

# 7<sup>th</sup> EFCC

SYMPOSIUM FOR BALKAN REGION

Under IFCC and EFCC Auspices

Biomarkers:  
From Standardization  
to Performance

PROGRAMME

Hotel „M“, BELGRADE, SERBIA

June 23–25, 2011

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## AUSPICES

### 7<sup>th</sup> EFCC Symposium for Balkan Region

is organized under the Auspices of the  
International Federation of Clinical Chemistry (IFCC)  
European Federation of Clinical Chemistry  
and Laboratory Medicine (EFCC)  
Balkan Clinical Laboratory Federation (BCLF)  
Ministry of Science and Technology of Serbia  
Ministry of Health of Serbia

## MEETING ORGANISERS

Society of Medical Biochemists of Serbia  
Pharmaceutical Faculty, University of Belgrade  
Institute of Medical Biochemistry,  
Clinical Center of Serbia

## SYMPOSIUM COORDINATORS:

Nada Majkić-Singh (Serbia)  
Victor Blaton (Belgium)  
Svetlana Ignjatović (Serbia)

## MEETING SECRETARIAT

### INSTITUTE OF MEDICAL BIOCHEMISTRY CLINICAL CENTER OF SERBIA

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Dear colleagues and friends,

The Society of Medical Biochemists of Serbia has the pleasure to welcome you to the 7<sup>th</sup> EFCC Symposium for Balkan Region being held under the title **Biomarkers: From Standardization to Performance**. The 7<sup>th</sup> EFCC Symposium for Balkan Region is organized under the auspices of the International Federation of Clinical Chemistry (IFCC) and European Federation of Clinical Chemistry and Laboratory Medicine (EFCC). The Society as a member of the IFCC and EFCC greatly appreciates the role it has in the continuing development of our discipline according to the IFCC mission and the Strategic Plan. EFCC appointed Belgrade (Serbia) and the Society of Medical Biochemists of Serbia as the organizer of educational symposia for clinical chemists in the Balkan region and as a result of this decision six symposia have been organized up to now very successfully.

The first Symposium (Belgrade, June 2005) under the title **»Education, Management and Standards in Laboratory Medicine«** appointed the Present and future activities of EC4 (Rob Jansen), Education and training program of the IFCC in clinical chemistry and laboratory medicine (Willem Huisman), A practical tool for the management of quality in the medical laboratory – ISO 15189 (David Burnett), External quality assessment programs: past, present and future (Mario Plebani), and the process of Establishing reference laboratories in laboratory medicine (Lothar Siekmann). Also experts from the Balkan region (L. Crezante, D. Rizos, N. Majkić-Singh, S. Ignjatović, G. Kolios, A. Tzontcheva) presented their experiences regarding the topics of the Symposium in the Balkan region.

During the 2<sup>nd</sup> EFCC Symposium (Novi Sad, October 2006) held under the title **»New Diagnostic Tools and Quality in Laboratory Medicine«** the New diagnostic tools in clinical chemistry: Applications of SELDI-TOF MS, 2 D-HPLC and microarrays in protein profiling (Marja P. van Dieijen-Visser, Isabella Levreri, Reinhard Hiller), the New biomarkers of diseases: Cardiac natriuretic peptides (Johannes Mair), Complexed PSA (Rainer Neumann), Bone remodeling (Jan Stepan), and Evidence-based approach (Svetlana Ignjatović, Nada Majkić-Singh) were discussed. A special section was devoted to the Application of quality indicators in a medical laboratory (Oswald Sonntag, Jakub Hejsek).

The 3<sup>rd</sup> EFCC Symposium (Belgrade, September 2007) titled **»Theory and Application of Evidence-Based Laboratory Medicine«** provided answers to the following questions: What is evidence based laboratory medicine? (Rita Horvath), How to ask the right questions? (Dunja Rogić), How should you read an article about a diagnostic test? (Svere Sandberg), What is a systematic review and how can it be performed? and How to appraise guidelines? (Rita Horvath), Is there a

correlation between the methodological quality and the validity of contents of guidelines? (Joseph Watine), How to implement EBLM in everyday practice? (S. Sandberg). Also, special subjects addressed the matter of Diagnostic guidelines compared to therapeutic guidelines (Wytze Oosterhuis) and Simple statistics used in diagnostic test evaluations (Svere Sandberg & Diler Aslan) were presented.

