expences for traveling, accomodation and possible fee for education of participants. On that way we would be able to stimulate the exchange of knowledge between different professionals/laboratories/institutions and EFLM countries.

The aim of this project, is to obtain higher level of knowledge/experience of different fields of laboratory diagnostics, better networks between professionals, experts, and scientists thereby gaining an improvement of the general quality of our profession.



EFLMLabX website for searching practices in Laboratory Medicine



EUROPEAN FEDERATION OF CLINICAL CHEMISTRY
AND LABORATORY MEDICINE

2nd EFLM Strategic Conference

THE END OF LABORATORY MEDICINE AS WE KNOW IT?

Handling disruption of Laboratory Medicine in digital health

SCIENTIFIC COMMITTEE

Chair:

Michael Neumaier, Germany

Eric Kilpatrick, UK-Qatar
Wytze Oosterhuis, The Netherlands
Klaus Pantel, Germany
Sverre Sandberg, Norway
Ana-Maria Simundic, Croatia
Ian Watson, UK



With the auspices of



EFLM thanks the following companies for the kind and unconditional support



The conference will consider the impact that the on-going digitalization of technologies and a digitalized society will have on the medical laboratory in future health care. We contend that such changes enable Digital Health that will be disruptive for Laboratory Medicine as we know it, because they will change our capabilities to compile, integrate and visualize complex diagnostic data as well as providing the opportunity for radical changes to diagnostic health strategies.

With the digital revolution spreading into every realm of modern medicine, we will experience a democratisation

of health care, i.e. a comprehensive data usage not just being in the hands of health care professionals, but also in the patients'. Indeed, a central concept of digital health medicine is patient empowerment as demonstrated by key words like "electronic health record", "patient access", "health apps", "wearable health tech" etc. In this rapidly changing health care environment, Laboratory Medicine must redefine its positions, not only acting in its classical role as provider of laboratory results, but also adopting new roles and responsibilities in the clinical dialogue.

Session 1 - h. 9.00 - 12.00

DISRUPTIVE TECHNOLOGIES IN LABORATORY ANALYTICS

- 09.00 Welcome
Michael Neumaier (DE), Sverre Sandberg (NO)
- 09.15 Introductory lecture: History of disruptions in Laboratory Medicine: what have we learned from predictions?
Larry Kricka (US)
- 10.00 How to identify disruption early on? – examples from IVD industry. A joint presentation format of the IVD-Industry partners
Matthias Essenpreis (Roche), Michael Mayer (Siemens), Frank Diehl (Sysmex)
- 10.45 Coffee break
- 11.00 "Small" means "gone" – moving analytics away from the lab to a chip and beyond
Albert van den Berg (NL)
- 11.30 Analytical Examples for disruption - cell-free nucleic acids in body fluids
Klaus Pantel (DE)
- 12.00 Lunch

Session 2 - h. 13.00 - 15.45

DISRUPTION THROUGH BIOMEDICAL INFORMATICS TECHNOLOGIES

- 13.00 Introductory lecture: Paradigm changes for diagnostics: using Big Data for prediction
Josep Roca (SP)
- 13.45 Architectures of present and future information technologies
Werner Eberhardt (SAP)
- 14.15 Digital networks for laboratory data and their potential in clinical decision support (visualization)
Thomas Ganslandt (DE)
- 14.45 Diagnostics 4.0: the medical laboratory in Digital Health
Michael Neumaier (DE)
- 15.15 Coffee break

Session 3 - h. 15.45 - 18.00

INTEGRATING LABORATORY AND CLINICAL DATA – A GAME FOR THE LAB?

- 15.45 Introductory lecture: Recent advances
Jonathan Kay (UK)
- 16.30 EU Cross-border health initiative - legal and regulatory issues
Petra Wilson (Health Connect partners)
- 17.00 Example - Country presentation
Per Jorgensen (DK)
- 17.30 Is there a classical role for the lab in Digital Health?
Ferruccio Ceriotti (IT)
- 18.00 Closing remarks

