

# EuroLabNews

THE EFLM BI-MONTHLY NEWSLETTER

*Happy Holiday Season***In this issue**

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## Foreword

Reported by Harjit Pal Bhattoa, Editor EFLM EuroLabNews

## Greetings and Farewell note of the EFLM President



Dear Colleagues, and Friends,  
It has been a great honour and privilege for me to serve the EFLM community as the President of the EFLM during the term 2022 and 2023. Throughout my tenure, my commitment has been focused on maintaining the EFLM's position as the leading organization representing Laboratory Medicine in Europe.

Assuming a leadership role, together with other motivated members of the EFLM Executive Board and EFLM officers, my main focus was directed towards strengthening the solid foundations of the Federation. Our work was to identify new opportunities and strategies, enabling Laboratory Medicine to exert its crucial role in patient care.

### **Prof. Dr Tomris Ozben, EuSpLM, Ph.D., Specialist in Medical Biochemistry (2022-2023)**

In recent years, EFLM activities have experienced steady growth through collaborative efforts with EFLM national societies and, in vitro diagnostic (IVD) industry partners. They joined actively to EFLM in its endeavours, working together to share comments, suggestions, and challenges and to strengthen the leadership role of EFLM in advancing laboratory medicine as well as in improving the quality of healthcare and medical laboratories in Europe.

*To be continued on page 2*

This year end issue of the EuroLabNews is commenced by the season's greetings from the President of the EFLM Tomris Ozben, and is also a recap of her tenure as President of the EFLM during the term 2022 and 2023. The EFLM office announces the EFLM Academy Award and the EFLM

Research Grant. Please note the deadlines for these must-apply opportunities. Coffee with the President column runs 3 interviews with prominent EFLM personalities. Tara Rolic, Chair of the Task Group European Laboratory, highlights the happenings of the 2nd European Laboratory Day. EFLMLabX corner presents experiences of Ksenia Fomichenko from Russia and Tamar Ramishvili from Georgia at their host institutes. Changing of the guard is being reported by the Montenegrin, Norwegian, and UK societies. Ales Kvasnicka, member of the EFLM Communication Committee, summaries past EFLM webinars and announces upcoming EFLM events and forthcoming webinars. Under news from the EFLM National Societies, happenings at the 30th meeting

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### Editorial Information

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of Balkan Clinical Laboratory Federation are presented, the Spanish Society discusses the importance of monoclonal gammopathies, celebration of their 70th anniversary are summarized by the Croatian Society and the Slovakian Society celebrated its 30th anniversary. Under its regular column, the IFCC corner presents global perspectives in Laboratory Medicine. Under its regular column, the IFCC corner presents global perspectives in Laboratory Medicine. The Calendar of Events lists all major happenings in our field. Before I conclude the final issue of this fruitful year, please allow me to applaud the Editorial Team of the EuroLabNews, namely Silvia Cattaneo, Silvia Terragni, Lelja Alic, Tara Rolic, Alex Tihonoff, Ales Kvasnicka and our Chair, Daniel Rajdl. I thank each and every one of you, it is a pleasure to be a part of this fantastic Editorial Team. Last but not least, on behalf of the Communications Committee my deepest gratitude to all our contributors, without their input and news items the EuroLabNews would not be feasible. On behalf of my dedicated committee members, I wish our readers a peaceful festive season with good health, and a joyous and prosperous New Year.

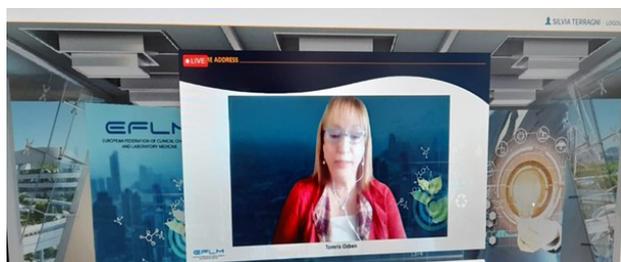
The significance of EFLM's services and contributions to the enhancement of Laboratory Medicine is widely acknowledged. This remarkable success to building, growing, and promoting laboratory medicine is attributed to the voluntary service, dedicated effort, and time generously provided by over 200 laboratory scientists from member societies working across various EFLM Functional Units. I extend my gratitude to the EFLM officers and member societies for their continuous support, loyalty, and invaluable contributions that have enabled the successful completion of numerous EFLM tasks and projects. My sincere thanks to all of them, as well as to the EFLM Executive Board members and Silvia & Terry (Silvia Cattaneo and Silvia Terragni) for their exceptional capacity, enthusiasm and efforts in efficiently managing the hard-daily work of EFLM and EFLM office.

Now, I confidently pass the torch of EFLM to my successor, Prof. Mario Plebani, 2024-2025 EFLM President. With his wisdom and leadership, I have no doubt, he will steer our federation through new challenges and towards new achievements. Listed below are some of the important EFLM activities, achievements and projects developed and established during the past two years.



**Photo 1.** EFLM bursaries ceremony at the EFLM booth during WorldLab-EuroMedLab, May 2023, Rome, Italy.

### 3rd EFLM Strategic Conference



**Photo 2.** 3<sup>rd</sup> EFLM Strategic Conference entitled "SMART and GREEN LABORATORIES. How to implement IVDR, Emerging Technologies and Sustainable Practices in Medical Laboratories", May 25-27, 2022.

The 3<sup>rd</sup> EFLM Strategic Conference entitled "**SMART and GREEN LABORATORIES. How to implement IVDR, Emerging Technologies and Sustainable Practices in Medical Laboratories**" was held from 25<sup>th</sup> to 27<sup>th</sup> May 2022.

According to the EFLM Procedure Manual, the preparation of the EFLM Strategic Conference is initiated under the coordination of the President-Elect. So, I initiated the preparations for the 3<sup>rd</sup> Scientific Conference, consulting and collaborating with the EFLM officers and EFLM national societies. The objective was to create an inspirational and exceptional program, which included the careful selection of cutting-edge and innovative topics, as well as identifying and inviting new expert speakers and scientific chairs.

The aim of the 3<sup>rd</sup> EFLM Strategic Conference was to address and discuss recent developments and challenges in our profession focusing on important aspects in Laboratory Medicine in which some strategic actions/measures should be taken. The Strategic Conference resulted in the establishment of several EFLM Task Forces (TFs) and Working Groups (WGs) dedicated to the key themes of the Strategic Conference and also developing and identifying EFLM Strategic Actions Plans for 2022 and 2023.

More than 1000 scientists, 60 Speakers and Session Chairs registered and attended the Conference. The 3<sup>rd</sup> EFLM Strategic Conference was a unique opportunity for all the stakeholders to learn, understand and question the direction of Laboratory Medicine in Europe and worldwide.

Despite the online format necessitated by the pandemic, the Conference program was designed to be interactive allowing sufficient time for discussions. More in the spirit of strategic thinking: what are the problems now, what should we strive for in the future, where should our focus be, how can we achieve this, and how can we implement revolutionary ideas to take us forward. All presentations, discussions, networking, and the exhibition were found to be rewarding and valuable by the participants.

Outstanding expert speakers, and global opinion leaders from the different fields of laboratory medicine, in vitro diagnostics (IVD) industry, digital health, medical devices, and representatives from the MedTech Europe attended the conference to present the latest innovations in laboratory medicine, in healthcare, diagnostic technologies and scientific advances in all disciplines relevant to laboratory medicine.

### **EFLM Strategic Action Plans (2022-2023)**

I firmly believe that advancing healthcare through Laboratory Medicine relies on the active engagement of the EFLM National Societies and EFLM Functional Units. Therefore, in consultation with the EFLM Executive Board, EFLM Functional Units and EFLM National Societies, I tried to develop the Strategic Action Plans following the 3<sup>rd</sup> EFLM Strategic Conference according to the suggestions, comments, and criticisms. The final version of the Strategic Action Plan 2022-2023 was approved by the EFLM Executive Board and subsequently shared with all Functional Units and National Society members.

I express my gratitude and heartfelt thanks to everybody for their dedicated involvement in formulating the EFLM Strategic Action Plans. Their collective efforts have been instrumental in steering our profession toward the objectives outlined in the [EFLM Strategic Action Plan](#) implemented in 2022-2023. The EFLM Strategic Action Plan comprise four main sections, encompassing a total of 29 items, outlined as follows:

- Structure and Organization - 6 Items
- Relation with Other Organization- 9 Items
- Profession, Education and Training, Communication - 9 Items
- Scientific Affairs - 5 Items

### **The new EFLM Functional Units (2022-2023)**

17 new EFLM Functional Units were established in 2022 and 2023. I am particularly proud of the dedicated work of their members.

1. Task Force: Green and Sustainable Laboratories (TF-GSL)  
<https://greenlabs.eflm.eu/>
2. Task Force: Preparation of Labs for Emergencies (TF-PLE)  
<https://eflm.eu/site/page/a/1819>
3. Task Force: Direct-to-Consumer Testing (TF-DTCT)  
<https://eflm.eu/site/page/a/1823>Task
4. Force: EFLM Continuing Professional Education Credit System for the accreditation of continuing education events (TF-EFLM CPECS®)  
<https://eflm.eu/site/page/a/1775>
5. Working Group: Artificial Intelligence (WG-AI)  
<https://eflm.eu/site/page/a/1766>
6. Task & Finish Group: Biomarkers of Diagnosis and Follow-up of Nitrous Oxide Abuse  
<https://eflm.eu/site/page/a/1832>
7. Working Group: Biomarkers of Mild Traumatic Brain Injury (mTBI)  
<https://eflm.eu/site/page/a/1837>
8. Task Group: Chronic Kidney Disease  
<https://eflm.eu/site/page/a/1768>
9. Working Group: Harmonisation  
<https://eflm.eu/site/page/a/1152>
10. Task Group: Integrated Diagnostics - a New Interdisciplinary Frontier  
<https://www.eflm.eu/site/page/a/1829>
11. Working Group: Postanalytical Phase  
<https://eflm.eu/site/page/a/1155>
12. Task Group: Practical Guide to Implement Measurement Uncertainty in Laboratory Medicine  
<https://eflm.eu/site/page/a/1594>
13. Working Group: Test Evaluation  
<https://eflm.eu/site/page/a/1158>
14. Task Group: European Lab Day  
<https://eflm.eu/site/page/a/1520>
15. Task Group: Young Scientists  
<https://eflm.eu/site/page/a/1725>
16. Working Group: Distance Education and e-Learning  
<https://eflm.eu/site/page/a/1133>
17. Working Group: Ethics  
<https://eflm.eu/site/page/a/1867>

### **New Corporate membership status in EFLM addressed to IVD Companies**

Individual IVD, biomedical and pharmaceutical companies, corporate entities and research establishments play a great role for our profession of Laboratory Medicine. For this reason, it is crucial to establish concrete links with companies, ensuring alignment in all decision-making processes and enhancing communication and collaboration between industry and laboratory professionals.

This rationale has prompted me to propose to the EFLM Executive Board the introduction of a new membership status specifically tailored for the Corporate Members (CMs). This proposal underwent thorough and careful discussion during the EFLM Executive Board meeting held in Rome on May 21, 2023, and it was unanimously agreed by the EFLM EB members that it presented a valuable opportunity for EFLM to establish direct communication channels with the IVD industry.

Subsequently, the proposal was brought to the attention of the EFLM General Meeting, the governing body of EFLM, which met in a meeting held on September 7<sup>th</sup>, 2023. 35 Full National Societies Members and 3 Affiliate National Societies Members (these latter ones with an observer status) were present at the extraordinary General Meeting. A unanimous and affirmative vote was cast in favour of incorporating the new Corporate Membership status into EFLM and subsequently amending the EFLM Articles of Association to accommodate the necessary changes.



**Photo 3.** MedTech Forum 2023, 30 May - 1 June 2023, Dublin, Ireland.

A call was launched to receive the applications of IVD, biomedical, and pharmaceutical companies, corporate entities, and research establishments operating in the Laboratory Medicine field. Their applications were evaluated by the EFLM Executive Board and submitted to the EFLM General Meeting (GM) for a final decision: on November 23, 2023, GM approved the CM applications of the IVD companies. Congratulations to the IVD companies on achieving EFLM Corporate membership status!

### Closer collaborations with EFLM National Societies

As the EFLM President, I was invited to attend many National Congresses of EFLM National Societies, providing me with the opportunity to strengthen collaboration between the EFLM and NSs.

In the frame of the EFLM initiative "Invite an EFLM Executive Member at your National Congress", I attended the following congresses:

1. SWEDEN - Jonkoping, 20-22 September 2022 - Annual Meeting for Clinical Chemistry
2. SLOVAK REPUBLIC - Demanovska Dolina, 9-11 October 2022 - XIV Congress of Slovak Society of Clinical Biochemistry
3. UNITED KINGDOM - London, 8-9 November 2022 - UKMedLab22.
4. FRANCE - Paris, 1-2 December 2022 - JIB 2022
5. PORTUGAL - Porto, 14-15 April 2023 - 5<sup>th</sup> Scientific Meeting of the Portuguese Society of Laboratory Medicine

I also visited several other EFLM National Societies outside the framework of this EFLM initiative. I extend my sincere gratitude to them for the gracious invitation to speak at their National Congresses and for their warm hospitality.



