Howard Morris: ‘dynamic scientist; inspiring leader and thoroughly good person’

by Graham Beastall, IFCC Past President

The world of laboratory medicine is in shock following the tragic and sudden death of IFCC President Professor Howard Morris on Thursday 18th April 2019. He was travelling to Kazakhstan as an IFCC visiting lecturer when he suffered a heart attack. Prof Morris (PhD, FAACB, FFSc (RCPA) held a joint appointment as Professor of Medical Science at the University of South Australia and Clinical Scientist in Chemical Pathology at SA Pathology, Adelaide Australia. He had 30 years’ experience working in diagnostic clinical biochemistry in the field of immunoassay and endocrinology and this fuelled his research interest in the pathophysiology of metabolic bone disease and the effects of hormones, particularly vitamin D. His active research team had received over $AUD 10 million in competitive research grants and he had published >280 refereed publications, reviews and book chapters. He supervised 13 completed PhD students. Recently, he identified anabolic actions of vitamin D following metabolism within bone tissue providing a molecular mechanism for vitamin D

To be continued on page 2
Foreword
by Harjit Pal Bhattoo, Editor EFLM EuroLabNews

The EuroLabNews team would like to express its deep condolences on the loss of a titan figure in laboratory medicine
Professor Howard Morris. He shall be deeply missed and his inspiration shall live on. The EFLM communications committee would like to thank MariaStella Graziani for all her guidance and inspirations. She is an icon and we in the committee profited tremendously thanks to her experience and wisdom. On the same note, we all express our heartiest congratulation to Daniel Rajdl for his appointment as the new chair of this committee. He has an established track record and is a pioneer in his own right and has considerable enhanced and forwarded the vision of the EFLM and has dramatically improved its visibility. We are all counting on his expertise and hope that he will further enhance the productivity of the Communications committee. On behalf of the EFLM office Silvia Cattaneo announces the results of the EFLM Executive Board election results held in Barcelona and we heartily welcome the new president elect Tomris Ozben and the new elected officers. Laboratory diagnostic of venous thromboembolism: Where are D-dimers in 2019? is the hot topic in this issue penned by Francois Muller. You are all encouraged to spread the word on the Full Member position in the Distance education and e-learning working group. 10 recipients benefited from grants by EFLM to participate in the EuroMedLab Congress in Barcelona, Spain. Dora Vuljanic reports on the 5th EFLM European Conference on Preanalytical Phase held in Zagreb in March this year. Don’t forget to mark your calendars to participate in the EFLM Webinar Monitoring of Internal Quality Control System Using Patients’ Data by Dr. Abdurrahman Coşkun on the 18th of June. The Slovak Society of Clinical Biochemistry and the The Association for Clinical Biochemistry & Laboratory Medicine report changing of the guard. The Calendar of events pinpoints where you need to be to keep up breast with all the advancement in our field.

THE EFLM OFFICE INFORMS

Results of the election of the EFLM Executive Board 2020-2021

by Silvia Cattaneo, EFLM Office

On 19 May 2019, the election of the EFLM Executive Board 2020-2021 took place during the EFLM General Meeting in Barcelona, on occasion of the 23rd EFLM European Congress of Clinical Chemistry and Laboratory Medicine. The candidates submitted by EFLM National Societies were:
- For the position as “President-Elect”: Damien GRUSON (Belgium), Tomris OZBEN (Turkey), Jan YOUNG (UK).
- For the position as “Executive Board Secretary”: Giuseppe LIPPI (Italy).
- For the position as “Treasurer”:правленная ошибкавой (Serbia), Klaus KOHSE (Germany).
- For the position as “Member-at-Large” (2 positions available): Pilar FERNANDEZ-CALLE (Spain), János KAPPELMAYER (Hungary), Ralf LICHTINGHAGEN (Germany), Dalius VITKUS (Lithuania).

Via ballot, the EFLM General Meeting has elected the below indicated candidates to be part the EFLM Executive Board 2020-2021 that will be composed as follows:
- President: Prof. Ana-Maria Simundic (Croatia)
- Past-President: Prof. Michael Neumaier (Germany)
- President-Elect: Prof. Tomris Ozbën (Turkey)
- EB Secretary: Prof. Giuseppe Lippi (Italy)
- Treasurer: Prof. Klaus Kohse (Germany)
- Member-at-Large: Dr. Pilar Fernandez-Calle (Spain)
- Member-at-Large: Prof. Dalius Vitkus (Lithuania)

Katherina Psarra, IFCC-e-News’ Editor-in-chief, is glad to announce that a special issue has been devoted to the memory of Prof. Howard Morris. Click here to access the IFCC-e-News special issue.