The 4<sup>th</sup> EFCC Symposium (Belgrade, June 2008) was organized with the subject »**Impact of the Pre-analytical Phase on the Quality of the Laboratory Results**« where the latest findings regarding the application and significance of the impact of preanalytical factors on the quality of laboratory results were presented with the goal of preventing preanalytical errors that can cause damage to the patients as well as the entire laboratory procedure (Victor Blaton, Nada Majkić-Singh, Sol Green, Pierangelo Bonini, Giuseppe Lippi). Safety measures during the process of collecting biological samples from patients were been discussed, e.g. during venipunctures, for the purpose of protecting the patients (Camilla Mattiuzzi). Besides presentations on the impact of the preanalytical phase in hematology (Giuseppe Banfi), sample stability was also reviewed (Gian Luca Salvagno), as well as the recommendations and ways of educating staff regarding the quality of diagnostic samples (Walter G. Guder). In order to achieve the best possible results, new approaches in laboratory medicine dealing with the application and philosophy behind the LEAN and SIX SIGMA techniques were laid out (Ana Stanković). Experts from Serbia, Romania, Bulgaria and Greece (Z. Šumarac, A. Tzontcheva, M. Cojocar) presented their experiences regarding the application of the preanalytical phase technology in the Balkan region. Round table discussions on the topics presented served as the basis for reaching conclusions and guidelines in this area of laboratory medicine with the aim of achieving the best possible results to the benefit of patient treatment.

The idea of the 5<sup>th</sup> EFCC Symposium for Balkan Region (Belgrade, October 2009) under the title – **Proteins: from electrophoresis to proteomics** was to make a connection and show the continuation of different electrophoresis techniques for protein profiling to proteomics which is able to show the large-scale image of proteins, particularly their structures and functions. The program of the 5<sup>th</sup> Symposium covers: Agarose gel electrophoresis and capillary electrophoresis (Jean-Francois Giot), Lab-on-chip electrophoresis (Olgica Trenčevska), MADGE-Microplate array diagonal gel electrophoresis (Sanja Stanković), Isoelectrofocusing and PCR amplification-reverse hybridization assay in evaluation of alfa-1-antitrypsin deficiency (Andelo Beletić), Proteomics techniques in biomarker discovery (Antonia Vlahou), Urinary proteome analysis using capillary electrophoresis coupled with mass spectrophotometry (Harald Mischak), Glucocorticoid receptor in health and disease (Gordana Matic), Molecular diagnosis of phenylketonuria (Sonja Pavlović), Experiences in clinical protein arrays: Biochip cardiac array technology (Grazyna Sypniewska), Cytokine and growth factor array (Hans J. van Pelt), Colorectal cancer array (Martin Crockard) and Multiparameter testing of colorectal cancer (Bernhard Risse).

The 6<sup>th</sup> EFCC Symposium for Balkan Region (Belgrade, October 2010) has been organized under the topic – **Implementing Laboratory Automation, Quality and Efficiency** where prominent foreign (Mario Plebani, Giorgio Da Rin, Jean-Michel Valid, Gerd Hafnner, Gabriele Halwachs-Baumann, Divide Villa) and local experts (Nada Majkić-Singh, Svetlana Ignjatović and Vojislav Stoilković) introduced to the participants the means for achieving full automation and laboratory consolidation, with the goal of adhering to the philosophy of Lean and Six Sigma laboratory efficiency.

The 7<sup>th</sup> Symposium (Belgrade, June 2011) under the title **Biomarkers: From Standardization to Performance** is natural continuation of the knowledge from the previous Symposia. It will be

marked with the lecture titles: What is biomarker? From discovery to clinical application (Nada Majkić-Singh), Standardization approaches and definition of performance requirements for heterogeneous biomarker assay (Mauro Panteghini), Defining biomarker performance and clinical validity (Patrick MM Bossuyt), Prospective biomarkers in cardiovascular events (Victor Blaton), How do apolipoproteins B and A perform as biomarker in acute coronary syndrome patients (Grazyna Sypniewska) and The role of copeptin (Dunja Rogić) and Myeloperoxidase (Sanja Stanković) as a cardiac biomarkers. The new biomarkers of molecular aging of proteins (Philippe Gillery), The biomarkers of diabetes complications (Diler Aslan), and Glycans as biomarkers (Miroslava Janković) will be presented. Screening biomarkers for fetal anomalies (Svetlana Ignjatović), Biomarker for bone turnover (Andrea Griesmacher) and A novel promising tumor markers combination for the prediction of ovarian cancer (Demetrios Rizos) will be discussed. The special lecture on Biomarkers, Biospecimen and European biobanking infrastructures for translation research will be discussed (Bernard Gouget).