**Photo 4.** Selected photos from some National Society Congresses I attended.



**Photo 5.** International Lecture Award talk at UKMedLab 2022, November 8 – 10, 2022, London, United Kingdom.



**Photo 7.** Keynote speaker at the 25th IFCC WorldLab-EuroMedLab-SIBioC Congress, May 2023, Rome, Italy.



**Photo 6.** Welcome address at WorldLab-EuroMedLab, May 21st 2023, Rome, Italy.

## Agreements & Collaborations with other Federations, and Associations

**New Horizons Session - Jointly organised by the ESR and EFLM**  
**NH 10 - Integrated diagnostics: evidence-based therapy guidance in oncology**  
 July 14, 14:00 - 15:30 CEST

- The Memorandum of Understanding (MoU) between the European Society of Radiology (ESR) and European Federation of Clinical Chemistry and Laboratory Medicine (EFLM), which was initiated on March 1, 2019, and expired after 2 years, has been renewed. The Presidents of the ESR and EFLM signed the renewal on October 23, 2023. The renewed MoU is set to be valid for 3 years, extending until December 31, 2026.
- The Memorandum of Understanding (MoU) between the Balkan Clinical Laboratory Federation (BCLF) and European Federation of Clinical Chemistry and Laboratory Medicine (EFLM) was signed on November 7, 2023, by the Presidents of BCLF and EFLM. This agreement is set to remain valid for three years, concluding on December 31, 2026.
- The new guidelines for organizing the Laboratory Medicine for Mobile Societies (LM4MS) Conferences were approved by the Executive Boards of the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM) and Arab Federation of Clinical Biology (AFCB) and agreement was signed by the Presidents of the EFLM and AFCB.



**Photo 8.** Invited speaker at the session on Integrated Diagnostics at the European Congress of Radiology (ECR). July 13-17, 2022, Vienna, Austria.

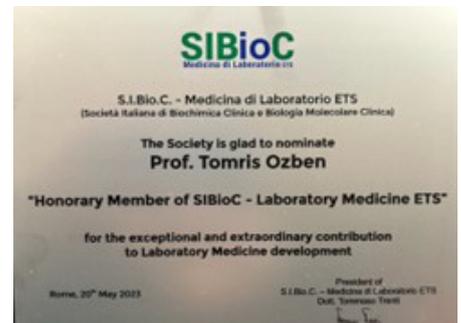
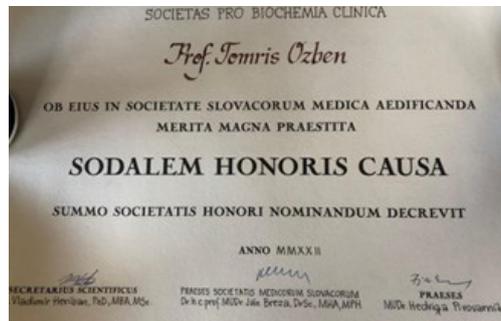


### Honorary Memberships and Awards

I also want to express my gratitude to the following three EFLM National Societies for their professional esteem towards me.

I felt extremely honoured to receive their signs of recognition:

- Honorary Membership from the Slovak Society of Clinical Biochemistry (Slovak Republic)
- Honorary Membership from the Italian Society of Clinical Biochemistry and Clinical Molecular Biology (Italy)



**Photo 9.** Honorary memberships and International Lecture Award (2022-2023).

### EFLM General Meetings

During 2022 and 2023, two EFLM General Meetings in-presence were held:

1. EFLM General Meeting 2022, during the EuroMedLab Congress at the ICM International Congress Centre in Munich on Monday, April 11, 2022, from 12:45 to 14:30 (CET).
2. EFLM General Meeting 2023, during the EuroMedLab Congress at the Rome Congress Centre 'La Nuvola' on Sunday, May 21, 2023, from 13:45 to 16:30 (CET).
3. Further on, two EFLM General Meetings were conducted online in 2023:
4. EFLM General Meeting via Zoom on September 7, 2023, from 14:00 to 15:00 (CET).
5. EFLM General Meeting via Zoom on November 23, 2023, from 14.00 to 15.00 (CET).



**Photo 10.** EFLM General Meeting during the WorldLab EuroMedLab Congress, May 21, 2023, Rome, Italy.

### Interviews with the EFLM National Society Representatives and National Society Presidents "Coffee with the EFLM President"



Interviews with the EFLM National Society Presidents and National Society Representatives were regularly published in the EFLM Newsletters in the section "Coffee with the President" providing the distinguished, successful, and knowledgeable EFLM colleagues and their societies to be recognized by the EFLM community and the readers of the EFLM newsletter to get to know them and their societies better.

At the end, once again I express my sincere thank you to all colleagues who walked beside me and contributed to the notable progress of EFLM.

I am sending my warmest wishes for the upcoming holidays to dear colleagues and friends, may your Christmas be filled with joy, and may the New Year bring you happiness, health, peace, and prosperity.

Yours sincerely,  
Tomris Ozben  
EFLM President (2022-2023)



**Photo 11.** Welcoming address at the CELME Symposium, Prague, Czech Republic, October 12-13, 2023.

# Do not miss two current EFLM open opportunities!

Reported by Silvia Terragni, EFLM Office

## The EFLM Academy Award – 2023 Edition

The **EFLM Academy award** has been created to promote excellence and honor extraordinary individuals who have made substantial contribution to the education in Laboratory Medicine in Europe. The award aims to encourage educational activities and recognize the value and importance of education for EFLM. The award is granted annually to the author of the most distinguished educational activity or a project in the past 5 years. Eligible are various high quality educational materials, like educational papers, handbooks, books or book chapters, online educational resources, educational courses and workshops. EFLM values inclusiveness and accessibility through removing barriers and sharing resources in education. Therefore, although consideration will be given both to National and European projects, the preference will be given to the most outstanding European projects aimed to a wide International audience. The award will be given on occasion of the EuroMedLab Congress 2025 in Brussels. The award winner will receive a trophy and a certificate. As a token of appreciation, the winner will also receive the free registration, travel and accommodation for the EuroMedLab Congress where the award will be presented.



Click [here](#) to know more about entry criteria and submission procedure.

Applications and supporting documents must be written in English and submitted electronically to [eflm@eflm.eu](mailto:eflm@eflm.eu) **within 15 December 2023**.

## The EFLM Research Grant – 2024 Edition



The **EFLM Scientific Research Grant** has been established to promote science and facilitate research in Laboratory Medicine in Europe. Two grants of the maximum amount of **EUR 10.000** each can be awarded, one for an applicant coming from a country enjoying "Vic Blaton" scholarship program and the other for an applicant coming from any other country in Europe.

Applicants must submit a detailed budget of the study with a list of all required reagents or consumables, necessary to perform their study. It is the responsibility of the applicant to ensure that allocated funds are sufficient to allow completion of the study. If additional funds are needed, a letter of support from a third party is provided that confirms that the rest of the budget shall be covered by that third party. The responsibility of the selected applicant is to publish the findings of the study in an international (preferably) or national peer-reviewed journal, within two years, after receiving the grant. The grant's recipient who fails to fulfil this requirement shall be automatically disqualified from all future applications for any other EFLM award, bursary or grant within the next five years. The selected applicant can apply for this grant only once. Eligible applications will be judged by a Research Grant Evaluation Committee composed of the Chair of the EFLM Committee for Science, the Chair of the EFLM Committee for Education and

Training and one EFLM Executive Board Member selected by the EFLM President. Applications will be evaluated according to selected criteria.

Click [here](#) to know more about entry criteria and submission procedure.

Applications and all supporting documents must be written in English and submitted electronically to the EFLM Office: [eflm@eflm.eu](mailto:eflm@eflm.eu) **within 15 January 2024**.

## COFFEE WITH THE EFLM PRESIDENT



Dear EFLM colleagues and friends,

In the last issue of the EFLM EuroLabNews of the year 2023, I would like to present you the interviews with distinguished EFLM National Society Presidents. Please allow me to introduce you: Jozo Ćorić, Alexander Haliassos and Dildar Konukoğlu. I am truly grateful for their significant contribution to EFLM. I sincerely appreciate the time they took to share their experiences, thoughts, and opinions about EFLM and the laboratory medicine profession. I hope you will enjoy reading these interviews with our esteemed colleagues and get to know them and their society better.

Tomris Ozben  
EFLM President



### Coffee with Prof. Jozo Ćorić, President of the Association of Medical Biochemists in Bosnia-Herzegovina.



**Could you briefly introduce your society? When was it founded, who can become a member, activities of your society, what has been done so far and future activities, projects, plans?**

Our Society Medical Biochemists of Bosnia and Herzegovina was founded in 1953. as a member of the Yugoslav Association of Medical Biochemists and, since 1996., as independent national organization. In 2004. it changed its name to Association of Medical Biochemists in Bosnia and Herzegovina (ASSMBBH). Currently the Association has over 70 members. It is possible to become a member, if you are medical biochemist or a biochemist with a natural science degree. Furthermore, biotechnicians can become affiliated member and we also have corporate members.



The Association regularly conducts external quality assessment of biochemical laboratories in Bosnia and Herzegovina which is at the moment voluntary. The EQA program is continuously updated and expanded according to the needs of the profession and in accordance with EQALM guidelines.

**What are your suggestions for better education? Is the current education in your country fit for the purpose? Do you have a core curriculum for the training of medical biochemistry professionals?**

Our suggestions mainly focus on standardization education in Bosnia and Herzegovina with European syllabus. Currently we do have a core curriculum that needs updating.

**In what direction do you see the laboratory medicine heading? What do you think for the position of the laboratory specialist to increase their visibility within the healthcare system? What challenges do you and your colleagues face?**

Laboratory medicine in Bosnia and Herzegovina will improve its analytical portfolio and diagnostic quality. We believe that our profession will be more and more entangled with new technologies and AI solutions. Since standardization and harmonisation processes are continuously advancing, laboratory medicine will need to shift to postanalytical interpretation. Expertise in AI and cooperation with industry will become a professional competency requiring new educational strategies.

**Do you think medical biochemistry professionals are ready for the emerging technologies such as Digitalization, Laboratory Diagnostic Algorithms, AI, ML, Integrative Diagnostics, Big Data? Do you believe in Partnership model for efficient**



ASSMBBH is member of the International Association for Clinical Chemistry (IFCC), the European Association for Clinical Chemistry and Laboratory Medicine (EFLM) and the Balkan Federation of Laboratory Medicine (BCLF). One of our focuses for the future is how to organize workforce in our laboratories according to European standards. We are also working on activating publication of Association Journal.

## integration and adoption of emerging technologies and innovations?

We believe that new educational programs are needed in order for biochemistry professionals to be ready. The Partnership model is unavoidable.

**Do you think your society members participate and/or contribute enough to EFLM activities? Do they know the advantages to be EFLM Academy membership, for example, the unique educational resource "Syllabus course", free attendance to the recently held 3<sup>rd</sup> EFLM Strategic Conference, its sessions were recorded and are available for one year?**

As a society in developing country, we are undergoing core organisational changes and improvements. We are aware of low participation of our members in EFLM activities. All our society members are also by default members of EFLM Academy.

**What do you think about the ongoing and recent EFLM activities/initiatives? Do you have suggestions to increase communication and cooperation with EFLM? What you like and dislike about EFLM**

We support and encourage all activities that can improve laboratory medicine profession in Bosnia and Herzegovina. Creating a support channel within EFLM for day-to-day questions and ambiguities could help development of Laboratory medicine.

Some Personal questions...

**Please introduce yourself with a few sentences.**

I am currently President of the Association of Medical Biochemists in Bosnia and Herzegovina, Past-President of the BCLF Balkan Clinical Laboratory Federation, and National EFLM Representative. For more than 35 years I worked in Department of Laboratory Medicine, University-Hospital, Sarajevo. I participate in laboratory accreditation processes as an expert and in the educational process of young professionals. I am author and co-author on more than 200 publications and lectures. I am currently a full professor at Faculty of pharmacy in Travnik.



**In your professional career, you have served in many leading roles both in your country and internationally. What was your motivation?**

Our profession is facing with many challenges but also great opportunities. I chose a career in Clinical Biochemistry because laboratory data provide information, which may be more helpful to physicians than the subjective information from a patient's history or physical examinations.

**Could you share your way in biochemistry? Why did you choose this field? What do you like about your current job? Do you think that you chose the right job for you? If you have another chance???**

I graduated from the Faculty of Science, University in Sarajevo, then had postgraduate studies in biochemical analytics. In my doctoral thesis I investigated pancreatic enzyme. I completed my specialization in Laboratory Medicine at the School of Medicine, Sarajevo. As a professor I love sharing my knowledge and experience with new generations, which can also be very insightful for me. I'm almost at the end of my career with no regrets of the chosen scientific field.

**What would be your advice to young scientists who wish to pursue their career in laboratory medicine?**

**Love the profession first. Find a part of it, where you can be the expert. Do you have some hobbies? What are the things outside of your work that you are passionate about? How do you like to spend your free time?**

If I feel physically fit, I like nature exploration. I like to read books, watch movies and football matches on TV.