Session 4 - h. 8.30-10.45

INTERPRETATION AND COMMUNICATION OF TEST RESULTS: THE STAKEHOLDER'S PERSPECTIVES

- 08.30 Introductory lecture: How you communicate complex information to the patient?
Holly Witteman (CN)
- 09.15 Adding clinical utility to the lab report – automation of interpretative comments
Wytze Oosterhuis (NL)
- 09.45 The view of a patient on understanding results
Patricia Wilkie (patient)
- 10.15 The view of a general practitioner on free access for patients to their results
Amir Hannan (doctor)
- 10.45 Coffee break

Session 5 - h. 11.15-13.30

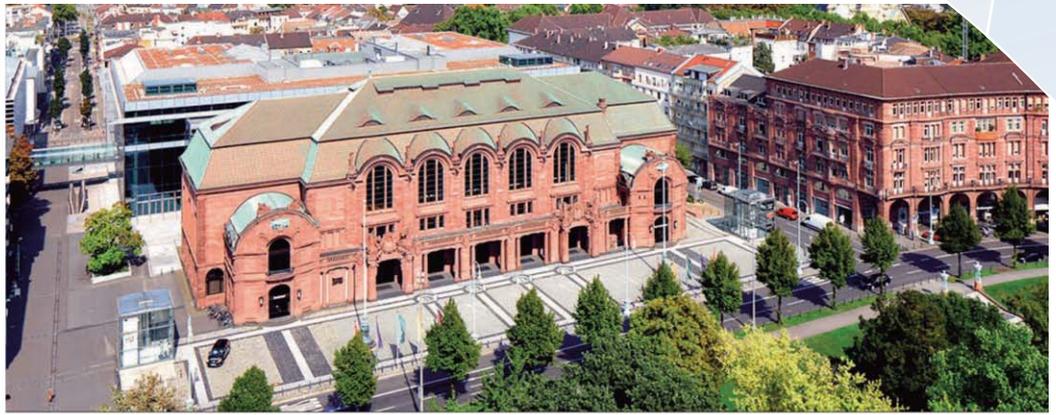
PATIENT EMPOWERMENT AND THE LABORATORY

- 11.15 Introductory lecture: What relationship should a Patient have with a Specialist in Laboratory Medicine? [communication; context; availability; responsibility];
Ian Watson (UK)
- 12.00 Reliability of Internet data and Smartphone apps for Laboratory Medicine
Snežana Jovičić (SRB)
- 12.30 Example – Benefits of patient's involvement in their investigation
Paul van der Boog (doctor); N.N. (patient)
- 13.00 Teaching the pony new tricks: competencies for Specialists in Laboratory Medicine to meet the challenges of disruptive innovation
Gilbert Wieringa (UK)
- 13.30 Lunch

Session 6 - h. 14.30-15.30

PANEL DISCUSSION: DETERMINING OUTCOMES AND THE WAY TO GET THERE

GENERAL INFORMATION



Official Language

The official language of the conference is English.

Registration fee

EUR 250,00

The registration fee includes:

- Coffee break & lunch buffet as indicated in the programme
- Certificate of participation

Cancellations:

- registrations cancelled within April 30, 2018 will result in a 50% penalty
- afterwards, registrations will result in a 100% penalty

Places are limited, registration will be accepted on a first come, first served basis.

To make your registration, please access the following link:

<https://ems.mzcongressi.com/start/1366/eng>

Venue

Congress Center Rosengarten Mannheim

Meeting room: Hall 3.7 Arnold Schönberg

Rosengartenplatz 2, Mannheim

<http://www.rosengarten-mannheim.de/en/tagungen-kongresse/>

Mannheim is an Inter City Express junction train station. There is a direct train connection from Basel, Berlin, Cologne, Düsseldorf, Frankfurt am Main, Frankfurt am Main Airport, Freiburg, Hamburg, Munich, Paris, Stuttgart, and many other cities. The Rosengarten is a five minute walk (walking towards the city centre) from the main railway station.

Accommodation

The following hotels are all located walking distance from the congress venue. To book your room please refer to the below indicated hotel reservation system.