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Gratitude to MariaStella Graziani, outgoing C-C Chair.

MariaStella Graziani has decided to leave her third term of office as Chair of the EFLM Communication Committee ahead of time for personal reasons. During her term she has concentrated on expanding running projects as well as on establishing new relevant areas for Communication inside and outside the EFLM. The Communication Committee has gained a high profile and recognition through the work of recent years thanks to the efforts of Dr. Graziani. In particular, the efforts of the Committee have granted enormous success in developing visibility and collaboration with the EFLM member National Societies (NSs), strengthening and formalizing the relationships with industrial partners, developing visibility and collaboration with IFCC and IFCC Regional Federations, as well as promoting the profession, increasing awareness on the importance of clinical laboratories in healthcare and modern society and disseminating EFLM Newsletters among the many members of the EFLM NSs. During Dr. Graziani Chairship, the EFLM has considerably increased its visibility and acknowledgment throughout Europe. The Executive Board of EFLM is happy and honored that Dr. Graziani has taken over this task and wants to thank her for the valuable contribution in appreciation of the tremendous work that she has accomplished as chair of the Communication Committee throughout her terms of office. For her successor, Dr. Daniel Rajdl, MariaStella Graziani leaves a very good foundation where to start and build upon this groundwork. The EB of the EFLM wishes the best to Dr. Graziani for the rest of her outstanding scientific and professional career.

Introducing Dr. Daniel Rajdl, incoming new C-C Chair.

The EFLM Executive Board has appointed Dr. Daniel Rajdl as next Chair of the Communication Committee. Daniel is well-renew and esteemed within the EFLM, for having chaired the Working Group Distance Education and e-Learning for years and for having contributed to remarkably enhance the visibility and acknowledgment of EFLM Webinars in the past 4 years. The EFLM Executive Board is therefore confident that Daniel Rajdl will be a valuable and worthy successor to the former Chairs and will contribute fresh energy and new ideas along the fruitful and challenging path of his predecessor, Dr. MariaStella Graziani.

D-dimer is one of the most commonly requested coagulation tests. As a biomarker of activation of coagulation and fibrinolysis, D-dimer is mainly used for ruling out venous thromboembolism (VTE). The term D-dimer is a generic term comprising a broad mixture of plasmin-mediated degradation products of cross-linked fibrin, with molecular weights more likely to range from 190 to over 10,000 kDa. This heterogeneous composition, as well as the use of different monoclonal antibodies, lack of international certified internal control or calibrator, and different units, contribute to explain the dramatic inter-variability always found when comparing different D-dimer immunoassays. This evidence emphasizes that further studied are urgently needed to reach a major degree of harmonization in D-dimer measurement, and constructive discussion among manufacturers, scientists and clinicians would be essential for achieving this goal. D-dimer fragments are mainly eliminated by renal clearance and by the reticulo-endothelial system. The plasma half-life of D-dimer is approximately 8h. Therefore, it is unadvisable, if not misleading, to repeat D-dimer testing within 8h after first test result. Pre-analytical requirements are paramount in the hemostasis laboratory, as well as in other areas of in vitro diagnostic testing. Although it may seem that the literature is quite reassuring concerning several preanalytical variables affecting D-dimer measurement (needle bore size, butterfly devices, use of pneumatic tube system, centrifugation, stability), this does not hold true. The main variables which could influence D-dimer measurement are venous stasis, hemolysis, clotting and inadequate sample volume. The tourniquet should never remain in place for more 1-2 min, to prevent spurious increase of D-dimer concentration. A recent study has shown that 17.1% of hemolysed samples exceed the critical difference for D-dimer (65%). Even more importantly, such interference was not directly proportional to the degree of hemolysis, this making unreliable the use of correction formulas. The automatic assessment of hemolysis should be preferred over manual assessment, since the latter is affected by larger inter-individual variation. Currently, it is recommended to use D-dimer assays with a very high sensitivity (≥95%) and negative predictive value (NPV; ≥97%) to safety rule out venous thromboembolism (VTE). D-dimer shall also be measured with quantitative immunoassays, with an imprecision <10% at the diagnostic cut-off, displaying linearity between 50-5,000 μg/L Fibrinogen Equivalent Units (FEU). The use of POC D-dimer assays as a rapid screening tools is especially attractive for general practitioners (GPs), since central quantitative D-dimer assays are not always readily available. However, not all POC D-dimer assays can be reliably used for excluding VTE; only POC immunoassays which have been thoughtfully validated in clinical trials and cleared by the US Food and Drug Administration (FDA) or display the CE (European Community) mark shall be used. D-dimer may also be affected by using of two different measuring units: D-dimer units (DDU) or FEU. Results of D-dimer testing obtained with different methods should not be directly compared, nor used interchangeably. The cut-offs used by the laboratories for ruling out VTE should be validated in prospective studies and locally verified. A negative D-dimer value along with a low clinical probability (using clinical prediction rules) can safety exclude
YEARS diagnostic algorithm across all trimesters of pregnancy. CT pulmonary angiography could be avoided in 32-65% patients. D-dimer is also increasingly used within clinical decision models (mainly DASH, Vienna or HERDOO2 scores) for assessing the risk of VTE recurrence after a first unprovoked episode, and may also contribute to define optimal duration of anticoagulation treatment in patients with thrombosis. The risk of VTE is increased by 2-fold when D-dimer values are higher than the diagnostic cut-off after 3-months of anticoagulant therapy. Finally, D-dimer is systematically used for diagnosing of disseminated intravascular coagulation (DIC), and for screening medical patients at increased risk of VTE. Other emerging indications (i.e., prognostication of peripheral artery disease, screening of intracardiac thrombus) need further scrutiny.