**Coffee with Dr. Alexander Haliassos, President of the Greek Society of Clinical Chemistry and Clinical Biochemistry (EEKX-KB).**



**Could you briefly introduce your society? When was it founded, who can become a member, activities of your society, what has been done so far and future activities, projects, plans?**

At the end of eighties some colleagues, working mostly at the public sector and academia either as clinical chemists with

a university degree in Chemistry, or as clinical biochemists, with a university degree in Biology, along with some MDs specialized in Biopathology (then Microbiology), recognized the need of a Scientific and Professional association for Invitro Laboratory Medicine and decided to create the Greek Society of Clinical Chemistry - Clinical Biochemistry (GSCC-CB). Our Society had been founded in 1989 in Athens and became

full member of FESC, EC4 (merged in EFLM) and of IFCC. We are also founding member of the Balkan Clinical Laboratory Federation (BCLF). In 1996 our Society started organizing our biannual Congresses that became annual from 2008. GSCC-CB actually has 335 full members (200 with a degree in Chemistry, 85 with a degree in Biology, 30 MDs, and 20 other university degree scientists), 100 associate members and 45 honorary members. Moreover, we have organized 5 BCLF congresses through Greece, the second LM4MS (EFLM-AFCB meeting on Laboratory Medicine for Mobile Societies) in Heraklion, Crete and the EuroMedLab Athens 2017. We organized two cycles of 18 Core Education Seminars in Laboratory medicine and 60 Continuous Education Seminars and Workshops through major cities in Greece and Cyprus. From 2020 most of these seminars and workshops are organized in hybrid form. Under an agreement with AACC (now ADLM), since 2005 GSCC-CB edits and publishes the Greek language version of the website Lab Tests online at the URL [www.labtestsonline.gr](http://www.labtestsonline.gr)

**What are your suggestions for better education? Is the current education in your country fit for the purpose? Do you have a core curriculum for the training of medical biochemistry professionals?**

In my country, except MDs who have a five-year state organized multidisciplinary specialization training in Laboratory Medicine after their MD diploma and license, all other colleagues working in the Laboratories of Public and Private sector receive only on the job training from their colleagues directly after their graduation from universities. There is a law of 1973 that describes the education and training program of the non-medical scientists working in the field of Clinical Chemistry, but this law remains inactive as the guidelines and decrees for its application have never been issued, despite continuous GSCC-CB lobbying. Our Society recognized from the beginning the need for formal training, and via the Scientific Committee of GSCC-CB organized a program of theoretical training with 18 Core Education seminars in Laboratory medicine mentioned above, and a practical training on participating laboratories during 4-5 years on a full curriculum equivalent to the EFLM standards. The trainees receive a logbook with analytical training tasks that are certified by their instructors. At the end of their theoretical and practical training, after formal examination, they receive the title of trained Clinical Chemist of the GSCC-CB and can be part of the Greek Register of our society, maintained by the Greek National Registration Committee for Clinical Chemistry. Our National Register has actually 180 members. The equivalence of our training program with the standards of EFLM has been obtained in 2003. Consequently, the members of the Greek Register can become members of the European Register and obtain the title of the EurSpLM. Actually 120 colleagues from Greece have the title of EurSpLM. For the same reason we organize our Continuous Education Seminars to maintain the knowledge and capabilities of our colleagues according to the international standards.

**In what direction do you see the laboratory medicine heading? What do you think for the position of the laboratory specialist to increase their visibility within the healthcare system? What challenges do you and your colleagues face?**

I believe that in the future we will see the involvement of new approaches in Laboratory Medicine, as the "democratization" of mass spectrometry and NMR assays to the everyday routine, the expansion of all the different "-omics", the help of Artificial Intelligence at every aspect of our profession starting from the pre-analytical stage and arriving to the meta-analysis of our, really **big, data** and the development of Integrative Diagnostics combining IVD technologies with Medical Imaging. Our colleagues will participate in this evolution, part of the Fourth Industrial Revolution which can be described as the advent of "cyber-physical systems" involving entirely new capabilities for humans and machines. While these capabilities are reliant on the technologies and infrastructure of the Third Industrial Revolution based on the development of digital systems, communication and rapid advances in computing power, the Fourth Industrial Revolution represents entirely new ways in which technology becomes embedded within societies and even our human bodies. Examples include genome editing, new forms of machine intelligence, breakthrough materials and approaches to governance that rely on cryptographic methods such as the Blockchain. We will see the expansion of personalized diagnostics and personalized therapies, the decentralization of laboratories, the expansion of POCT and personal testing, even the continuous monitoring of critical analytes, the way that already happened for glucose monitoring.

Our colleagues should acquire new skills including information technologies, data security, cooperation with other laboratory

specialties (Imaging, Genetics...) and apply the rules of evidence based laboratory testing, respecting the principles of ethical testing, without harming as much as possible our environment (Green Labs). A consequence of all these new responsibilities, that will demand a great effort from our side, will highly increase the visibility of laboratories and of our colleagues within the healthcare system.

**Do you think medical biochemistry professionals are ready for the emerging technologies such as Digitalization, Laboratory Diagnostic Algorithms, AI, ML, Integrative Diagnostics and Big Data? Do you believe in Partnership model for efficient integration and adoption of emerging technologies and innovations?**

Emerging technologies, without any doubt, are essential components of the laboratory of near future, and the healthcare system adopted them, deciding to follow their way. Especially, Integrative diagnostics that requires the partnership and collaboration with other Laboratory Disciplines, but also with the Clinicians, are key factors in digitalized healthcare where many scientific disciplines collaborate to improve the health of patients.

**Do you think your society members participate and/or contribute enough to EFLM activities? Do they know the advantages to be EFLM Academy membership, for example, the unique educational resource "Syllabus course", free attendance to the recently held 3<sup>rd</sup> EFLM Strategic Conference, its sessions were recorded and are available for one year?**

As I already mentioned, the members of GSCC-CB participate in EFLM activities. We realized from the beginning, the contribution of the Federation to the training and the recognition of our colleagues. For this reason, we designed our training program adopting the standards of EFLM, so the equivalence of standards of our syllabus has been obtained quite easily. Thus, many members of the Greek Registry had become members of the European Registry and obtained the title of the EuSpLM. Consequently, all these colleagues are also members of the EFLM Academy, along with **many more young scientists** that are actually in the training stage. The GSCC-CB, recognizing the importance of the EFLM Academy membership, subsidizes the 66% of the fees for our members, charging them only a symbolic fee as a confirmation of their engagement.

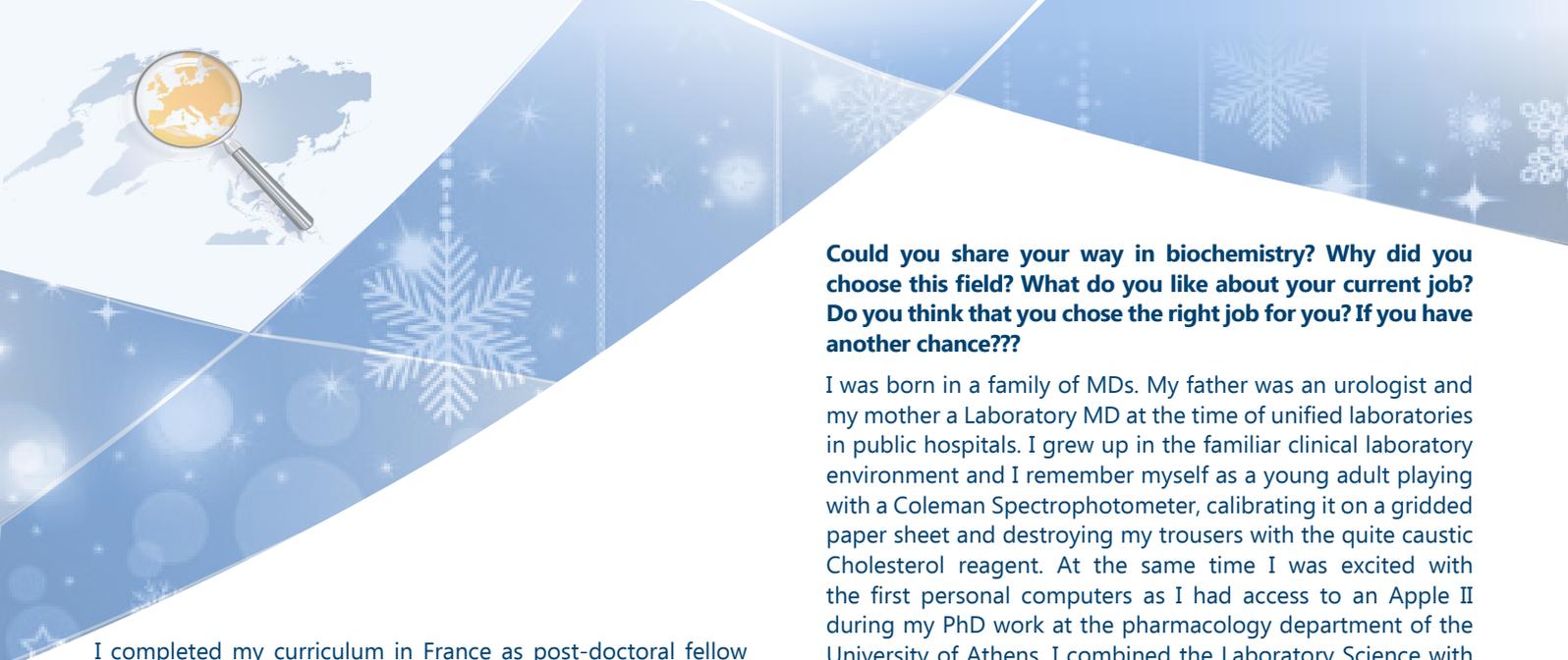
**What do you think about the ongoing and recent EFLM activities/initiatives? Do you have suggestions to increase communication and cooperation with EFLM? What you like and dislike about EFLM.**

We like, among others, the practical help and training to Laboratory issues, as at the Pre-analytical phase, The Green Labs initiative and the effort to reduce our environmental impact, the Webinars, Conferences and other educational events that are well recognized and accredited with the EFLM CPECS system and, finally, the Laboratory Exchange Program (EFLMLabX). I don't like the reluctance of many colleagues to be actively involved and participate in EFLM activities.

**Some Personal questions...**

**Please introduce yourself with a few sentences.**

I obtained my MD diploma and my thesis (PhD) at the school of Medicine, National University of Athens, Greece and I pursued my scientific education at the Faculty of Medicine, Claude Bernard University, Lyon I, France where I gained a thesis (DEA) on electronics applied in the medical field, and another one in human genetics.



I completed my curriculum in France as post-doctoral fellow (1987-1991) at the "Institute of Molecular Biology" of Paris-Descartes University. I'm a registered as EuSpLM at the European Register since 2003.

I am the elected president of the GSCC-CB since November 2017, a founding Member of the Scientific and Educational Committee of our society, of the Greek National Registration Committee for Clinical Chemistry and the IFCC National Representative of Greece since 2005. I'm acting as the Scientific Director of the Greek External Quality Assessment Scheme (ESEAP), I represent Greece at EQALM, the European Organization for EQA Providers in Laboratory Medicine, and I am an elected member of HellasLab Executive Board, the Greek section of EuroLab.

During the last decade, I had been involved in various scientific and professional International and European committees and working groups. I served as member of the IFCC-WG on Standardization of Troponin I (WG-TNI) and as member of the IFCC Analytical Quality Committee (C-AQ). In 2014, I was appointed Chair of the IFCC-Task Force on Proficiency Testing (TF-PT), a multidisciplinary effort of IFCC in the analysis and the exploration of the Proficiency Testing and External Quality Control issues. I have been elected in the Executive Board of IFCC as Treasurer for the term 2021-2023 and re-elected at the same position for the term 2024-2026.

For several years now, I intensified my engagements with the IFCC conferences and congresses acting as the Greek leader for the organization of the 10<sup>th</sup> IFCC-General Conference at Corfu in 2010 and I was the President of EuroMedLab Athens 2017.

**In your professional career, you have served in many leading roles both in your country and internationally. What was your motivation?**

When I finished my studies at the University in Greece and my post-doctoral fellowship in France, I started a research career in both countries. I was convinced then, that the development of applied research at the field of Laboratory Medicine was crucial for the advancement of medicine. Moreover, I always believed that the basis of an accurate and timely diagnosis was the information provided by our laboratories. My wish to improve processes and quality of services, to make things easier and more efficient, and to help my colleagues, is my motivation at work and in everyday life, that pushed me to serve the Medical Laboratory community in Greece and internationally.

**Could you share your way in biochemistry? Why did you choose this field? What do you like about your current job? Do you think that you chose the right job for you? If you have another chance???**

I was born in a family of MDs. My father was an urologist and my mother a Laboratory MD at the time of unified laboratories in public hospitals. I grew up in the familiar clinical laboratory environment and I remember myself as a young adult playing with a Coleman Spectrophotometer, calibrating it on a gridded paper sheet and destroying my trousers with the quite caustic Cholesterol reagent. At the same time I was excited with the first personal computers as I had access to an Apple II during my PhD work at the pharmacology department of the University of Athens. I combined the Laboratory Science with Informatics during my stay in France working at a Research Molecular Biology Laboratory at the late eighties. Then, it was quite easy and natural to choose the field of Laboratory Medicine for my specialization and my career. I think that I took a correct decision that I never regretted.

**What would be your advice to young scientists who wish to pursue their career in laboratory medicine?**

My advice for our younger colleagues is to be always enthusiastic and curious with ambitions for improvement. Never stop Learning, Researching and Innovating. Never forget the patients you work for and the colleagues you work with. You have to both learn and teach at the same time, acquiring new skills and disseminating your knowledge to your fellow colleagues. When you love your job, and you are a part of a team the daily challenges are never too difficult. And, don't forget, try to stay, at least at the spirit, forever young!

