

30TH MEETING OF BALKAN CLINICAL LABORATORY FEDERATION

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

30th 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 Mauricio Ferari »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.

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.

| Wednesday, 27.09.2023. | | | |
|--|--|-------|-------|
| Session 1: Bone and mineral metabolism | Emir Muzurovic - <i>Hyperparathyroidism - diagnosis with many horizons.</i> | 14:00 | 14:30 |
| | Etienne Cavalier - <i>Parathyroid hormone: from the first radio-immunoassay to LC-MS/MS.</i> | 14:30 | 15:00 |
| | Aylin Sepici Dincel - <i>Sclerostin and Dickkopf-1 as a new marker of bone disease.</i> | 15:00 | 15:30 |
| | Nela Raseta Simovic - <i>Bone metabolism markers in physically active postmenopausal women.</i> | 15:30 | 16:00 |
| Session 2: Total testing process in clinical laboratory | Mario Plebani - <i>Standardization and harmonization in laboratory medicine: data comparability is needed.</i> | 16:00 | 16:30 |
| | Khosrow Adeli - <i>Closing the gaps in adults and pediatric reference intervals: global initiatives.</i> | 16:30 | 17:00 |
| | Sverre Sandberg - <i>How to use biological variation data to 1) set performance specifications 2) monitor patients 3) generate personal reference.</i> | 17:00 | 17:30 |

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.**

| Thursday, 28.09.2023. | | | |
|---|---|-------|-------|
| Lab-clinical case reports: From diagnostics to diagnosis | Petra Uljarevic - <i>Blood morphology. A microscope: between reality and mind's eye.</i> | 7:30 | 8:15 |
| | Aleksandra Antovic - <i>Antiphospholipid syndrome – diagnostic and therapeutic challenges.</i> | 8:15 | 9:00 |
| Session 3: Laboratory haematology | Sverre Sandberg - <i>An overview on how to diagnose and monitor the different porphyrias.</i> | 9:15 | 9:45 |
| | Slavica Pavlovic Djuranovic - <i>What makes you stronger can kill you: Use of poly-basic peptides as new drug candidates against Plasmodium falciparum.</i> | 9:45 | 10:15 |
| | Marko Trtica - <i>Iron deficiency in nonanaemic COPD patients - Could low haemoglobin density and microcytic anaemia factor be useful?</i> | 10:15 | 10:30 |
| | Miljan Savkovic - <i>The importance of determining hepcidin-25 for treating anemia in patients with end-stage renal disease.</i> | 10:30 | 10:45 |
| Session 4: Thrombosis and haemostasis | Jovan Antovic - <i>Laboratory diagnosis of thrombotic microangiopathies: Measurement of ADAMTS-13.</i> | 11:30 | 12:00 |
| | Ivana Lopic - <i>One disease, numerous challenges: How to successfully diagnose von Willebrand disease in the laboratory?</i> | 12:00 | 12:30 |
| | Nikola Bakic - <i>Mainstream in haemostasis in Montenegro, can we keep up?</i> | 12:30 | 13:00 |
| | Milena Velizarova - <i>Optimal utilization of thrombophilia testing in asymptomatic individuals.</i> | 13:00 | 13:15 |

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| Session 5: Cardiovascular diseases and cardiovascular disease risk prediction | Murat Cihan - <i>Clinical and laboratory applications of kynurenine and its pathway products.</i> | 15:00 | 15:15 |
| | Vladimir Prelevic - <i>Early vascular ageing, arterial stiffness and target organ damages in treated hypertensive patients.</i> | 15:15 | 15:45 |
| | Ebru Sezer - <i>Protein Bound Uremic Toxins (PBUTs); Potential impact of implementing test panels for PBUTs on patient outcomes.</i> | 15:45 | 16:15 |
| | Muhammed Fevzi Kilinckaya - <i>Cathepsin D in cardiovascular diseases and its relationship with cardiovascular mortality.</i> | 16:15 | 16:30 |
| | Aneta Boskovic - <i>Clinical implications of high-sensitivity cardiac troponin assays in acute coronary syndrome.</i> | 16:30 | 17:00 |
| Session 6: Immunology / Allergology | Urska Bidovec Stojkovic - <i>Exploring the latest innovations in laboratory diagnostics for drug-induced anaphylaxis: towards personalized approaches and biomarker develop.</i> | 17:45 | 18:15 |
| | Marija Saric Matutinovic - <i>Thyrotropin receptor antibodies: clinical relevance and methodological aspects.</i> | 18:15 | 18:45 |
| | Neda Milinkovic - <i>Analytical and clinical characteristics of serological immunoassays of anti-SARS-CoV-2 antibodies.</i> | 18:45 | 19:00 |
| | Verica Jakjimoska - <i>The bright side of COVID-19 pandemic for patients with allergic conditions.</i> | 19:00 | 19:15 |