- Dorint Congress Hotel <https://hotel-mannheim.dorint.com/de>
- Maritim Hotel www.maritim.de/de/hotels/deutschland/hotel-mannheim
- Syte www.sytehotel.de
- BoardingHouse Mannheim www.boardinghouse-ma.de
- Radisson Blue www.radissonblu.com/en/hotel-mannheim
- Hotel Kurpfalzstuben www.kurpfalzstuben.de/en/home.html
- Best Western Plus Delta Park Hotel www.delta-park.de
- Kleiner Rosengarten <http://de.kleiner-rosengarten.com>
- Leonardo Royal Hotel www.leonardo-hotels.de/leonardo-royal-hotel-mannheim
- City Partner Augusta Hotel <http://cph-hotels.com/de/hotel/mannheim/city-partner-augusta-hotel/hotelinfo.html>



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UPCOMING EVENTS

1ST IFCC, EFLM, AFCB CONFERENCE
**“LABORATORY MEDICINE:
MEETING THE NEEDS OF
MEDITERRANEAN NATIONS”**

2 - 4 JULY, 2018
UNIVERSITY OF TOR VERGATA
ROME

Click here to download the full leaflet:
http://ifccorg.hosting.insoft.dk/media/476771/flyer_nov-2017.pdf

**5TH EFLM - UEMS EUROPEAN JOINT
CONGRESS IN LABORATORY MEDICINE**
“LABORATORY MEDICINE AT THE CLINICAL INTERFACE”

ANTALYA
10-13 OCTOBER 2018
TITANIC BEACH LARA HOTEL, ANTALYA - TURKEY

5th EFLM-UEMS European Joint Congress in Laboratory Medicine will be held in Antalya, Turkey, on October 10-13, 2018 at Titanic Beach Lara Hotel by Turkish Society of Clinical Biochemistry.

Owing to the theme of “Laboratory Medicine at the Clinical Interface”, invited speakers are experts from laboratory medicine and clinical medicine as well. Building on the success of previous congresses, 5th EFLM-UEMS European Joint Congress in Laboratory Medicine will include plenary sessions, symposiums, oral and poster presentations.

The Joint Congress will provide an ideal forum to stimulate intense discussions in laboratory medicine as well as to establish collaborations which is very important for young professionals in the field.

Only through your kind participation, we may enjoy a fruitful congress feast. We are expecting your valuable contributions to the 5th EFLM-UEMS European Joint Congress in Laboratory Medicine.

**Check out the congress website
for more information:**
<http://eflm-uems-antalya2018.org/>

[Click here to read the first issue of the congress Newsletter!](#)

Key dates:
Abstracts submission deadline: May 20, 2018
**Early registration and accommodation deadline:
August 31, 2018**

Updates of the EFLM Publication list

by Maria Stella Graziani, Chair of the Communication Committee

The EFLM Working Group on Biological Variation and the Task and Finish Group for the Biological Variation Database continue their fundamental efforts to make available to the international scientific community reliable data on Biological Variation (BV).

The Biological Variation Data Critical Appraisal Checklist: A Standard for Evaluating Studies on Biological Variation

Aarsand AK, Raas T, Fernandez-Calle P, Ricos C, Díaz-Garzón J, Jonker N, Perich C, González-Lao E, Carobene A, Minchinela J, Coškun A, Simón M, Álvarez V, Bartlett WA, Fernández-Fernández P, Boned B, Braga F, Corte Z, Aslan B, Sandberg S. on behalf of the European Federation of Clinical Chemistry and Laboratory Medicine Working Group on Biological Variation and Task and Finish Group for the Biological Variation Database

Clin Chem. 2017 doi: 10.1373/clinchem.2017.281808.

Biological variation (BV) data are essential in many aspects of Laboratory Medicine and are used for setting analytical performance specifications. Since concerns have been raised about the quality of BV estimates, the EFLM functional units on the topic decided to work to address the issue. The aim of this paper is three-fold: to describe the Biological Variation Data Critical Appraisal Checklist (BIVAC), which verifies whether publications have included all essential elements that may impact the veracity of associated BV estimates; to use the BIVAC to critically appraise existing BV publications on enzymes, lipids, kidney, and diabetes-related measurands, and finally to apply metaanalysis to deliver a global within-subject BV estimate for some measurands. The conclusions of the paper are that application of BIVAC to BV publications identified deficiencies in study details and delivery, which impact the reliability of BV estimates. BV data from BIVAC-compliant studies can be combined to deliver robust global estimates for suitable clinical application. As an example, reliable BV data on alanine aminotransferase (ALT) produced through a metaanalysis of many studies is presented. Results for other measurands will be made available soon in a new BV database linked to the EFLM website.