**Do you have some hobbies? What are the things outside of your work that you are passionate about? How do you like to spend your free time?**

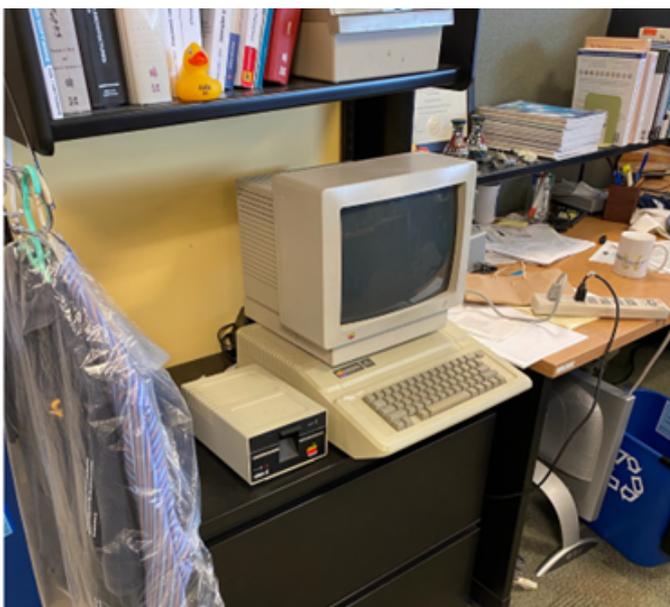
I like to read, to swim, to walk and to socialize with friends and family. Every day I swim at least two kilometres in the open sea, and the days I am away from the sea, mainly for professional reasons, I try to use the hotel pool if available, or to find a public pool. I had crossed swimming four times the Bosphorus between Asia and Europe during the "Bosphorus Cross-Continental Swim" in Istanbul. In Athens I go from the laboratory to the GSCC-CB offices and I return walking as also I do to go to the beach from my home and back. That is around 10Km per day. My hobbies also include, electronics, computers, programming, reverse engineering and ethical hacking.



Dr. Alexander Haliassos



Coleman Junior Spectrophotometer



The Apple II computer



Photos from EFLM AFCB BCLF GSCC-CB "LM4MS" meeting at Heraklion Crete



### Coffee with Prof. Dr. Dildar Konukoğlu, President of the Society of Clinical Biochemistry Specialists (KBUD), Turkey



**Could you briefly introduce your society? When was it founded, who can become a member, what activities of your society, what has been done so far, and what future activities, projects, and plans?**

Society of Clinical Biochemistry Specialists (KBUD) was established in Istanbul in 1999. It is comprised of 1022 members, who are all specialists or residents in Clinical

Biochemistry. KBUD's governing board is elected biennially from its members. Our mission is to bolster our members' scientific and professional development, advocate for their legal rights, and foster their professional growth through annual symposia, courses, seminars, conferences, and international participatory grants. We started quality studies in 2005, hosted some national quality and accreditation symposia, and even had an international symposium in 2008, whose proceedings were published in Clinical Biochemistry in March 2009. Our external quality control program, KBUDEK,

established in 2006 and accredited in 2017, represents Türkiye's first accredited program in this domain. It now consists of 20 programs and we're planning to add two more by 2024. We've also made participation in external quality control programs mandatory for labs nationwide through discussions with the Ministry of Health. KBUD has been a pioneer in this field with the preanalytical symposiums, the first of which was held in 2013. In the preanalytical symposium held every year, the importance of the preanalytical process was emphasized in unit-specific subjects such as haematology, paediatrics, and endocrine, as well as general issues. All these studies led to the launch of our KBUDEK Preanalytical External Quality Control Program in 2018. This program is available to our members free of charge. We also recognize and encourage scientific studies on laboratory quality through the "Prof. Dr. Kaya Emerk Quality Award," presented since 2016.

Besides running courses on analytical errors, quality control, and laboratory statistics we also have an online exam software on Clinical Biochemistry allowing our members to prepare for board exams and reinforcing their knowledge. KBUD actively contributes to national healthcare policy with working groups dedicated to laboratory processes, toxicology, molecular



techniques, advanced research methods, and artificial intelligence. These groups are pivotal in shaping national directives and guidelines within their respective specializations. Our Society's contribution to the scientific community extends to its publication endeavours. We distribute an array of books, authored or translated by our members, free of charge. "International Journal of Medical Biochemistry" (IJMB), the journal of our Society, is a double-blind peer-reviewed, open-access journal. Our journal publishes articles on clinical and experimental chemistry, molecular biology, genetics, therapeutic drug monitoring, toxicology, immunology, haematology, and laboratory medicine, focusing on the analytical and clinical investigation of laboratory tests used for diagnosis, prognosis, and treatment. It has been recognized and indexed by numerous prestigious databases. Our partnership with ADLM (formerly AACC) in 2011 led to the translation and publication of Labtests Online website in Turkish and allowed it to serve as a critical resource about laboratory tests and diseases for millions of patients and thousands of healthcare professionals until the site had to shut down in 2021. Looking ahead, KBUD intends to organize international congresses, generate additional scholarship funds for our members, enhance the global standing of our quality control programs, and enrich our foundational educational programs. Our key objective remains to foster collaborations with international entities within our field. Our joint congress with the Association of Azerbaijan Clinical Laboratory Specialists in 2023 marked a significant milestone, yielding substantial scientific and social benefits for both nations.

**What are your suggestions for better education? Is the current education in your country fit for the purpose? Do you have a core curriculum for the training of medical biochemistry professionals?**

Laboratory specialists should be knowledgeable in the clinic, up to date with technology, understand lab statistics, and have great communication and leadership skills. Learning is a lifelong process. The journey towards specialization in Clinical Biochemistry begins with successful performance in the Ministry of Health's exams which are available to graduates in medicine, veterinary science, pharmacy, or chemistry. Four-year residency program culminates in the presentation of an original research thesis and a scientific competency examination. The training is provided by universities, and Education and Research hospitals affiliated with the Ministry of Health, following a core curriculum set by a board that I'm part of, which also defines the minimum requirements for the educational institutions. One of the most important features of the training is that besides Clinical Biochemistry they perform laboratory and clinical practices in microbiology, general internal medicine, and paediatrics

clinics. In addition, night shifts in the laboratory are effective in helping our students gain skills in managerial activities and decision-making in emergencies.

**In what direction do you see the laboratory medicine heading? What do you think about the position of the laboratory specialist to increase their visibility within the healthcare system? What challenges do you and your colleagues face?**

Laboratory medicine is advancing at an unprecedented pace relative to other medical disciplines. The laboratory specialist's role in ensuring reliable results and fostering communication with clinicians and patients is integral to the progression of laboratory medicine. Despite the advent of artificial intelligence, the dynamic nature of human interactions remains irreplaceable. I am confident that well-equipped biochemistry experts will continue to distinguish themselves within the healthcare landscape. The important thing is to be aware of our characteristics and deficiencies and to have the desire to overcome them. The important thing is to be aware of our characteristics and deficiencies and to have the desire to overcome them. As there will always be new biomarkers and technological methods to be discovered, more tests will need to be performed, more diseases and reports will need to be interpreted and, accordingly, laboratory specialists will always be visible.

**Do you think medical biochemistry professionals are ready for emerging technologies such as Digitalization, Laboratory Diagnostic Algorithms, AI, ML, Integrative Diagnostics, and Big Data? Do you believe in the Partnership model for efficient integration and adoption of emerging technologies and innovations?**

I think our labs were aware of AI, digitalization, and diagnostic algorithms earlier than other health professionals. We've been using automation, lab information systems, delta checks, and sample tracking for the last 15 years. Medical laboratories have a lot of data. Numerous studies and applications can be performed. Technologies that will facilitate the acquisition, as well as the interpretation of these data, have made it easier for laboratory specialists to focus on other issues in the field by saving time and partially reducing the routine burden. Ordering the right test from the right patient at the right time directly affects the disease process with a cost-effective and time-efficient approach. Establishing and implementing diagnostic algorithms is very important at this point. Laboratory specialists play an important role in the creation of these algorithms and their integration into laboratory technology.

**Do you think your society members participate and/or contribute enough to EFLM activities? Do they know the advantages of being EFLM Academy member, for example, the unique educational resource "Syllabus course", free attendance to the recently held 3<sup>rd</sup> EFLM Strategic Conference, its sessions were recorded and are available for one year?**

Feedback from our members indicates a keen interest and active participation in the EFLM's activities. The strategic conference last year, in particular, provided valuable insights for future endeavours. We've been encouraging our members to join the EFLM Academy and take advantage of the membership benefits. I think that the announcements we make and the link address of EFLM's website on KBUD website are important for our members to follow EFLM activities.

**What do you think about the ongoing and recent EFLM activities/initiatives? Do you have suggestions to increase communication and cooperation with EFLM? What do you like and dislike about EFLM?**

There's been a noticeable increase in EFLM activities over the last five years. We follow working group publications closely and apply them to our practices. Especially "Green and Sustainable laboratory" has been the most interesting topic recently. I believe that EFLM's European Curriculum for post-graduate education for specialists is an important resource for planning the activities of laboratory medicine and our Society and I congratulate all EFLM members for their efforts. We would like our Society to collaborate with EFLM in all areas of laboratory medicine, especially in external quality control and internal quality control. I hope to see more representation from Türkiye in EFLM boards or working groups and would like EFLM to consider our Society's input when accepting members. We would be honored to have an EFLM board member at our congresses; however, we would like to suggest extending the deadline for final notifications as the current volatility of the economic conditions in Türkiye and the world makes it difficult to finalize the organizational details of events in advance. Extending the deadline to the end of March for a congress that will be organized in November might be ideal.



**Some Personal questions...**

**Please introduce yourself with a few sentences.**

After graduating from Ege University Faculty of Medicine in 1987, I completed my specialty training in medical biochemistry at Istanbul University Cerrahpaşa Faculty of Medicine in 1991. I am currently a full-time professor and manager of the clinical biochemistry laboratory at Cerrahpaşa Faculty of Medicine. I am actively involved in medical education and postgraduate training and serve in various course and examination boards

of our faculty. As the head of the hospital's environmental management unit since 2021, I provide training to hospital staff and students in terms of green hospitals and green laboratories. Since 2021, the year of its establishment, I have been working as the director of our University's Application and Research Centre for Excellence in Clinical Research. I also serve as a board member in our hospital organ transplant centre. I actively participate in various scientific committees at the Ministry of Health and was a member of the Laboratory Medicine Commission between 2016 and 2020. Over the years, I have written nearly 200 scientific articles and edited or authored over 20 books. I am honoured to serve as the editor-in-chief of the "International Journal of Medical Biochemistry", the publication of our Society.

**In your professional career, you have served in many leading roles both in your country and internationally. What was your motivation?**

My deepest source of motivation in life stems from the love and respect I hold for my profession. I have consistently placed significant emphasis on the work I undertake, always striving for the utmost quality. Both to learn and teach at the same time, seeing my students succeed, and knowing the profound impact a laboratory report has on a patient have always motivated me to work harder.

**Could you share your way in biochemistry? Why did you choose this field? What do you like about your current job? Do you think that you chose the right job for you? If you have another chance?**

After graduating from medical school, my initial inclination was towards clinical practice. However, the next period led me to study biochemistry. I believe that my profession is compatible with my lifestyle and personality. I love working, learning, and teaching. I follow technology and am open to new ideas and innovations. Being actively involved in both education and clinical investigations brings me immense satisfaction. I believe there is no greater source of motivation than loving what you do. Ever since I was a child, I harboured dreams of becoming a medical doctor, and that dream became true when I completed medical school. Since laboratory medicine is related to almost all branches of medicine and diseases, I believe that choosing the field of biochemistry was one of the right decisions for my life.

**What would be your advice to young scientists who wish to pursue their career in laboratory medicine?**

My main advice to young scientists who want to pursue a career in laboratory medicine is to be passionate about this profession. Laboratory medicine requires a solid foundation in medical knowledge to effectively evaluate biochemical changes, metabolism, and diseases in a variety of health conditions. It is very important to follow technology and developments and put them into practice. To be at the forefront of the field, it is necessary to actively participate in scientific events such as conferences and symposiums. Our profession requires communication with clinicians, patients, and laboratory personnel. Therefore, developing communication skills is also very important.

**Do you have some hobbies? What are the things outside of your work that you are passionate about? How do you like to spend your free time?**

Although I have admittedly little free time, I enjoy spending time with my family by watching movies at home or going on nature hikes. I also like listening to music, dancing, and cooking. Weekend meetings with my friends make me feel very relaxed. I travel several times a year to see new places and meet new cultures both nationally and internationally. I like to go to technology events as I have a great interest in electronic products.



**NEWS FROM EFLM FUNCTIONAL UNITS**

# 2<sup>nd</sup> European Laboratory Day: Starting a tradition!

Reported by Tara Rolić, Chair of the Task Group European Laboratory



The second edition of the European Laboratory Day organized by the EFLM Task Group European Laboratory Day in November showed creativity among EFLM members. By organizing different activities all around Europe, the tradition of celebrating EuLabDay was noticed. Participants engaged in EuLabDay activities, including open-door days of the laboratory and presenting Laboratory Medicine profession lecturers were able to see how a blood sample is analyzed, how the pathway from a sample to a laboratory report looks, and ask a question during the interesting talks covering a wide field of Laboratory Medicine. Colleagues from all around Europe showed their knowledge and brought our profession closer to the general public and healthcare professionals. Joining healthcare campaigns, like Tobacco Free Month, Pink October, and Diabetes Day, as well as recording laboratory

videos were important for promoting EuLabDay. Different activities were organized by colleagues across 15 EFLM countries: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, France, Italy, Lithuania, Montenegro, Portugal, Serbia, Slovenia, Spain and Turkey. Shared opportunity to embrace communication and education, emphasized through your dedicated work successfully brought Laboratory Medicine into the spotlight, demonstrating professional life-saving impact. Laboratory Medicine as a profession, thanks to all of you, came out behind the curtains. This success without your contribution, would not be possible.