REFERENCES


Vacancies in EFLM functional units

by Silvia Cattaneo, EFLM Office

Here below the open positions for which EFLM is looking for candidates:

**Working Group “Distance Education and e-learning” (WG-DE) chaired by Prof. Darko Cerne (SL)**

- 1 Full Member

In order to complement the successful work conducted in the past, the ideal candidate should preferably have pedagogical and IT e-learning skills (especially MOODLE, creation of voice-over presentations and basic editing of videos) in order to be involved in the practical organisation of live EFLM webinars or in the processing of webinars/congress lectures’ recordings. However, the most important skill is to be a proactive person because the above mentioned skills can be easily acquired from the other WG members during the first months of membership.

The related WG terms of reference are available by clicking here. For the above mentioned position, the term of office will be for 2 years (ending on 31 Dec 2020). The position could be renewable for other two more terms if the work for the Group is deemed essential at that time. The work is mainly conducted by e-mail and teleconferencing, the WG usually meets once per year.

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

**Deadline to apply:**
15 June 2019

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EFLM BURSARY PROGRAMME FOR YOUNG SCIENTISTS


by Maria del Mar Calvo Malvar, Expert/Consultant EFLM WG Promotion and Publications

In response to the invitation to apply for the EFLM bursary programme addressed to Young Scientists attending the 23rd IFCC-EFLM European Congress in Barcelona, 73 applications were received from a total of 13 different countries. All applications were eligible for selection and were carefully evaluated by a dedicated panel of EFLM Officers. The following 10 applicants were selected to receive the EFLM support consisting of a bursary of Eur 900 covering travel and 4-night accommodation. In addition, EFLM bursary recipients received the free congress registration and a free on-line subscription to EFLM official journal “CCLM”, kindly offered by Walter de Gruyter.

• Katrien EECKHOUT (Belgium)
• Elisabet GONZÁLEZ LAO (Spain)
• Lenka HANOUSKOVÁ (Czech Rep)
• Cuma MERTOGLU (Turkey)
• Marija SARIĆ MATUTINOVIĆ (Serbia)
• Ivana ŠPAKOVA (Slovak Rep)
• Sara TARTAGLIONE (Italy)
• Jasmijn VAN BALVEREN (The Netherlands)
• Alen VRTARIĆ (Croatia)
• Mustapha ZENDJABIL (France)

To keep updated with EFLM initiatives addressed to Young Scientists, join us on LinkedIn https://lnkd.in/dsdYrifX, twitter https://twitter.com/@_EFLM or the EFLM mailing list on the website www.eflm.eu.
EFLM Awards illustration our dedication to support original research and scientific excellence. Congratulations to the following distinguished individuals:

**EFLM Scientific Award for Laboratory Medicine** - sponsored by Roche

- Prof. Joris Delanghe
  - Clinical Chemistry Laboratory, Ghent University Hospital (Belgium)
  - for his outstanding scientific contributions to Medical Laboratory Technology and Analytics and their application to various diagnostic areas in Laboratory Medicine

- Prof. Andrea Rita Horvath
  - Dept of Clinical Chemistry, Prince of Wales Hospital, Sydney (AU)
  - for her important achievements as a Scientist in Laboratory Medicine and her outstanding contribution during the establishment and promotion of the European Federation of Clinical Chemistry and Laboratory Medicine under her Presidency