NEWS FROM EFLM NATIONAL SOCIETIES

Sverre Sandberg at the LABAC Conference in Paris: A guarantee of quality and an EFLM matter of fame

by Dr Jean-Marc Giannoli, President LABAC and Dr Bernard Gouget, President, Cofrac-Healthcare Section Committee on accreditation, SFBC international Committee

The "Réseau de Laboratoires de Biologie Médicale Accrédités – LABAC" (Network of Accredited Medical Labs, (www.labac.eu) is one of the main national French associations in the field of medical biology and laboratory medicine bringing together medical biologists practicing privately or at the general or university hospitals, or in any other health institution (Reference laboratories, Atomic Energy Commission etc. and the IVD industry...). LABAC was established in 2000, representing around 300/884 medical labs and 1874/10442 medical biologists in France. The main goal of the association is to be a forum to foster medical laboratory accreditation. The view is to develop a national network of mutual recognition and to contribute to the continuous improvement of the quality of services for the patient increasing confidence. The accreditation gets the LABAC community more involved by valuing their skills and making the association a genuine tool for management, motivation and promotion of the medical biologist profession. The LABAC representatives are also members of the Comité Français d'accréditation (COFRAC) Healthcare section and accreditation technical committees.

LABAC organizes national conferences twice a year to strengthen the evidence of the benefits of accreditation and to demonstrate that lab accreditation has a positive influence on the performance of many other healthcare areas. Dr Jean-Marc Giannoli, President LABAC, invites a world-renowned scientist to give a key note lecture at each conference. In the fall of 2017, Pr Sverre Sandberg, EFLM President (2016-2017) was the invited international speaker. During his lecture on "Biological variations, reference values and performance specifications", emphasis was made on skill building, with an overarching theme of evaluation of the effect of analytical performance on clinical decisions. He described different models, and reminded attendees that analytical performance specifications should therefore always be accompanied by a statement of the rationale, the source and the quality of the evidence behind the recommendation. He noted also the work of the EFLM-WG on Biological Variation, citing,

with a touch of humor, George Box: "All models are wrong, but some are useful" as well as "the best models are not necessarily the most useful models". Pr Sverre Sandberg translated his ideas into innovative, practical strategies for the specialist in lab medicine. He demonstrated the EFLM leadership in this field and contextualized the importance of education and scientific knowledge for the interpretation of the biological results. To close the morning session, Dr Mikael Paris presented a national survey on biological variation and the impact on clinical practice. The highly connected generation audience was under Sverre's charm and lunch was an opportunity to learn more about EFLM. The afternoon was dedicated to the role and harmonization of the practices of the technical and quality assessors presented by Pr Henri Portugal and Mathieu Leger followed by a presentation on reagent vigilance procedure. Hélène Mehay, Director Health Healthcare section-Cofrac underlined the professionalism of medical biologists to succeed with accreditation and thanked COFRAC's commitment teams for their ability to adapt and innovate for the success of the medical labs reform.



From left to right: Mathieu Léger, Jean Marc Giannoli, Labac President, Helene Mehay, Henri Portugal, Jacques De Graeve, Beatrice Veyrat, Jean Michel Vialle, Thierry Avellan, Jean Pierre Bouilloux, Bernard Gouget, Sverre Sandberg, Florian Scherrer and Mickael Paris.



NEWS FROM EFLM NATIONAL SOCIETIES

News from the Croatian Society of Medical Biochemistry and Laboratory Medicine (CSMBLM)

by Adrijana Dorotić, on behalf of LabMedDay Organizing Committee



Hrvatsko društvo za medicinsku biokemiju i laboratorijsku medicinu

International Day of Laboratory Medicine (LabMedDay) has been organised by the Croatian Society of Medical Biochemistry and Laboratory Medicine (CSMBLM) for the first time in Croatia on November 5th 2017. It was imagined as series of

promotional activities with the goal to present laboratory medicine as a profession and work of medical biochemistry laboratories to the general public.

Many CSMBLM members were actively engaged in the organization of the first Croatian LabMedDay with 48 events all over the country. Events were completely designed and conducted by laboratory personnel and medical biochemistry students with logistic and technical support of the CSMBLM LabMedDay Organizing committee. Target audience of LabMedDay events were the users of laboratory services, general public and future laboratory experts and students. There were two basic types of activities – ‘opening the doors of laboratory’ and ‘coming out from the laboratory among people’ (in kindergartens, schools, retirement homes, libraries and shopping malls). Activities were designed very creatively – there were workshops for the youngest children such as ‘My teddy bear needs to have blood drawn’, blood cell workshops for school children and laboratory tours for high school children and lectures for the general public.