On behalf of the Society of Medical Biochemists of Serbia and the EFCC we would like to welcome and thank all distinguished lecturers for their participation in our Meeting. Their presence gives very high recognition and prestige to this Meeting, which will influence the development of clinical chemistry and laboratory medicine in the Balkan region.

Special thanks are addressed to the participants whose presence is the main stimulus and only reward for those of us who have worked hard in organizing this meeting. We would like to thank all industrial companies and local representatives participating in the exhibitions and sponsoring the organization of the Meeting.

We hope that the EFCC Symposium in Belgrade will continue its successful progress of the previous years, aiming to focus on the new data in the field of laboratory medicine.

To all of you, we wish that you may enjoy these days of science, friendship and hospitality. We hope you will have a happy and pleasant stay in Belgrade.

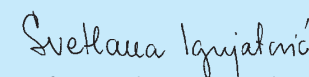
Symposium coordinators



Prof. Dr. Nada Majkić-Singh  
President of the Society of Medical Biochemists of Serbia



Professor Victor Blaton  
EFCC Past President



Prof. Dr. Svetlana Ignjatović  
Member of Serbian Health Council

## THURSDAY, JUNE 23, 2011

11,00 a.m. – 13,00 p.m.

### Section 1

Chairs: *V. Blaton* (Belgium)  
*N. Majkić-Singh* (Serbia)

11,00 – 11,30 a.m.

**Introduction**  
**EFCC Symposium for Balkan Region**  
(Prof. Dr Nada Majkić-Singh, Prof. Dr Victor Blaton)

11,30 – 12,00 a.m.

**What is biomarker?**  
**From discovery to clinical application**  
*Nada Majkić-Singh*,  
Institute for Medical Biochemistry,  
Clinical Centre of Serbia, Belgrade, Serbia

12,00 – 12,30 p.m.

**Standardization approaches**  
**and definition of performance**  
**requirements for heterogeneous**  
**biomarker assays**  
*Mauro Panteghini*,  
Department of Clinical Sciences  
»Luigi Sacco« University of Milan, Milan, Italy

12,30 – 13,00 p.m.

**Defining biomarker performance**  
**and clinical validity**  
*Patrick MM Bossuyt*,  
Dept. Clinical Epidemiology  
and Biostatistics, Academic Medical Center,  
University Amsterdam, The Netherlands

*Discussion*

13,30 – 14,30 p.m.

*Lunch*

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15,00 p.m. – 17,00 p.m.

### Section 2

Chairs: *G. Sypniewska* (Poland)  
*S. Stanković* (Serbia)

15,00 – 15,30 p.m.

**Prospective biomarkers in**  
**cardiovascular events**  
*Victor Blaton*,  
Department of Clinical Chemistry  
Hospital AZ Sing-Jan AV, Brugge, Belgium

15,30 – 16,00 p.m.

**How do apolipoproteins B and A**  
**perform as biomarkers in acute**  
**coronary syndrome patients**  
*Grazyna Sypniewska*,  
Department of Laboratory Medicine,  
Collegium Medicum, Nicolaus Copernicus University,  
Bydgoszcz, Poland

16,00 – 16,30 p.m.

**Copeptin – is there a role for**  
**another cardiac biomarker?**  
*Dunja Rogić*,  
Clinical Institute of Laboratory Diagnostics,  
Clinical Hospital Center Zagreb, Croatia

16,30 – 17,00 p.m.