**Congratulations to all the participants of the 2<sup>nd</sup> European Laboratory Day! CLICK THE BELOW IMAGE**



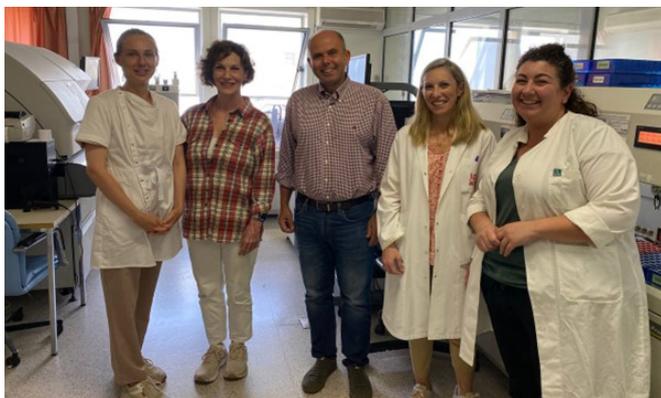
Your unwavering dedication and groundbreaking approaches have truly illuminated the field of Laboratory Medicine. The wide array of innovative ideas shown during this event has undoubtedly played a significant role. Together let's continue to push the boundaries and strive for even greater accomplishments' in the future.

Save the date for the EuLabDay 2024, November 5th!



## EFLMLabX two users' experiences

### EFLMLABX Experience reported by Ksenia Fomichenko, Russia



My name is Ksenia, I am a medical laboratory scientist from Russia. My visit to the Clinical Chemistry-Biochemistry Laboratory, University General Hospital of Heraklion under the EFLM-LabX exchange program ended a few weeks ago. I applied to participate in the program in May, and already in October Professor Tsatsanis was waiting for me at the Clinical Chemistry-Biochemistry Laboratory. Thanks to the financial support from EFLM, I was able to get this invaluable experience and plunge into my favorite job, but in a different country. I got acquainted with the details of the laboratory work, new equipment and methods, and saw the differences in the healthcare system between our countries. The most valuable part of this training is the people I had the opportunity to work with. From the first day, I was surrounded by professionals who shared their knowledge and experience with me. Professor Tsatsanis provided assistance and support at every step, from discussing my training to

my leave. I spent most of the time in the Clinical Chemistry-Biochemistry Laboratory, but thanks to Prof. Tsatsanis, I was able to visit other laboratories in the hospital. I spent some time in the Hematology Laboratory, where except for routine tests, I participated in a platelet aggregation test. With a doctor from the Hematology lab, who was my mentor that day, we discussed all aspects of this analysis, from patient preparation to curve interpretation. In the Immunology laboratory, I learned a lot about chemiluminescence assay. I could evaluate patient samples compared with positive controls under doctor's guidance, and realized how complex this assay can be. The team of the Clinical Chemistry-Biochemistry Laboratory is very friendly and professional. Head of Laboratory Niki Malliaraki shared her experience in laboratory management, change management and some work's organization moments. Valia Anagnostopoulou and Eleftheria Fragiadouli told me about the nuances of result validation in their laboratory, calibration, quality control and generally answered a large number of my questions linked with laboratory's work and the responsibilities of specialists. Also, I managed to improve my sperm analysis skills. The doctor from the Clinical Chemistry-Biochemistry Laboratory shared the tricks, nuances and features of sperm analysis, which was very valuable. The team of laboratory technicians is big and friendly. Despite the amount of workload, it is felt that everyone is passionate about their job. Thanks to the training and all these people I have learned not only new methods and equipment but also improved my medical English and soft-skills. I am sure all the knowledge gained from the training have helped me become more competent in my field.

On the last day of the EFLM-LabX exchange program, I was sad that laboratory training and my time in Greece finished, but on the other hand, I was grateful for everything I had known during this time. It is sad that not all laboratory specialists were caught on camera. But here you can find me and colleagues from Clinical Chemistry-Biochemistry Laboratory, University General Hospital of Heraklion: Niki Malliaraki, MD, Head of Laboratory; Christos Tsatsanis, PhD, Professor, Director; Valia Anagnostopoulou, PhD, Clinical

### EFLMLABX Experience reported by Tamar Ramishvili, Georgia



I was honoured to take part in the EFLM LabX program and for 2 weeks, from 16th to 30th October, I had the opportunity to visit the Institute of Medical Biochemistry And Laboratory Diagnostics – General University Hospital and the 1st Medical faculty of Charles University (Prague, Czech Republic). Prof. Tomáš Zima, the dean of the medical faculty and head of the laboratory, accepted me and offered a visit to the university laboratories to exchange knowledge in the following fields: Cytogenetics, Molecular Genetics, Prenatal and neonatal screening and inborn error diagnostics. My visit in laboratories was generously supervised by Dr. Ivan Šebesta. As for me, I am a young doctor of laboratory medicine. For almost 11 years, I have been working in a local private medical laboratory named Mrcheveli as an assistant medical doctor of Genetics. The objectives of my Exchange programme were to observe all the phases of analysis, including pre- and postanalyticals, to learn the different methods of diagnostics and bioinformatic analyses and according to the experience gained here, gradually help to establish the technology and knowledge development for the mentioned Laboratory disciplines in my home Laboratory. At present, samples for many tests from the above-mentioned disciplines are sent abroad, mainly to Germany, because there are no laboratories capable of doing such tests in Georgia and the Caucasus region. The techniques I became familiar with the genetic and metabolic studies are the following: sample preparation, conventional Karyotyping, G and Q banding, QF-PCR, DNA and RNA isolation, PCR primer set up; Bioanalyzer for DNA quantification, Real time PCR for deletion / duplication analyses, Sanger sequencing, NGS technologies, Gel electrophoresis, Tandem mass spectrometry, 2D-LS/MS/MS technique, Bioinformatic tools, reporting and interpretation.



I also had the opportunity to look at the daily work and practice, and colleagues from the host laboratories showed me around each segment of the lab, what I was interested in and asking for.

I have to thank Prof. Tomáš Zima and to Dr. Ivan Šebesta for accepting me in their laboratories and for introducing me to the team who shared all their experience and knowledge with me. I'd like to specially thank all my colleagues I met here during my visit: Dr. Romana Mihalová, Dr. Kotlas, Milena Hovhannisyan, Marta Černá, Prof. Springer, Marcela Kotasová, Karolína Pešková, Dr. Lenka Dvořáková, Šafaříková Markéta and all of their team were very kind and welcoming and built a very friendly and inclusive atmosphere at work and were always available for teaching. Also, special thanks to the board of Georgian Laboratory Medicine Association (GLMA) and to president Prof. Tina Bukia (already honored president of GLMA), without their support, it would not have been possible to grasp this exchange.

Finally, I would like to thank Prof. Tomris Obzen (EFLM President), the EFLM Professional committee, to Prof. Evgenija Homsak, Snezana Jovicic, Apl. Prof. Dr. Klaus Peter Kohse and to the EFLM office, to Silvia Silvia Terragni and Silvia Cattaneo to select and give me the opportunity to receive one of the EFLM bursaries and for this memory of a lifetime! Hope, one day it will be available to host other lab professionals already in our home genetic laboratory in Georgia!

## Changing of the guard in EFLM National Societies

Reported by Silvia Terragni, EFLM Office

***A warm welcome to the new incoming National Society officers and a great thank you to the outgoing EFLM National Representatives and National Society Presidents for the support to EFLM activities during their terms of office.***

### **Georgian Laboratory Medicine Association (GLMA)**

Manana Akhvlediani (Laboratory Service, Todua Clinic, Tbilisi) is the new president of the Georgian Laboratory Medicine Association, replacing Prof. Tinatin Bukia.

### **Montenegrin Association of Clinical Chemistry and Laboratory Medicine (MACC)**

Tanja Antunovic (Clinical Laboratory Diagnostic, Clinical Centre of Montenegro) is the new President of the Montenegrin Association of Clinical Chemistry and Laboratory Medicine, replacing Najdana Gligorovic-Barhanovic.

### **Norwegian Society of Medical Biochemistry (NSMB)**

Ingrid Hokstad (Lab.Medical Biochemistry, Innlandet Hospital Trust) is the new president of the Norwegian Society of Medical Biochemistry; she is replacing Bess Frøyshov. Ragnhild Veline Nome (Dept. of Medical Biochemistry, Oslo University Hospital) is the new EFLM National Representative for NSMB, before the position was covered by Anne-Lise Bjørke Monsen.

**The Association for Clinical Biochemistry and Laboratory Medicine (ACB)** Victoria Logan (Chief Executive, ACB) is the new EFLM National Representative of the Association for Clinical Biochemistry and Laboratory Medicine, replacing Bernie Croal.

## PAST EFLM EVENTS

### Past EFLM webinars

Reported by Aleš Kvasnička, Member of the EFLM Communication Committee

The EFLM e-Learning platform started in 2023 with interesting webinars for the EFLM Academy members. If you missed one of these amazing webinars, we strongly recommend you visit the [EFLM eLearning platform](#) where you can access the recordings of these webinars on-demand. If you are not an EFLM Academy member sign up [here](#) (webinars are available only for EFLM Academy members).



During the autumn and at the end of the year there were again many interesting live EFLM webinars. On 10<sup>th</sup> October a webinar was held on the topic of current concepts for early diagnosis of malignant disease led by Michael Neumaier (Dept of Clinical Chemistry, University of Heidelberg and Institute for Clinical Chemistry, Mannheim, Germany) discussing the specificity of molecular changes in the development and progression of malignant disease, the use of cell-free nucleic acids and ctDNA in bodily fluids for early diagnosis of cancer and much more. On 24<sup>th</sup> October we delved into the fascinating realm of nutrition and biochemistry held by Ruth Ayling (Department of Clinical Biochemistry, Royal London Hospital, Newark Street, London, UK) focusing on refeeding syndrome, laboratory monitoring of parenteral nutrition and rare nutrition related biochemical issues. On 7<sup>th</sup> November we continued with another webinar, this time focused on the diagnostic abilities of POCT instruments by Kristin Aakre (Norway), Paul Collinson (UK) and Angelika Hammerer-Lercher (Switzerland) focusing on certain clinical and practical issues related to the use of POCT in the ED, evidence for a clinical role for POCT cardiac marker testing and the relevance of cardiac marker testing with POCT in the periphery and compare that with the hospital setting. Last passed EFLM live webinar was held on 28<sup>th</sup> November by our president Prof. Tomris Ozben (Dept. of Clinical Biochemistry, Faculty of Medicine, Akdeniz University, Antalya, Turkey), where she focused on and stressed the importance of the implementation of sustainable practices in medical laboratories and switching clinical laboratories to green labs. If you have missed one of these webinars you can search and watch them all on demand. Only for EFLM Academy members have this privilege at the [EFLM e-learning platform](#)

## UPCOMING EFLM EVENTS

### EFLM Strategic Conference 2024

“A vision to the future: value-based laboratory medicine”

Padova (IT), 23-24 September

The EFLM Strategic Conference is a specialized conference organized under the coordination of the President-Elect and managed by the Executive Board. The previous editions were held in Milan (IT) in 2014, Mannheim in 2018, and a virtual event in 2022. The general goal of this Conference is to focus on important aspects of laboratory medicine in which some strategic actions/measures should be taken. The Strategic Conference is not just about gaining knowledge from scientific sessions: the aim is to create an interactive environment which allows opportunities to share visions, projects and actions. The title of the 2024 edition is:

**“A vision to the future: value-based laboratory medicine”**

The sessions will deal with important aspects of the organization of clinical laboratories, the increasing concern on ethical issues and the future of laboratory professionals. The 2024 edition of

the Strategic Conference will be a hybrid meeting for allowing a large participation of delegates (virtual) and an interactive discussion (in presence) to consensually identify important aspects in Laboratory Medicine in which some strategic actions/measures should be taken. Global leaders and participants from laboratory medicine, IVD diagnostics companies, Information technology experts, and other stakeholders will join the conference to deliver talks and discuss trends, opportunities and challenges in Laboratory Medicine. An important outcome of the Conference is the creation of an EFLM Task Force dealing with the main topics of the Conference through the creation of a number of Task & Finish Groups to provide new ideas, projects and programs. Lectures and contributions presented at the Conferences will be published in a special issue of the official EFLM Scientific Journal, Clinical Chemistry and Laboratory Medicine (CCLM).

**SAVE THE DATE**



## EFLM Strategic Conference 2024

# A Vision to the future: value-based laboratory medicine

Padova (IT), 23-24 September 2024

### September 23rd

First session:  
Creating value for users

Second session:  
Changing the organization

### September 24th

Third session:  
Ethical aspects in laboratory medicine

Fourth session:  
The future of laboratory professionals

Conclusion remarks and open discussion on the  
expectations from participants

For information:



Registrations  
patrizia.sir tori@MZevent s .i t



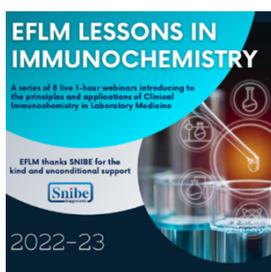
Organizing secretariat  
lc@lccongressi.com



## Forthcoming EFLM webinars

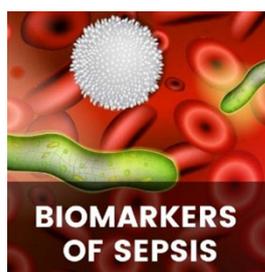
Reported by Aleš Kvasnička, Member of the EFLM Communication Committee

Do not miss excellent forthcoming webinars, free and available for EFLM Academy members at the [EFLM e-learning platform](#)! There are last two upcoming webinars this year!