48 events were organized in 17 Croatian cities from October 19th to November 8th and were visited by 1500 visitors of all age groups (Figure 1). All events were announced on Facebook page (<https://www.facebook.com/HDMBLMLabday>) and most of them were covered by the media – on local news portals, radio and TV stations. Theme of the first LabMedDay was the the preparation of patients for laboratory tests. Questions as *Is it necessary to be fasting before the blood sampling? How to collect 24-hour urine sample? Why is blood taken in the morning?* have been answered during the workshops and lectures. First LabMedDay has definitely fulfilled its task of promotion of laboratory medicine in Croatia.

Figure 1.
Some of the participants and organisers of first Croatian LabMedDay



New SIBioC Executive Board



SIBioC has a new Board since January 2018.

Prof Sergio Bernardini, Full Professor of Clinical Biochemistry, Department of Experimental Medicine-University Tor Vergata, Rome is the new President (2018-2019), while Marcello Ciaccio (Palermo) has become Past President. The Board includes: Fiamma Balboni (Firenze), Umberto Basile (Roma), Giorgio DaRin (Bassano del Grappa, Vicenza), Davide Farci Santarcangeli (Milano), Martina Montagnana (Verona), Michele Mussap (Genova), (Secretary and Treasurer), Antonello Nonnato (Torino) (vice Secretary and Treasurer), Laura Sciacovelli (Padova) (President elect), Martina Zaninotto (Padova). Welcome to the new Board.

The National Representative is Giuseppe Lippi (Verona) who will continue in this role for another two years.

Changing of the Guard in EFLM National Societies

Hungarian Society of Laboratory Medicine

Prof. Janos Kappelmayer (Dept of Laboratory Medicine, University of Debrecen) is the new President of Hungarian Society of Laboratory Medicine replacing Prof. Eva Ajzner; while Dr. Dr. Zsuzsanna Bagoly (Clinical Research Center, University of Debrecen) is the new EFLM National Representative replacing Dr. Bela Nagy. A warm welcome to Prof. Kappelmayer and Dr. Bagoly and a big thank you to the outgoing President Prof. Ajzner and the National Representative Dr. Nagy for their support during the past years.

Swiss Society of Clinical Chemistry

Prof. Nicolas Vuilleumier (Laboratory Medicine, HUG Hôpitaux Universitaires Genève) is the new SSCC President replacing Prof. Martin Hersberger who will continue to act as EFLM National Representative for SSCC. A warm welcome to Prof. Vuilleumier!

Calendar of EFLM events and events under EFLM auspices

Do not miss the opportunity to have your event listed here.

Apply for EFLM auspices! For more information visit: <https://www.eflm.eu/site/page/a/1048/> or email eflm@eflm.eu

8-9 February 2018

International Congress on Quality in Laboratory Medicine

Helsinki, Finland

<https://www.labquality.fi/en/eqas/labquality-days-congress/>

27 March 2018

M-protein diagnostics of multiple myeloma patients treated with biologics EFLM webinar

on-line <https://elearning.eflm.eu/course/info.php?id=23>

28 February - 2 March 2018

3rd Turkish in vitro Diagnostic (IVD) Symposium:

“Endocrine Disorders and Metabolic Diseases;

Biomarkers for Diagnosis and Treatment”

Izmir, Turkey

<http://www.ivd2018.org>

15-19 April 2018

11th International Symposium on Pneumococci and Pneumococcal Diseases (ISPPD-11)

Melbourne, Australia

<http://isppd.kenes.com/2018>

3 March 2018

How to perform tube validation?EFLM webinar

on-line <https://elearning.eflm.eu/course/info.php?id=12>

17 April 2018

The role of EQA in the verification of in vitro medical diagnostics EFLM webinar

on-line <https://elearning.eflm.eu/course/info.php?id=32>

13 March 2018

Reliable estimates of biological variation – the way forward EFLM webinar

on-line <https://elearning.eflm.eu/course/info.php?id=12>

20-23 April 2018

11th International & 16th National Congress on Quality Improvement in Clinical Laboratories