**Myeloperoxidase – a novel risk biomarker**  
**for diagnosis of acute coronary syndrome**  
*Sanja Stanković, Nada Majkić-Singh*  
Institute for Medical Biochemistry,  
Clinical Centre of Serbia, Belgrade, Serbia

*Discussion*

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## FRIDAY, JUNE 24, 2011

**9,00 a.m. – 11,00 a.m.**

### Section 3

Chairs: *D. Aslan* (Turkey)  
*B. Gouget* (France)

9,00 – 9,30 a.m.

**Biomarkers, biospecimen and European biobanking infrastructures for translational research**

*Bernard Gouget*,  
Federation Hospitaliere France, Paris, France

9,30 – 10,00 a.m.

**Nonenzymatic posttranslational modification derived products: New biomarkers of molecular aging of proteins**

*Philippe Gillery*,  
Laboratoire de Biologie et de Recherche Pediatriques,  
Americal Memorial Hospital, Reims, France

10,00 – 10,30 a.m.

**Biomarkers for diabetes complications: the results of several clinical studies**

*Diler Aslan*,  
Pamukkale University School of Medicine,  
Denizli, Turkey

*Discussion*

*Coffee break*

**11,00 a.m. – 13,00 p.m.**

### Section 4

Chairs: *A. Griesmacher* (Austria)  
*D. Rizos* (Greece)

11,00 – 11,30 a.m.

**Human epididymis protein 4 (HE4) and CA125. A novel promising combination for the prediction of ovarian cancer**

*Demetrios Rizos*,  
Medical School, University of Athens, Greece

11,30 – 12,00 a.m.

**Biomarkers for bone turnover**

*Andrea Griesmacher*,  
Central Institute of Med. and Chem. Laboratory,  
Diagnostics LKH-University Hospital of Innsbruck, Austria

12,00 – 12,30 p.m.

**Screening biomarkers for fetal anomalies**

*Svetlana Ignjatović*,  
Institute for Medical Biochemistry,  
Clinical Centre of Serbia, Belgrade, Serbia

*Discussion*

13,30 – 15,00 p.m.

*Lunch*

**15,30 p.m. – 17,00 p.m.**

*Section 5*

Chairs: *V. Blaton* (Belgium)  
*N. Majkić-Singh* (Serbia)  
*S. Ignjatović* (Serbia)

🔗 Experiences from Balkan region  
Glycans as biomarkers: status and perspectives

*Miroslava Janković*,  
Institute for the Application of Nuclear Energy-INEP,  
University of Belgrade, Serbia

🔗 Round table discussion on presented topics

*Discussion*

**SATURDAY, JUNE 25, 2011**

**Sightseeng Tour**

**A train ride on the Šargan Eight railway and visit to city of Mokra Gora and Drvengrad (Wooden Town)**

## GENERAL INFORMATION

### Date and Venue

The Scientific programme and exhibition of the 7<sup>th</sup> EFCC Symposium for Balkan Region in Belgrade 2011 will be held in Hotel »M«, Bulevar oslobođenja 56, Belgrade, from 23–25 June.

### Registration desk

The registration desk located at the Hotel »M«, Belgrade will be open for the duration of the Symposium from Thursday, 23 June 2011 at 9:00 a.m. to Friday, 24 June 2011 at 6:00 p.m.

### Full registration fee 100.00 Euro

Registration fees may be paid in Euros or dinars, by bank transfers or in cash at site (see Registration Form).

### The registration fee includes:

- ☞ Admission to all scientific sessions
- ☞ Admission to exhibition
- ☞ Congress material (programme, abstract book, congress bag, badge, etc.)
- ☞ Coffee breaks
- ☞ Two lunch
- ☞ Certificate of attendance

### Badges

Badges will be distributed at the registration desk upon arrival. Please attach your badges for admission to all scientific and social activities.

### Certificate of participation

The certificate of participation will be issued to those who are properly registered. The certificate of participation will be available at the registration desk and must be picked up just before departure.

### Congress language

The official language of the congress will be English.

### Visual Equipment

The Meeting hall will be equipped with data video projectors for the speakers needs.

### Exhibition

An exhibition of laboratory equipment and reagents will take place during Meeting.

### Internet

The Organizer kindly invites you to visit the Meeting Web pages at [www.dmbj.org.rs](http://www.dmbj.org.rs)

### Weather

In June Belgrade enjoys a mild climate. The average daily temperature in June is about 21 °C.

**PRINCIPAL SPONSORS**





## **ORGANISER**

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