**EFLM Award for Excellence in Outcomes Research in Lab. Med.** - sponsored by Abbott Diagn.

- Dr. Maurits C.F.J. de Rotte
  - Dept of Clinical Chemistry, Amsterdam Univ. Medical Center, Amsterdam (NL)
  - for the article:
    - "Development and validation of a prognostic multivariable model to predict Insufficient clinical response to methotrexate in rheumatoid arthritis"

**EFLM Award for Excellence in Performance Specifications Research** - sponsored by Abbott Diagn.

- Dr. Aasne Karine Aarsand
  - Norwegian Porphyria Centre and Dept of Med. Biochemistry and Pharmacology, Haukeland Univ. Hospital and Norwegian Quality Improvement of Lab. Examinations, Bergen (NO)
  - for the article:
    - "The Biological Variation Data Critical Appraisal Checklist: A Standard for Evaluating Studies on Biological Variation"

**EFLM Cardiac Marker Award** - sponsored by HyTest

- Dr. Saara Wittfooth
  - Department of Biochemistry, University of Turku (FI)
  - for the article:
    - "Direct Immunoassay for Free Pregnancy Associated Plasma Protein A (PAPP-A)"

The images and text are not directly related to the content of this page.
The 5th EFLM Conference on Preanalytical Phase, organized by the European Federation of Laboratory Medicine (EFLM), was held on 22-23 March 2019 in Zagreb under the auspices of IFCC. Conference was sponsored by BD Life Sciences, Abbott Diagnostics, Bio-Rad Laboratories, Maksense and Snibe Diagnostic. Almost 600 participants from all over Europe and beyond attended the conference which represents the largest such preanalytical conference in Europe.

Our guiding principle is to be different, pragmatic, practical and interactive, to address challenges, to raise questions and offer answers. The focus of the conference was the quality of the preanalytical phase of the laboratory work. The conference programme was tailored to deliver up-to-date knowledge in the field and create an open forum for interactive discussions. The Conference Sessions covered the following topics:
- How technology can improve preanalytical phase?
- Preanalytical phase - away from routine chemistry laboratory
- WG-PRE recommendations and ISO 15189 preanalytical requirements

Two poster awards were given during the conference, one by the decision of the Scientific Committee: “Follicular phase sampling for anti-Müllerian hormone (AMH) measurements – a real necessity?” by Dojder A., Tomas M., Radišić Biljak V. and Šimundić AM. (Croatia) and one voted by the audience: “Preanalytical errors in peripheral blood collection for hematology tests” by Lemos C., Gonçalves I., Muzyka V., Vaz Carneiro C. (Portugal).

The EFLM Walter Guder Preanalytical Award (sponsored by BD), as decided by an independent panel of experts, is given to the best published paper “Parathormone stability in hemodialyzed patients and healthy subjects: comparison on non-centrifuged EDTA and serum samples with second- and third-generation assays” by Marie-Louise Schleck, Jean-Claude Souberbielle, Pierre Delanaye, Mario Plebani, Etienne Cavalier (published in Clin Chem Lab Med 2017;55(8):1152-9).

EFLM bursaries were granted to 4 Young Scientists (under 35y) covering conference registration, travel and accommodation. They also received a free annual online subscription to the Journal “CCLM”, kindly offered by W. de Gruyter.

- Martin H. Keppel (Austria)
- Bettina Kárai (Hungary)
- Africa Corchón-Peyrallo (Spain)
- Glynis Frans (Belgium)
This year’s novelty was a quiz, with over 20 questions. All conference participants have been invited to participate. The participant with the highest score was Maja Krhač (Croatia) who won the award which granted her free participation on the next EFLM Conference on Preanalytical Phase.

We hope that participants have enjoyed the scientific content and format of the meeting as well as the opportunity to interact with experts and colleagues from all over Europe. We will continue to be different, to raise issues, to encourage interactive discussions and explore many more challenges to address. We will listen to your wishes and needs and will try to focus on topics that you find most interesting and important.

We therefore invite you to join us also for the next Conference that will be held in Warsaw in 2021. We are very much looking forward to your attendance!

Conference Organizers

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EFLM Webinar: Monitoring of Internal Quality Control System Using Patients’ Data

by Merve Gungoren, Chair EFLM WG Promotion and Publications

Darko Cerne, Chair of the EFLM WG Distance Education and e-Learning informs about next webinars. EFLM is happy to remind you that the attendance to the webinars is free of charge and that the recording of the lectures will be available afterwards on the EFLM elearning platform for those unable to attend.

Speaker: Abdurrahman Coşkun (TR)
Moderator: Merve Sibel Gungoren (TR)
Date: 18th June at 18:00 CET

The aim of this webinar is to raise awareness for the necessity to monitor analytical instruments continuously while reporting test results.