Tehran, Iran

<http://www.iqctehran.ir>



<p>24-25 April 2018 Theory and Practice of Laboratory Medicine Kiev, Ukraine http://acclmu.org.ua/en/</p>	<p>21-22 June 2018 7th International Symposium on Critical Care Testing and Blood Gases Antibes, France http://www.criticalcaretesting-antibes2018.eu/</p>
<p>9-12 May 2018 2nd Congress of the Romanian Association of Laboratory Medicine (RALM) Bucharest, Romania http://www.raml-conference.ro/</p>	<p>2 July 2018 1st IFCC, EFLM, AFCB Conference Laboratory Medicine: Meeting the needs of Mediterranean Nations Rome, Italy www.ifcc.org</p>
<p>10-12 May 2018 14th Baltic Congress of Laboratory Medicine (BALM) Vilnius, Lithuania https://www.balm2018.lt/</p>	<p>18 September 2018 Catheter collection EFLM webinar on-line https://elearning.eflm.eu</p>
<p>15 May 2018 The order of draw EFLM webinar on-line https://elearning.eflm.eu</p>	<p>26-29 September 2018 Labormedizin 2018 - 15th Annual Meeting of DGKL Mannheim, Germany www.dgkl2018.de</p>
<p>22-23 May 2018 51th Annual Meeting of the Israeli Society for Clinical Laboratory Sciences Barcelona (SP) http://www.ilmar.org.il/index_doc.asp</p>	<p>30 September - 3 October 2018 9th Santorini Conference "Systems Medicine and Personalised Health & Therapy - The Odyssey from Hope to Practice" Santorini, Greece www.santoriniconference.org</p>
<p>23-25 May 2018 XXI Serbian Congress of Medical Biochemistry and Laboratory Medicine with international participation Belgrade, Serbia www.dmbj.org.rs</p>	<p>3-5 October 2018 26th Meeting of Balkan Clinical Laboratory Federation and the 6th National Congress of the Macedonian Society for Medical Biochemistry and Laboratory Medicine Skopje, Macedonia http://www.bclf.info/index.htm</p>
<p>6-8 June 2018 Focus 2018 – Annual Meeting of the ACB Manchester, UK www.acb.org.uk/focus</p>	<p>4-6 October 2018 9th Russian Conference on Clinical Hemostasiology and Hemorheology St Petersburg, Russia http://coith2018.com/en/main</p>
<p>10-13 June 2018 41st European Congress of Cytology (ECC 2018) Madrid, Spain http://www.cytology2018.com/</p>	<p>10-13 October 2018 5th EFLM-UEMS Joint Congress Laboratory Medicine at the clinical interface Antalya, Turkey</p>
<p>12-15 June 2018 XXXVI Nordic Congress in Clinical Chemistry Helsinki, Finland http://www.nfkk2018.fi/</p>	<p>November 2018 Preanalytical mysteries EFLM webinar on-line https://elearning.eflm.eu</p>
<p>18-19 June 2018 7th International Symposium on Critical Care Testing and Blood Gases Antibes (FR) www.criticalcaretesting-antibes2018.eu/</p>	<p>22-23 March 2019 5th EFLM-BD European Conference on Preanalytical Phase Biannual Conference organized by the EFLM Working Group on "Preanalytical Phase" in collaboration with BD Munich, Germany http://www.preanalytical-phase.org/</p>
<p>19-23 May 2019 EuroMedLab 2019 - 23rd IFCC-EFLM European Congress of Clinical Chemistry and Laboratory Medicine Barcelona, Spain</p>	

Boost your brand and increase your company's visibility through the EFLM Newsletter!

EuroLabNews is the digital bi-monthly newsletter of EFLM targeting more than 4,500 laboratory medicine professionals and is also published on the EFLM website. The Newsletter features information on EFLM initiatives and activities of its functional units, news from EFLM National Society members and includes a calendar of the major events in the Clinical Chemistry and Laboratory Medicine field.

The EFLM IVD partners are offered the possibility to advertise on EuroLabNews as follows:

	1 issue	6 issues
1 quarter of page	500 €	2000 €
Half a page	1000 €	2000 €

Those companies interested in this opportunity can contact the EFLM Office at silvia.cattaneo@eflm.eu