**EFLM Lessons in Immunochemistry - Coronary Artery Disease - Predicting the development of coronary artery disease in apparently healthy individuals - the role of Lp (a)**

Date: 6th December 2023 at 16:00 CET time



**Biomarkers of sepsis: procalcitonin and more**

Date: 13th December 2023 at 18:00 CET time

### NEWS FROM EFLM NATIONAL SOCIETIES

## 30<sup>th</sup> Meeting of Balkan Clinical Laboratory Federation

Reported by: Tanja Antunović, MACC president and Najdana Gligorović Barhanović, BCLF and MACC past president

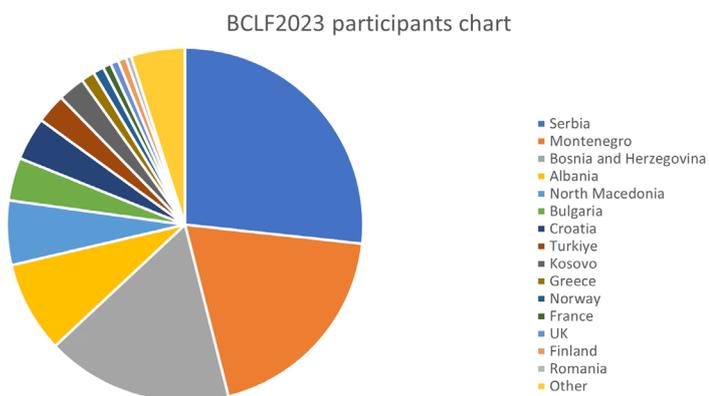
30<sup>th</sup> Meeting of Balkan Clinical Laboratory Federation (BCLF2023) and 2nd Conference of Montenegrin Association for Clinical Chemistry and Laboratory Medicine (MACC) was held in Herceg Novi, Boka Bay, Montenegro, 27-30.09.2023. It was organized by MACC, under the auspices of International (IFCC) and European (EFLM) Federation of clinical chemistry and laboratory medicine. The meeting was accredited by local Montenegrin medical chamber and European Accreditation Council for Continuing Medical Education with 25.0 European CME credit. „Smart Event“ application was used for monitoring attendance at lectures and final participants evaluation of the Meeting. During the Opening ceremony BCLF President Prof Dobrin Svinarov, EFLM president Prof Tomris Ozben, IFCC President Khosrow Adeli and MACC President and President of BCLF2023 Organizing committee Dr Tanja Antunovic welcomed the gathering, wishing the participants successful meeting and pleasant stay in Montenegro. Prof Mario Plebani

presented the organization and aims of EFLM. BCLF2023 was attended by 408 registered participants from different parts of the world, mostly from BCLF countries (Serbia – 109 attendees, Montenegro – 79, Bosnia and Herzegovina – 69, Albania – 34, North Macedonia – 24, Bulgaria – 16, Turkiye – 11 attendees).

The scientific program included 52 lecturers with:

- Opening lecture
- 3 plenary sessions
- 12 sessions with 37 lectures and 14 oral presentations
- 4 case report sessions
- 81 electronic poster presentations.

The opening lecture “Implementation of sustainable practices in medical laboratories – Switching Clinical laboratories to Green labs” was delivered by Prof Tomris Ozben (EFLM President and IFCC President-elect). Since sustainability is fast becoming the blueprint of every modern business strategy, this was great opportunity to hear more about this



important issue, EFLM Taskforce for Green and Sustainable Laboratories and practices how to minimize medical laboratory impact on the environment. Prof Gary Moor second day plenary lecture about one of the most challenging areas of laboratory medicine – “Thrombophilia screening - not so straightforward”, has been met with greatest interest of participants and unanimously rated as excellent, and more than useful. Up to date third day plenary lecture by Prof Maurizio Ferrari „Big data and aging“ focused on biological complexity and heterogeneity of ageing and the capacity to generate new knowledge about this process more quickly by using „big data“. Fourth day plenary lecture about „Mass Spectrometry-Based Omics“ introduced the value of this remarkably sophisticated molecular imaging technique, enhancing the current knowledge on the interaction mechanisms in health and disease.

Scientific program started with two Preopening sessions, Bone and mineral metabolism and Total testing process in clinical laboratory, listed in the table below.

Wednesday, 27.09.2023.	
<b>Session 1: Bone and mineral metabolism</b>	Emir Muzurovic - <i>Hyperparathyroidism - diagnosis with many horizons.</i>
	Etienne Cavalier - <i>Parathyroid hormone: from the first radio-immunoassay to LC-MS/MS.</i>
	Aylin Sepici Dincel - <i>Sclerostin and Dickkopf-1 as a new marker of bone disease.</i>
	Nela Raseta Simovic - <i>Bone metabolism markers in physically active postmenopausal women.</i>
<b>Session 2: Total testing process in clinical laboratory</b>	Mario Plebani - <i>Standardization and harmonization in laboratory medicine: data comparability is needed.</i>
	Khosrow Adeli - <i>Closing the gaps in adults and pediatric reference intervals: global initiatives.</i>
	Sverre Sandberg - <i>How to use biological variation data to 1) set performance specifications 2) monitor patients 3) generate personal reference.</i>

After the Opening ceremony and lecture, Meeting President Dr Tanja Antunovic invited participants to the Welcoming cocktail held nearby on the open terrace by the sea. It was a great opportunity to greet old friends, get to know new colleagues and discuss the opportunities for closer cooperation.

On Thursday, 28.09.2023, after two Lab-clinical case reports in early morning hours, the program continued with four sessions listed in the table below.

Thursday, 28.09.2023.	
<b>Lab-clinical case reports: From diagnostics to diagnosis</b>	Petra Uljarevic - <i>Blood morphology. A microscope: between reality and mind's eye.</i>
	Aleksandra Antovic - <i>Antiphospholipid syndrome – diagnostic and therapeutic challenges.</i>
<b>Session 3: Laboratory haematology</b>	Sverre Sandberg - <i>An overview on how to diagnose and monitor the different porphyrias.</i>
	Slavica Pavlovic Djuranovic - <i>What makes you stronger can kill you: Use of poly-basic peptides as new drug candidates against Plasmodium falciparum.</i>
	Marko Trtica - <i>Iron deficiency in nonanaemic COPD patients - Could low haemoglobin density and microcytic anaemia factor be useful?</i>
	Milijan Savkovic - <i>The importance of determining hepcidin-25 for treating anemia in patients with end-stage renal disease.</i>
<b>Session 4: Thrombosis and haemostasis</b>	Jovan Antovic - <i>Laboratory diagnosis of thrombotic microangiopathies: Measurement of ADAMTS-13.</i>
	Ivana Lopic - <i>One disease, numerous challenges: How to successfully diagnose von Willebrand disease in the laboratory?</i>
	Nikola Bakic - <i>Mainstream in haemostasis in Montenegro, can we keep up?</i>
	Milena Velizarova - <i>Optimal utilization of thrombophilia testing in asymptomatic individuals.</i>
<b>Session 5: Cardiovascular diseases and cardiovascular disease risk prediction</b>	Murat Cihan - <i>Clinical and laboratory applications of kynurenine and its pathway products.</i>
	Vladimir Prelevic - <i>Early vascular ageing, arterial stiffness and target organ damages in treated hypertensive patients.</i>
	Ebru Sezer - <i>Protein Bound Uremic Toxins (PBUTs); Potential impact of implementing test panels for PBUTs on patient outcomes.</i>
	Muhammed Fevzi Kilinckaya - <i>Cathepsin D in cardiovascular diseases and its relationship with cardiovascular mortality.</i>
	Aneta Boskovic - <i>Clinical implications of high-sensitivity cardiac troponin assays in acute coronary syndrome.</i>
<b>Session 6: Immunology / Allergology</b>	Urska Bidovec Stojkovic - <i>Exploring the latest innovations in laboratory diagnostics for drug-induced anaphylaxis: towards personalized approaches and biomarker develop.</i>
	Marija Saric Matutinovic - <i>Thyrotropin receptor antibodies: clinical relevance and methodological aspects.</i>
	Neda Milinkovic - <i>Analytical and clinical characteristics of serological immunoassays of anti-SARS-CoV-2 antibodies.</i>
	Verica Jakjimoska - <i>The bright side of COVID-19 pandemic for patients with allergic conditions.</i>

The third day of the BCLF2023 also started early with two Lab-clinical case reports, which were followed with four scientific sessions listed in the table below.

<b>Friday, 29.09.2023.</b>	
<b>Lab-clinical case reports: From diagnostics to diagnosis</b>	Adie Viljoen - <i>Lipoprotein (a)</i> .
	Marina Minic-Novcic - <i>Curious Cases of Dyslipidaemia – A Series of Case Reports</i> .
<b>Session 7: Biomarkers in neurobehavioral and psychiatric disorders</b>	Ole A. Andreassen - <i>Multimodal prediction of age of onset of Alzheimer's disease with potential for treatment stratification</i> .
	Sergej Djuranovic – <i>Approaches for the targeted modulation of mRNA translation in neurodegeneration</i> .
	Srdjan Djurovic - <i>Modeling psychiatric disorders with patient-derived brain organoid cultures</i> .
	Milena Petrovic - <i>The influence of COMT gene polymorphism on the severity of presentation of negative symptomatology in schizophrenia spectrum</i> .
<b>Session 8: Precision medicine technologies and molecular diagnostics</b>	Ron van Schaik - <i>Pharmacogenetics: prevention is key!</i>
	Maurizio Ferrari - <i>RNA editing as a diagnostic test to diagnosis bipolar disorders</i> .
	Dobrin Svinarov - <i>Clinical mass spectrometry becomes a major tool for precision medicine</i> .
<b>Session 9: Advancing healthcare for transgender patients</b>	Marta Bizic - <i>Genital surgery and bioethical aspects in transgender persons</i> .
	Jeroen Vervalcke - <i>Hormone treatment in transgender persons, and interpreting laboratory results</i> .
	Dusica Markovic Zigic - <i>Psychiatric aspects in transgender population</i> .
<b>Session 10: Dyslipidemia, diabetes, adiposity</b>	Khosrow Adeli - <i>Neuroendocrine Regulation of Food Intake and Metabolism via Gut Hormones and Enteric Neurons: Implications in Obesity &amp; Type 2 Diabetes</i> .
	Adie Viljoen - <i>Diabetes and lipids</i> .
	Marina Minic-Novcic - <i>Familial hypercholesterolaemia, diagnosis and management</i> .
	Marina Jaksic - <i>Association between vitamin D and hypertension in preobese and obese children in Montenegro</i> .
	Aleksandra Atanasova-Boshku - <i>Dyslipidemia and relevant disorders to female reproductive health</i> .

The final day of BCLF2023 had two scientific sessions - Masterclasses from Balkan region, where Balkan scientist got the opportunity to present their latest scientific achievements.

<b>Saturday, 30.09.2023.</b>	
<b>Session 11: Masterclass from Balkan region I</b>	Katerina Toseska-Trajkovska - <i>The science of women leadership</i> .
	Christos Tsatsanis - <i>Sepsis biomarkers: from bench to bedside</i> .
	Irini D. Leimoni - <i>Medical waste management at the biochemistry laboratory</i> .
	Ledina Mino - <i>Lipid profile in the context of cardiovascular risk: a new approach of ASoLaM in the role of laboratory specialist in patient counseling</i> .
	Vjerslava Slavic - <i>Immunomodulatory Effect of Nanomembrane-Based Low-Volume Plasma Exchange on Intestinal Permeability in Metabolic Syndrome</i> .
	Ozlem Unay Demirel - <i>Early prediction of bloodstream infection with complete blood count parameters: An ex-vivo human whole blood model</i> .
<b>Session 12: Masterclass from Balkan region II</b>	Radivoj Jadric - <i>Old biomarkers and their new use</i> .
	Sorin Giju - <i>Various types of urinary casts and their diagnostic significance - manual microscopic vs automatic method - an integrated view</i> .
	Aleksandra Klisic - <i>Endocan as a novel marker of cardiometabolic disorders</i> .
	Kenan Preljevic - <i>Chemical composition, antioxidant and antibacterial activity of essential oil of <i>Satureja montana</i> L.</i>

Poster presentations from broad number of areas of laboratory medicine were shown on 28<sup>th</sup> and 29<sup>th</sup> of October in electronic form, and were available for all the participants from 12-18h.

Besides the scientific part, BCLF2023 included five Commercial workshops, where leading manufacturers in this field had the opportunity to present their cutting-edge technologies:

1. Roche: Patient journey in HCC and importance of diagnostics in multidisciplinary approach, Western Balkan Initiative;
2. Sysmex: The impact of pre-analytical variables and drug interference on coagulation tests;
3. Mindray: Envision more with advanced hematology automation;
4. Sysmex: Reliable Automated Urinalysis by Sysmex;
5. Greiner Bio-One: Preanalytical phase - a continuous challenge for laboratory professionals.

According to the Participant evaluation, carried out through application Smart Event, the 30<sup>th</sup> BCLF meeting was rated with overall 4.53 mean score (5 – the best score). 30<sup>th</sup> BCLF meeting in Montenegro was very successful, we are looking forward to the next one!