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.

| Friday, 29.09.2023. | | | |
|---|--|-------|-------|
| Lab-clinical case reports: From diagnostics to diagnosis | Adie Viljoen - <i>Lipoprotein (a).</i> | 7:30 | 8:15 |
| | Marina Minic-Novcic - <i>Curious Cases of Dyslipidaemia – A Series of Case Reports.</i> | 8:15 | 9:00 |
| Session 7: Biomarkers in neurobehavioral and psychiatric disorders | Ole A. Andreassen - <i>Multimodal prediction of age of onset of Alzheimer's disease with potential for treatment stratification.</i> | 9:15 | 9:45 |
| | Sergej Djuranovic – <i>Approaches for the targeted modulation of mRNA translation in neurodegeneration.</i> | 9:45 | 10:15 |
| | Srdjan Djurovic - <i>Modeling psychiatric disorders with patient-derived brain organoid cultures.</i> | 10:15 | 10:45 |
| | Milena Petrovic - <i>The influence of COMT gene polymorphism on the severity of presentation of negative symptomatology in schizophrenia spectrum.</i> | 10:45 | 11:00 |
| Session 8: Precision medicine technologies and molecular diagnostics | Ron van Schaik - <i>Pharmacogenetics: prevention is key!</i> | 11:45 | 12:15 |
| | Maurizio Ferrari - <i>RNA editing as a diagnostic test to diagnosis bipolar disorders.</i> | 12:15 | 12:45 |
| | Dobrin Svinarov - <i>Clinical mass spectrometry becomes a major tool for precision medicine.</i> | 12:45 | 13:15 |

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| Session 9: Advancing healthcare for transgender patients | Marta Bizic - <i>Genital surgery and bioethical aspects in transgender persons.</i> | 15:00 | 15:30 |
| | Jeroen Vervalcke - <i>Hormone treatment in transgender persons, and interpreting laboratory results.</i> | 15:30 | 16:00 |
| | Dusica Markovic Zigic - <i>Psychiatric aspects in transgender population.</i> | 16:00 | 16:30 |
| Session 10: Dyslipidemia, diabetes, adiposity | Khosrow Adeli - <i>Neuroendocrine Regulation of Food Intake and Metabolism via Gut Hormones and Enteric Neurons: Implications in Obesity & Type 2 Diabetes.</i> | 17:15 | 17:45 |
| | Adie Viljoen - <i>Diabetes and lipids.</i> | 17:45 | 18:15 |
| | Marina Minic-Novcic - <i>Familial hypercholesterolaemia, diagnosis and management.</i> | 18:15 | 18:45 |
| | Marina Jaksic - <i>Association between vitamin D and hypertension in preobese and obese children in Montenegro.</i> | 18:45 | 19:00 |
| | Aleksandra Atanasova-Boshku - <i>Dyslipidemia and relevant disorders to female reproductive health.</i> | 19:00 | 19:15 |

Friday, 29.09.2023. Lab-clinical case reports: From diagnostics to diagnosis Friday, 29.09.2023. ended with the Get-together dinner, almost unanimously proclaimed as one of the best social events on conferences, not only by BCLF members, but also by distinguished guests from all around the world. Aim of the organizers was to present at least the small part of Montenegrin and Boka Bay culture, so beside

the abundant scientific knowledge participants could leave the Herceg Novi with new information from other areas of life.

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.

| Saturday, 30.09.2023. | | | |
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| Session 11: Masterclass from Balkan region I | Katerina Toseska-Trajkovska - <i>The science of women leadership.</i> | 8:00 | 8:30 |
| | Christos Tsatsanis - <i>Sepsis biomarkers: from bench to bedside.</i> | 8:30 | 9:00 |
| | Irini D. Leimoni - <i>Medical waste management at the biochemistry laboratory.</i> | 9:00 | 9:30 |
| | 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> | 9:30 | 9:45 |
| | Vjeroslava Slavic - <i>Immunomodulatory Effect of Nanomembrane-Based Low-Volume Plasma Exchange on Intestinal Permeability in Metabolic Syndrome.</i> | 9:45 | 10:00 |
| | Ozlem Unay Demirel - <i>Early prediction of bloodstream infection with complete blood count parameters: An ex-vivo human whole blood model.</i> | 10:00 | 10:15 |
| Session 12: Masterclass from Balkan region II | Radivoj Jadric - <i>Old biomarkers and their new use.</i> | 11:15 | 11:45 |
| | Sorin Giju - <i>Various types of urinary casts and their diagnostic significance - manual microscopic vs automatic method - an integrated view.</i> | 11:45 | 12:15 |
| | Aleksandra Klisic - <i>Endocan as a novel marker of cardiometabolic disorders.</i> | 12:15 | 12:45 |
| | Kenan Preljevic - <i>Chemical composition, antioxidant and antibacterial activity of essential oil of <i>Satureja montana</i> L.</i> | 12:45 | 13:00 |