Internal quality control (QC) is the backbone of quality system in laboratory medicine, which serves to validate patients' test results. However, it monitors the system intermittently, not continuously. Classical QC monitoring system depends on periods such as weeks, days, or predetermined time intervals and therefore detects some but not all analytical defects. In this situation, labs have not much information about what is going on between these periods.

During the webinar, presenter will discuss about a new solution to overcome this problem, a real-time monitoring system to detect the possible errors while the instruments are running. Dr. Abdurrahman Coşkun is the Professor of Clinical Biochemistry at the University of Acıbadem Mehmet Ali Aydınlar University, Istanbul, Turkey. His main research is biomedical metrology and focused on biological variation, uncertainty and Six Sigma. He is the member of EFLM Biological Variation Working Group and EFLM Biological Variation Database Task Group. He also interested in transplantation proteomics and developed patented new solid organ preservation solutions.

HOW TO REGISTER:
Registration at https://elearning.eflm.eu/enrol/index.php?id=40

Did you miss any EFLM webinar?
Do not worry: the recorded version of all EFLM webinars is available at https://elearning.eflm.eu/

New posted recorded webinar: Unmet clinical needs assessment for biomarker evaluation - a practical toolbox for Laboratory Medicine (Speaker: Phillip Monaghan, UK)

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Changing of the Guard in EFLM National Societies

Slovak Society of Clinical Biochemistry
Dr. Hedviga Pivovarníková (Clinical Laboratory, Synlab Slovakia, Prešov) is the new President of the Slovak Society of Clinical Biochemistry replacing Prof. Oliver Rácz, while Ing. Jan Balla continues to act as EFLM National Representative. A warm welcome to Dr. Pivovarníková and a thank you to the outgoing President, Prof Rácz, for the support to EFLM activities.

The Association for Clinical Biochemistry & Laboratory Medicine
Dr. Neil Anderson (Clinical Diagnostics, University Hospitals Coventry and Warwickshire) is the new President of the Association for Clinical Biochemistry & Laboratory Medicine replacing Prof. Ian Young. He will act also as EFLM National Representative for ACB. A warm welcome to Dr. Anderson and a thank you to the outgoing President, Prof Ian Young, for the support to EFLM activities.

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Calendar of EFLM events and events under EFLM auspices

Do not miss the opportunity to have your event listed here. Apply for EFLM auspices! For more information visit: https://www.eflm.eu/site/page/a/1048/ or email eflm@eflm.eu

5-7 June 2019
3rd Conference of Romanian Association of Laboratory Medicine (RALM)
Iasi (RO) http://www.congres-amlr.ro/

18 June 2019
Monitoring of Internal Quality Control System Using Patients' Data, EFLM webinar

22-26 September 2019
MSACL 2019 EU
Salzburg (AT) https://www.msacl.org

25-28 September 2019
16 Jahrestagung der Deutschen Gesellschaft für Klinische Chemie und Laboratoriumsmedizin (DGKL)
Magdeburg (DE) https://dgkl2019.de/

3-4 October 2019
CELME 2019: Emerging Challenges in Laboratory Medicine
Prague (CZ) www.celme2019.cz

16-18 October 2019
5th ESPT Congress Precision Medicine and Personalised Health
Seville (SP) http://www.2019esptcongress.eu/

17-18 October 2019
EQALM Symposium 2019
Ljubljana (SL) http://www.eqalm.org

7-9 November 2019
The Value of Laboratory Medicine into Clinical Medicine
Erice (IT) For information: chiara.bellia@unipa.it

23 October 2019
International Conference on Laboratory Medicine “From Bench to Diagnostic-Therapeutic Pathways”
Padova (IT) http://www.lccongressi.it/laboratorymedicine2019/

6-8 November 2019
3èmes Journées Francophones de Biologie Médicale
Munich (DE) www.jfbm.fr

28 November 2019
13th International Scientific Meeting of the Centre of Metrological Traceability in Laboratory Medicine (CIRME)
“Internal Quality Control in the Traceability Era”
Milan (IT) https://sites.unimi.it/cirme/category/events/

7-8 December 2019
Journees de biologie pratique
Paris (FR) https://www.revuebiologiemedicale.fr/les-journees-de-biologie-pratique.html

6-7 February 2020
International Congress on Quality in Laboratory Medicine
Helsinki (FI) www.labqualitydays.com

9-12 June 2020
XXXVII Nordic Congress in Medical Biochemistry
Trondheim (NO) www.nfkk2020.no

16-20 May 2021
EuroMedLab 2021
24th IFCC-EFLM European Congress of Clinical Chemistry and Laboratory Medicine
Munich (DE)