Tanja Antunović, MACC president,  
Najdana Gligorović Barhanović, BCLF and MACC past president



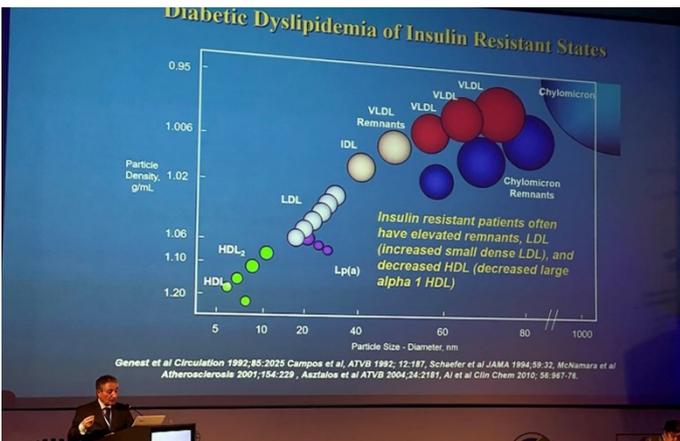
Congress hall



Exhibition area



Get together dinner



Prof. Khosrow Adeli



Prof. Mario Plebani



Welcome cocktail



Prof. Tomris Ozben



## NEWS FROM EFLM NATIONAL SOCIETIES

# Advances in diagnosis and treatment allow for the assessment of the risk of progression of monoclonal gammopathies malignant disease.

Reported by: Mercè Ibarz, PhD, SEQC-ML Vice-president

- **Monoclonal gammopathies are a group of diseases characterized by a clonal proliferation of plasma cells that can cause problems such as bone pain, predisposition to infections, as well as kidney, heart or neurological disorders.**
- **The Clinical Laboratory specialist plays a key role in correctly classifying these patients and providing personalized follow-up and treatment.**
- **In recent years, new risk stratification systems and treatments have permitted closer monitoring of patients and a delay of progression to symptomatic multiple myeloma, which lacks curative treatment.**

The Clinical Laboratory specialist plays a crucial role in the management and monitoring of monoclonal gammopathies, a group of diseases characterized by the clonal proliferation of plasma cells. These can initially manifest asymptotically and progress to causing problems such as bone pain, predisposition to infections, and kidney, heart or neurological disorders. Laboratory Medicine allows these patients to be correctly classified and to assess the risk of the disease progressing from a premalignant to a malignant condition so as to provide follow-up and treatment tailored to each patient.



On October 2, the Spanish Society of Laboratory Medicine (SEQC<sup>ML</sup>) held the course, "Management and Monitoring of Asymptomatic Monoclonal Gammopathy. Evolution of risk stratification models and their clinical importance", within the framework of its virtual training project SEQC<sup>ML</sup> ACADEMY, with the aim of addressing the importance of correctly classifying this type of patient, as well as the clinical value of the risk stratification systems. Monoclonal gammopathies include a wide spectrum of clinical entities that can include asymptomatic conditions, such as monoclonal gammopathy of undetermined significance, which is the most common, or quiescent multiple myeloma. On the other hand, other types of entities present symptoms, caused either by the neoplastic proliferation of plasma cells themselves or by the damage caused by the monoclonal protein they release. The most common are symptomatic multiple myeloma and light chain amyloidosis. According to the course moderator and president of the SEQC<sup>ML</sup> Protein Commission, Dr. Adrián Fontán, when asymptomatic (pre-malignant) monoclonal gammopathies evolve into symptomatic (malignant) gammopathies, they can cause problems such as bone pain, predisposition to infections, anemia, hyperviscosity, or renal, cardiac or neurological alterations. "Because of this, it is important to be able to assess the risk of progression from asymptomatic to symptomatic disease." The cause behind the appearance of this group of diseases is still unknown. Its incidence increases with age, is more common in men than in women, and is also more common in the African-American population than in the Caucasian population. In the words of Dr. Fontán, "the diagnosis of asymptomatic monoclonal gammopathies has increased, since different tools are currently available in the laboratory that, when combined, allow us to achieve greater test sensitivity." Currently, in the case of suspected monoclonal gammopathy, a proteinogram and measurement of free light chains together with their serum ratio are performed. Sometimes a urine study is necessary. In the case of a monoclonal gammopathy being diagnosed, a whole panel of tests is deployed that involve different specialties and especially Clinical Laboratory professionals. The diagnosis is made around the sixth and seventh decades of life. The follow-up of monoclonal gammopathies will depend on the patients' risk of progression. "This risk is assessed based on the type of immunoglobulin, its concentration, concentration of free light chains, immunoparesis, bone marrow status, genetic tests of tumor cells, as well as imaging tests," indicated Dr. Fontán.

### Precision medicine, key in the management of monoclonal gammopathies

Risk stratification models allow for the assessment of the risk of progression from premalignant to malignant disease in each patient. As Dr. Fontán pointed out, "it is important to correctly classify patients in order to provide adequate monitoring and treatment. That is, applying precision medicine so that each patient is unique. The Clinical Laboratory has an important role in this area, since for the management of the patient the analytical results are going to be decisive." In the words of Dr. Fontán, in recent years, having better classification systems and better treatments has resulted in closer monitoring of those patients with a higher risk of progression and also delayed progression towards symptomatic multiple myeloma. According to him, patients diagnosed with monoclonal gammopathy of undetermined significance, as well as those with asymptomatic multiple myeloma at low or intermediate risk of progression to symptomatic multiple myeloma, do not need treatment. With respect to asymptomatic multiple myeloma with a high risk of progression, it has been shown that applying treatment can delay the progression to symptomatic multiple myeloma. "Therefore, it is better to treat these types of patients rather than maintain a wait-and-see attitude. Finally, it is important to remember that symptomatic multiple myeloma currently has no curative treatment and therefore it is very important to delay progression," concluded Dr. Fontán.

Further info about SEQCML at [www.seqc.es](http://www.seqc.es)



Dr. Adrián Fontán, president of the Protein Commission of the Spanish Society of Laboratory Medicine (SEQC-ML)

# 70th Anniversary of the Croatian Society of Medical Biochemistry and Laboratory Medicine

Reported by: Nikolina Čolan, on behalf of CSMBLM

On the occasion of celebrating 70 years of our Society's work, the solemn academy was held in the Croatian State Archives on 20 October 2023. The ceremony was organized under the auspices of the President of the Republic of Croatia.



We were honoured to have many great scholars and local government representatives attend the jubilee, such as academician Josip Madić, deputy secretary of the Department of Croatian Academy of Medical Sciences of the Croatian Academy of Sciences and Arts; representative of the Mayor of Zagreb Mr. Šani Samardžić, MD, senior expert advisor in the City Office for Social Protection, Health, War Veterans and People with Disabilities; dean of the Faculty of Pharmacy and Biochemistry, prof. Jasmina Lovrić, Ph.D. and President of the Croatian Chamber of Medical Biochemists, Ms. Ivana Delić, Master of Medical Biochemistry. Our Society's former presidents were also present: prof. Zlata Flegar Meštrić, Ph.D., prof. Elizabeta Topić, Ph.D., prof. Ana-Maria Šimundić, Ph.D. and prof. Daria Pašalić, Ph.D. Highly esteemed guests such as Ana Soldo, Master of Pharmacy, the president of the Croatian Chamber of Pharmacists; Assist. prof. Snežana Jovičić, Ph.D., secretary of the European Federation for Clinical Chemistry and Laboratory Medicine and Society's friends from abroad attended this major event. The solemn academy was opened with the speeches of our distinguished guests, followed by prof. Nada Vrkić, Ph.D., who, on behalf of prof. Dubravka Juretić, Ph.D., presented Society's most important events and achievements in the past 70 years and reminded us of colleagues whose diligence and determination enabled everything we have today. This festive event was also an opportunity to award CSMBLM awards to the Society's most prominent members. The "Marijana Fišer-Herman Accolade" was awarded to prof. Nada Vrkić, Ph.D. "Ibrahim Ruždić Accolade" was awarded to assist. prof. Jasna Leniček Krleža, Ph.D. Due to her overall contribution to both our profession and the Society, the "Lifetime Achievement Award" was awarded to prof. Zlata Flegar Meštrić, Ph.D. The awards were presented by prof. Jasenka Wagner Kostadinović, Ph.D., president of the Committee for medals.



Annual award for scientific work in 2022 was awarded to Livija Šimičević, Ph.D. and annual award for the most successful young scientist "Krešo Lipovac" was awarded to Alen Vrtarić. The awards were presented by the president of the Society, assist. prof. Ivana Čelap, Ph.D. The following day, our traditional symposium was organized at the same venue

The academy was a great occasion to meet Society's retired distinguished members, reminiscence of our fruitful past and to make future plans which will contribute to further Society growth.



## The 13th Meeting of Young Biochemists in Písek

(under the auspices of the Czech Society of Clinical Biochemistry and Hospital in Písek)

Reported by: Aleš Kvasnička, David Friedecký and Pavel Malina

This year, for the 13th time, the annual meeting of young biochemists was held in Písek, organized by MUDr. Pavel Malina, Ph.D. (Hospital in Písek) under the auspices of the Czech Society of Clinical Biochemistry ČLS JEP, which took place on November 2-3, 2023, in Písek. After a welcome and a few words from the event organizer, the Arnold Beckman Award for young biochemists was introduced by the business director of Beckman Coulter, Ing. Lukáš Palivec, Ph.D.. He first acquainted us with the history of chemist, inventor, and philanthropist Arnold Beckman, who significantly contributed to the modern routine automatic analyzers, from the first inventions of pH electrodes and simple spectrophotometers to multicomponent automatic lines. The Arnold Beckman Award will serve as motivation for young biochemists, who can be duly recognized for presenting their contributions to the field of clinical biochemistry and laboratory diagnostics. Another excellent lecture was given by prof. MUDr. Vladimír Palička, CSc., dr. h. c., who dedicated his presentation to the problem of the large number of biochemical parameters that we can measure and provide to doctors, but the question is how many of them can be really meaningfully used. The lecture presented key recent studies and views of scientists from Europe and the USA, which were extensively discussed. In conclusion, there was an emphasis on greater involvement of biochemists in the process of interpreting results together with doctors and a change in perspective on clinical biochemistry as a "factory for numbers". The meeting was enriched by a practical course by prof. RNDr. David Friedecký, Ph.D., who focused on demonstrating the MedCalc program, specifically discussing the ROC (Receiver Operating Characteristic) curves in detail and how they can be helpful in evaluating the clinical performance of tests. The second practical statistical tool introduced were the Kaplan-Meier survival curves, which were explained using real data from lipidomic analysis and applied in predicting survival in patients after heart failure. This was followed by a comprehensive lecture on the practical examination of drug allergies with several case studies and tips from practice by MUDr. Jiří Novák and also a lecture by MUDr. Pavel Brož, Ph.D., who introduced us to the results of a study focusing on differences in the biochemical response of athletes to various preparations containing sodium bicarbonate. Finally, on the first day, Mgr. Aleš Kvasnička acquainted us with the activities of the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM) with regard to the upcoming European Laboratory Day, as well as the group of young scientists at EFLM (TG YS) and opportunities

for scholarships and internships for young scientists and biochemists in this community. Practical information from working in several EFLM working groups was provided by MUDr. Tomáš Šálek, Ph.D., EuSpLM, who further emphasized how beneficial and sought-after the presence of Czech experts in these supranational consortia is. The rest of the evening was spent in a friendly atmosphere with musical contributions on request with live music and singing, provided by the participants themselves.

On the second day, Mgr. Simona Kukrálová informed us about the comparison of methods of quantitative cytology of cerebrospinal fluid using the Fuchs-Rosenthal chamber and the Sysmex XN-1000 analyzer, with very interesting results that pointed to the undeniable advantage of the classical method in quantifying a very small number of blood elements. MUDr. Lenka Štefaničková, MUDr. David Randák, and MUDr. Pavel Malina, Ph.D. presented several case studies from practice with detailed professional commentary and description of the diagnostic process from the first suspicious findings to the complete diagnosis. MUDr. Václav Faměra introduced us to a recent case study that showed how critical it is to urgently determine resistant strains of *Staphylococcus aureus* and other associated rapid diagnostics. MUDr. Denisa Vlčková presented a study comparing the impact of inadequately collected biological material on selected biochemical parameters and the effect of combined contamination by interferents from different collection tubes. MUDr. Jan Vojtíšek and MUDr. Miroslav Verner prompted us to reflect on the necessary preparatory steps for the use of machine learning tools and artificial intelligence in practice and, above all, what obstacles need to be overcome with the help of computer scientists and bioinformaticians. Mgr. Hana Vimmerová introduced us to the possibilities of using the ChatGPT 4 language model in data analysis and comparing the efficiency of data processing and visualization using common spreadsheet programs compared to processing using artificial intelligence with the use of ChatGPT 4. The entire meeting was conducted in a good atmosphere full of new information and perspectives on where the field of clinical biochemistry will develop and how we can already directly contribute to its direction through membership in the ČSKB, EFLM, and possibly also the IFCC. We thank the organizers for the opportunity to participate in this great professional meeting and are already looking forward to continuing next year and for many more years to come.



Group photo of young clinical biochemists of the Czech Society of Clinical Biochemistry.



## NEWS FROM EFLM NATIONAL SOCIETIES

# LAB KVALITA 2023. Dedicated to the 30<sup>th</sup> anniversary of the independent Slovak Society of Clinical

Reported by: Ján Balla, Daniel Magula, Hedviga Pivovarníková and Mária Kačániová

This year we are celebrating the 30th anniversary of the independent Slovak Society of Clinical Biochemistry (SSCB). The culmination of the celebrations was the jubilee conference Labkvalita 2023 organized under the auspices of the EFLM in Stará Lesná, The High Tatras on October 8-10, 2023. Anniversaries are a time for celebration and recognition, but they are also a time for reflection.