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

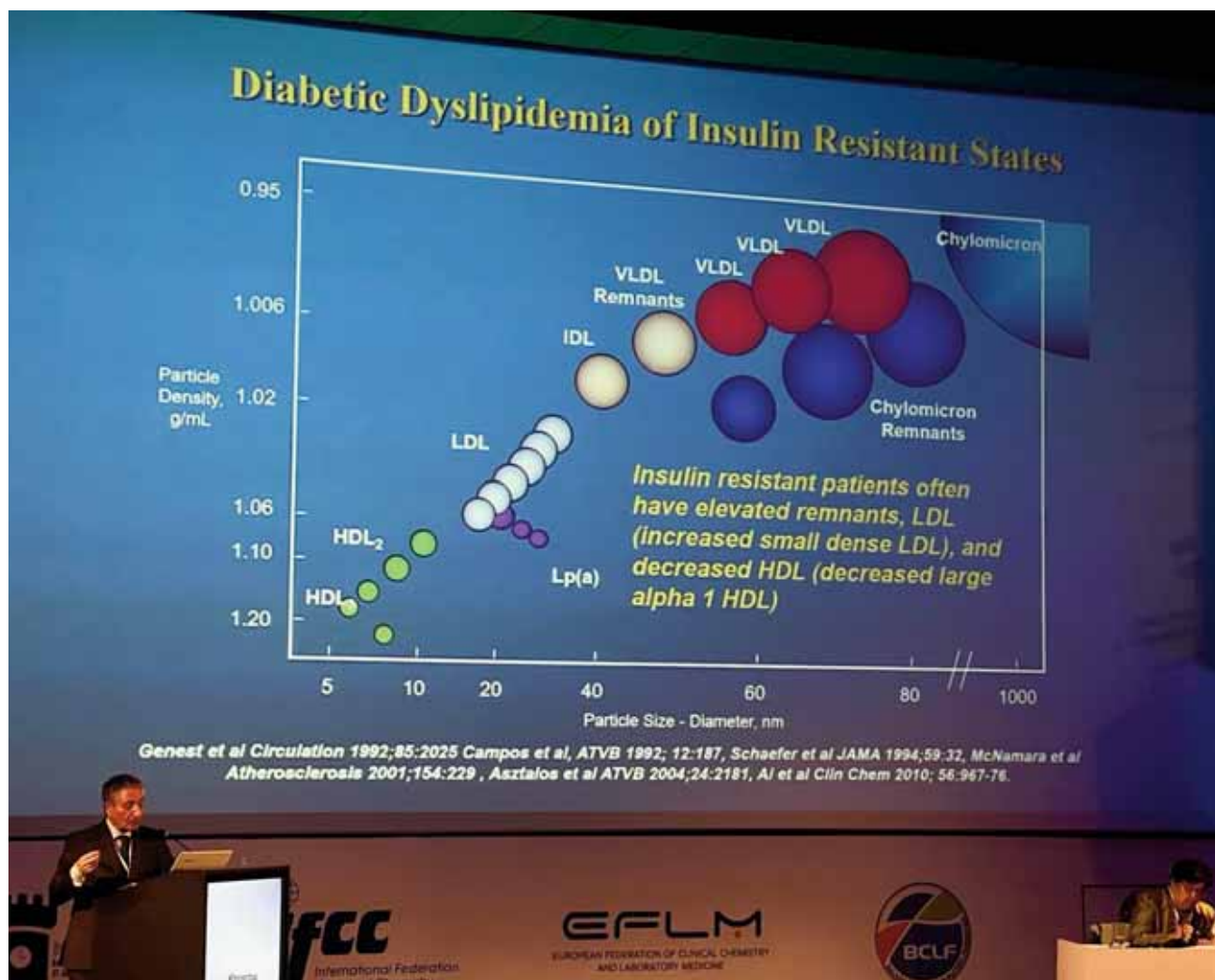
Besides the scientific part, BCLF2023 included five Commercial workshops, where leading manufacturers in this field had the opportunity to present their cutting-edge technologies:

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 30th BCLF meeting was rated with overall 4.53 mean score (5 – the best score).

30th BCLF meeting in Montenegro was very successful, we are looking forward to the next one!



Prof. Khosrow Adeli, IFCC president, lecture.



Prof. Mario Plebani, EFLM president-elect presentation of the EFLM activities.



Congress hall - Congress Venue - Park Hall, Herceg Novi.



Get together dinner, Palmon bay hotel, Igalo, Herceg Novi.



Exhibition area, Park Hall Foyer.



Prof. Nada Majkic-Singh and Dr Marina Minic Novcic as chairs.



Prof. Tomris Ozben, EFLM president lecture.



Welcome cocktail after the Opening ceremony, Gradska kafana, Herceg Novi.