The Slovak Society of Clinical Biochemistry (SSCB) was established alongside the federal Czechoslovak Society of Clinical Biochemistry in 1969. For a quarter of a century, it operated in parallel with the Czech Society of Clinical Biochemistry (CSSCB) within the Czech and Slovak Federal Republic. In 1993 federal society divided and both National societies became independent. In the same year at the XV. IFCC Congress of Clinical Chemistry in Melbourne SSCB was accepted as a full member of the IFCC. Later, at the registration of the EFLM in Brussels in 2013, SSCB was accepted as a full member of the regional federation EFLM. The first professional event of the SSCB in Slovakia was the Clinical Biochemistry Days in Nový Smokovec in 1962. The first Czechoslovak Congress was held in the High Tatras in 1966 which became the traditional venue of many important medical congresses and clinical biochemistry conferences in Slovakia for a long time.

The Labkvalita, a biennial scientific conference in clinical biochemistry and laboratory medicine, was founded in 1993. Labkvalita became a meeting of laboratory professionals, particularly from Slovakia, and keeners from other countries met regularly in order to exchange experience and to teach each other how to do things better. The Labkvalita conference is held every odd year under the banner of the SSCB, however, in the past in cooperation with other organizations as well. In even years the scientific event alternates with the National Congress of the SSCB. Since its foundation, Labkvalita has been held fifteen times, always with international participation and lectures by important European and world speakers, and often under the auspices of IFCC or later EFLM.

More than 3,000 participants, not only biochemists, microbiologists, hematologists, immunologists, and pathologists, but clinical laboratory directors, quality managers, IT specialists, hospital managers, representatives of Health Insurance, and the government, participated in the conference since 1993 as well. Conference participants valued the opportunity to learn from international colleagues. Contributions of top lecturers from the European Federation of Clinical Chemistry and Laboratory Medicine and The European Association for Predictive, Preventive, and Personalised Medicine will enrich the program by enhancing the diversity of perspectives and content represented.

The meeting always included a professional program focusing on current topics and those dedicated to the advancement of a variety of quality issues (QA, IQC, EQA, pre, and post-analytical aspects), quality indicators and measures, methods

standardization and harmonization, accreditation, education in laboratory medicine, the reimbursement and financial management, predictive, preventive and personalized medicine as well. I guess there is no topic that would not be presented in Labkvalita's meetings program. The program of the meetings was developed to always reflect actual issues in clinical biochemistry and laboratory medicine and improvement of the total laboratory process to patient outcomes. Distinguished speakers from Austria, Belgium, Canada, the Czech Republic, Denmark, Finland, Germany, Hungary, Israel, Italy, Norway, Russia, Scotland, Spain, Sweden, Switzerland, the UK, and the USA as well, were invited.

Labkvalita became the challenge of motivation, passion for work and service, the alignment of people and resources, developing relationships, and understanding the forces that drive clinical laboratories. During the past 30 years, a series of challenges, some of which put the event at risk, have finally resulted in a success. The success is no accident, nor is it guaranteed. We have built a tradition of sophisticated scientific programs and we believe our successors may successfully go on. Labkvalita has not only history and tradition but also spirit, which accompanied it throughout its life. Labkvalita is about new ideas, creativity, enthusiasm, search, and dedication of the organizers to the idea of quality in clinical laboratories. In the early beginnings, the conference program goals were focused mainly on improving the cost-effectiveness of the laboratory testing process, quality control, and external quality assessment.

Thanks to sponsorship contributions and the support of diagnostic companies, it was always self-financing and did not need any subsidies. It financed the production of the national journal *Laboratórna Diagnostika* and economically contributed to the SSCB budget to support other professional activities of the SSCB. The main location of the event was the High Tatras and their surroundings (Poprad), but the venue was also Bardejovské Kúpele, Košice, Bratislava, and Sielnica.

The ceremonial opening of the Labkvalita 2023 conference introduced Hedviga Pivovarníková, M.D., EuSpLM, the SSCB President, by a welcome speech. She cordially welcomed Congress guests, firstly Prof. Jozef Glasa, vice-president of Slovak Medical Association, and as well the Czech guests, Associate Prof. Drahomíra Springer, President of the Czech Society of Clinical Biochemistry (CSCB), and Prof. Jaroslav Racek, CSCB Vice-president, and Prof. Antonín Jabor, former CSCB President.

Then the celebratory program continued under the moderation of Daniel Magula, M.D., SSCB Secretary, awarding honours and awards to long-standing meritorious members of the Slovak Society of Clinical Biochemistry. Prof. Anna Gvozdjáková, a scientist with unsubstitutable shares for the development of the new scientific discipline "mitochondrial medicine", was awarded the Honorary Plaque under the name of

Academician T. R. Niederland. Prof. Ladislav Turecký, Head of the Institute of Medical and Clinical Biochemistry at the Medical Faculty of Comenius University in Bratislava was awarded by a Commemorative Letter of the Slovak Medical Association (SkMA).

Gold Medals "Propter Merita" of the Slovak Medical Association was awarded to Prof. Stanislav Oravec, physician, and scientist in the field of clinical biochemistry and endocrinology, and the Chief Adviser for Clinical Biochemistry at the Ministry of Health, then to Ing. Ján Balla, National Representative of SSCB in EFLM and IFCC and the Founder of Labkvalita conference, as well, for his lifetime and advanced contribution to the quality development in clinical biochemistry and laboratory medicine. Silver Medals of SkMA were awarded to Ing. Vladimír Heriban, current Vice-President of SSCB, and Peter Sečník, M.D., a physician involved in the extension and application of informatics in clinical biochemistry. The Bronze Medal of SkMA was awarded Mgr. Viera Kepičová. Other members of SSCB were awarded SkMA Letters of Appreciation.

Labkvalita 2023 had a varied scientific program. In addition to traditional laboratory topics about the quality of the laboratory process (4 lectures), advances in clinical biochemistry in Slovakia and over the world (4 lectures), the application of special methods in laboratory medicine (4 lectures), case reports and diagnosis of myocardial infarction (10 lectures), the program included also non-traditional topics from ethics and psychology in medicine.

The scientific program of the Annual meeting Labkvalita 2023 served to provide laboratory professionals with new ideas in laboratory medicine. Prof. Mario Plebani, EFLM President Elect enriched the gathering with his keynote lecture. Just before his presentation, he was awarded Honorary Membership of the Slovak Society of Clinical Biochemistry. He shared his vision with the participants of how laboratory medicine will change in the future. Diagnostic data are fragmented, being produced and delivered within each diagnostic discipline. They synthesize existing data only a little and are not translated into actionable information. Therefore, diagnoses may still be incorrect, delayed, or never made. Integrated diagnostics (ID) represents a vision for the future, wherein laboratory, pathology, and imaging data, together with clinical information, are aggregated to support through expert systems, and algorithms based on machine learning and artificial intelligence.

An integral part of the conference was the exhibition of the news and advances by diagnostic companies and manufacturers, which form the basis of the financing of this conference with their sponsorship contribution. The organization of the event was traditionally entrusted by Dr. **Mária** Kačániová with her technical team.



EB SSCB. On top left to right D. Magula,, M. Kačániová, H. Pivovarníková, A. Šaligová, M. Kapalla, J. Balla. At the bottom left to right P. Sečník, V. Heriban



Hedviga Pivovarníková, SSCB President at welcome speech



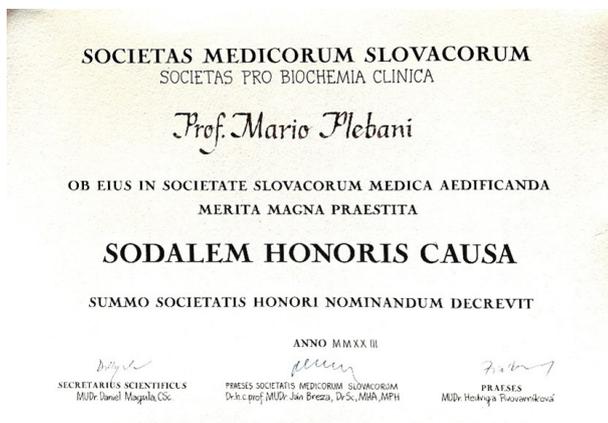
Ján Balla, SSCB National Representative was awarded the Gold Medal of Slovak Medical Association



Prof. Mario Plebani awarded SSCB Honorary Membership. Left H. Pivovarníková and D. Magula



Labkvalita 23 participants



Prof Mario Plebani SSCB Honorary Membership Plaque



SSCB Secretary and Labkvalita moderator D. Magula

## IFCC NEWS

Reported by Katherina Psarra, Editor of IFCC eNews and Chair eNews WG

Dear colleagues,

In the [November issue](#) of the eNews we pay tribute to the late Jocelyn Hicks, a model of a scientist and a woman, a very important person for IFCC. The IFCC people were lucky to know her well, lucky was also IFCC to have her as a president, lucky us to follow her example.

A pleasant article by Dr Bernard Gouget takes us to the Indian Karala state, (difficult to remember the name of this so interesting city, where the congress took place). We learn about the city and the area, we learn about proteomics and AI, it is a journey in India and so much scientific knowledge at the same time. And then, go to the next article by Prof M. Iqbal Parker that introduces us to the connection between laboratory and nutrition from a congress in Marrakech. The next article by the TF-YS is presenting the webinar by the young scientists on artificial intelligence, bioinformatics and the future. Three young ladies, scientists, following on Jocelyn's steps are introducing us, in three different languages, to a survey on reporting critical-risk laboratory results all over the world. Go on and respond to this survey in your preferred language. UNIVANTS guides us to the Executive Leadership Exchange. And finally, reports from the Mexican and the Australasian societies, together with new societies joining IFCC and the congresses to be held all over the world, are closing this eNews issue. Don't forget, dear colleagues, that the [WORLDLAB DUBAI 2024](#) is approaching. Get prepared on time! Go on and read this new issue dear colleagues! A lot to enjoy a lot to gain.



Katherina  
Dr Katherina Psarra, eNews Editor

### Farewell to Professor Jocelyn MB Hicks IFCC President 2006-2008

By Graham Beastall, IFCC Past President



With great sadness we announce that Dr Jocelyn M. Hicks, President of the IFCC from 2006 to 2008, passed away on 7th October 2023. Dr Hicks was an accomplished medical scientist, educator, and administrator. She will be remembered for her dynamism and many contributions to Clinical Chemistry and Laboratory Medicine worldwide and her passion for education. Within the IFCC, she worked to enhance the quality of laboratory testing worldwide. Under her leadership, the Visiting Lecturer Program was greatly expanded. During her presidency, the number of full Members grew. The number of Corporate Members also increased despite many mergers. She was awarded with the IFCC-Henry Wishinsky Award for Distinguished International Services (since 1990) and the IFCC Distinguished International Services Award (1981-1987) in recognition of her efforts towards emerging countries. Her passing is a significant loss to all of us. The IFCC's thoughts are with her family and friends.

[Click here to read the full portrait of Dr Hicks.](#)

### Last Call for the Executive Leadership Exchange.

Last chance to register and attend the [Executive Leadership Exchange](#) (ELX) forum for healthcare excellence. This inaugural, global educational event is open to all healthcare professionals, including laboratorians. With a goal to maximize value, resolve care gaps and promote wellness, this unique program is a must see and available until Dec 31st. Watch complimentary sessions and register today at [www.healthcareELX.com](http://www.healthcareELX.com). Registered attendees can obtain up to 15.25 ACCENT® continuing education credits.

**IFCC WORLDLAB DUBAI 2024**  
MAY 26-30

**IFCC** International Federation of Clinical Chemistry and Laboratory Medicine

**ARAB FEDERATION OF CLINICAL BIOLOGY (AFCB)**

**SSCC** الجمعية السعودية للمخبرية السريرية / Saudi Society for Clinical Chemistry

**27 May**

**EFLM SESSION**

**09:00-11:00 GREEN LABS. IMPLEMENTING SUSTAINABLE PRACTICES IN MEDICAL LABORATORIES**  
Chair: Tomris Ozben (Turkey)

Green labs: Implementing sustainable practices in medical laboratories  
*Tomris Ozben (Turkey)*

Striking the Right Balance: Sustainability and Innovation  
*Fion Jackson (UK)*

Strategies for energy conservation and sustainability  
*Snezana Jovicic (Serbia)*

Waste management for clinical laboratories  
*Alistair Gammie (UK)*

**Join the WordLab Congress in Dubai!**  
<https://www.dubai2024.org>

## 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 [here](#) or email [eflm@eflm.eu](mailto:eflm@eflm.eu)

6 December 2023



**EFLM Lessons in Immunochemistry: Lesson n. 8 - CORONARY ARTERY DISEASE predicting the development in apparently healthy individuals: the role of Lp(a)**  
on-line, [Click here for information](#)

13 December 2023



**EFLM Webinar: Biomarkers of sepsis: procalcitonin and more**  
on-line, [Click here for information](#)

Helsinki (FI), 08-09 February 2024

**Labquality Days – International Congress on Quality in Laboratory Medicine and Health Technology 2024**

[Click here for information](#)

Bruges (BE), 8 March 2024

**Symposium non-infectious serology**

[Click here for information](#)

Santorini (GR), 21-24 May 2024

**The 10+1 Santorini Conference “Systems medicine and personalised health & therapy”- “The odyssey from hope to practice: Patient first - Keeps Ithaca always in your mind”**

[Click here for information](#)

Saint Malo (FR), 13-14 June 2024

**9th International Symposium on Critical Care Testing and Blood Gases**

[Click here for information](#)

Padua (IT), 23-24 September 2024



**4th EFLM Strategic Conference. A Vision to the future: value-based laboratory medicine**

[Click here for information](#)

EuroMedLab 2025 Brussels (BE), 18-22 May 2025



**26th European Congress of Clinical Chemistry and Laboratory Medicine 49th Annual Meeting of the Royal Belgian Society of Laboratory Medicine**

[Click here for information](#)