

# **Chapter 9**

## **Education and Management Division**

## **9.1. Education and Management Division Executive Committee**

- 9.1.1. Mission Statement
- 9.1.2. Strategy
- 9.1.3. Projects
- 9.1.4. Terms of Reference

## **9.2. Education and Management Division Committees**

- 9.2.4. Clinical Molecular Biology Curriculum (C-CMBC)
- 9.2.5. Analytical Quality (C-AQ)
- 9.2.7. Evidence Based Laboratory Medicine (C-EBLM)
- 9.2.9. Clinical Laboratory Management (C-CLM)
- 9.2.10. Internet and Distance Learning (C-IDL)
- 9.2.11. Education in the Use of Biomarkers in Diabetes (C-EUBD)
- 9.2.12. Cardiac Biomarkers (C-CB)
- 9.2.13. Chronic Kidney Disease (C-CKD)
- 9.2.14. Point of Care Testing (C-POCT)
- 9.2.15. Proficiency Testing (C-PT)
- 9.2.16. Value Proposition for Laboratory Medicine (C-VPLM)

## **9.3. Education and Management Division Working Groups**

- 9.3.8. Laboratory Errors and Patient Safety (WG-LEPS)
- 9.3.10 Harmonisation of Interpretive Comments EQA (WG-ICQA)
- 9.3.11 Personal Support (WG-PS)

## **9.4. Education and Management Division Special Projects**

- 9.4.1. Visiting Lecturer Programme (VLP)
- 9.4.2. Flow Cytometry (WG-FC)
- 9.4.3. Developing Quality Competence in Medical Laboratories (DQCML)

## **List of Addresses**

**THE EDUCATION AND MANAGEMENT DIVISION  
EXECUTIVE COMMITTEE (EMD-EC)**

**Chair:**

Prof. Leslie LAI (MY)

**Members:**

Prof. Ana-Leticia MASELLI (GT)

Prof. Nader RIFAI (US)

*To be nominated*

**Corporate Representative and Secretary:**

Dr. André ZIEGLER (CH)

## CHAIRS OF EDUCATION AND MANAGEMENT DIVISION COMMITTEES AND WORKING GROUPS

### 9.1. Executive Committee

L. Lai (MY)

### 9.2. Committees

9.2.4. Clinical Molecular Biology Curriculum (C-CMBC)	E. Lianidou (GR)
9.2.5. Analytical Quality (C-AQ)	A. Thomas (UK)
9.2.7. Evidence Based Laboratory Medicine (C-EBLM)	A. Zemlin (ZA)
9.2.9. Clinical Laboratory Management (C-CLM)	S. Yenice (TR)
9.2.10. Internet and Distance Learning (C-IDL)	L. Langman (US)
9.2.11. Education in the Use of Biomarkers in Diabetes (C-EUDB)	G. John (UK)
9.2.12. Cardiac Biomarkers (C-CB)	F. Apple (US)
9.2.13. Chronic Kidney Disease (C-CKD)	F. Alcantara (BR)
9.2.14. Point of Care Testing (C-POCT)	R. Tirimacco (AU)
9.2.15. Proficiency Testing (C-PT)	A. Haliassos (GR)
9.2.16. Value Proposition for Laboratory Medicine (C-VPLM)	A. St. John (AU)

### 9.3. Working Groups

9.3.8. Laboratory Errors and Patient Safety (WG-LEPS)	L. Sciacovelli (IT)
9.3.10. Harmonisation of Interpretive Comments EQA (WG-ICQA)	S. Vasikaran (AU)
9.3.11. Personal Support	G. Beastall (UK)

### 9.4. Special Projects

9.4.1. Visiting Lecturer Programme (VLP)	N. Rifai (US)
9.4.2. Flow Cytometry (WG-FC)	U. Sack (DE)
9.4.3. Developing Quality Competence in Medical Laboratories (DQCML)	E. Amann (DE)

## 9. The Education and Management Division (EMD)

The Education and Management Division (EMD) fosters educational activities and managerial skills. The Divisional activities are currently conducted by Committees, Working Groups and Special Projects.

### 9.1. EMD Executive Committee

The EMD Executive Committee is the management group responsible for directing and coordinating the activities of the EMD working units.

#### Membership

Name	Position	Country	Term	Time in Office
L. Lai	Chair	MY	2 <sup>nd</sup>	2018 01 - 2020 12
A.L. Maselli	Member	GT	2 <sup>nd</sup>	2017 01 - 2019 12
N. Rifai	Member	US	1 <sup>st</sup>	2018 01 - 2020 12
A. Ziegler	Corp. Rep. and Secretary	CH	1 <sup>st</sup>	2018 01 - 2020 12
<i>To be nominated</i>	<i>Member</i>			

#### 9.1.1. Mission Statement

EMD will provide IFCC members and the healthcare community with education relevant to Clinical Chemistry and Laboratory Medicine, directed at scientific, management and clinical issues.

#### 9.1.2. Strategy

To accomplish this mission EMD will:

- Guide laboratory professionals to function optimally, in a changing environment, so that they might best serve the healthcare needs of society.
- Strengthen consultation and collaboration among all groups responsible for the planning and delivery of healthcare.
- Identify areas of relevance to Clinical Chemistry and Laboratory Medicine, and will assist in the transfer of knowledge in these areas to the profession.
- Participate actively in programs of IFCC Congresses and Scientific Meetings
- Produce and ensure the quality of IFCC educational documents.
- Respond to the needs of IFCC Members in education and management skills as well as those of the Corporate Members and external agencies.
- Design, develop and implement diagnostic strategies.
- Identify current problems in education and management practices and provide solutions and guidelines to overcome them.

EMD will implement this strategy by:

- Facilitating the provision of critically evaluated information by means of projects, expert visits, courses, lectures and documents including electronic learning tools.
- Covering topics such as educational principles and methods, quality management, utilisation and cost-effectiveness of laboratory measurements and observations.
- Reaching its target audience which includes IFCC Members (National Societies, Corporate Members and Affiliate Members), other healthcare workers, students, healthcare agencies and governments, the diagnostic industry and the general public.

### 9.1.3. Projects

- Visiting Lecturer Programme
- Clinical molecular biology courses
- Expanding knowledge in evidence based laboratory medicine
- Managing the quality of laboratory services, including analytical quality
- Courses and workshops in specialised areas
- Promoting laboratory accreditation
- Raising awareness of quality issues
- Promoting distance learning
- Providing personal support to specialists in developing countries

### 9.1.4. Terms of Reference

The functions of the EMD Executive Committee include:

- Initiates, manages and coordinates EMD projects.
- Ensures committees and working groups are functioning under clear terms of reference and an agreed schedule of activity.
- Ensures progress on each project, monitoring of activities, and resolutions of conflicts.
- Reviews educational and managerial problems in current practice and initiate projects as appropriate.
- Seeks funding to achieve the completion of selected projects.
- Communicates and interfaces with Executive Board, Divisions and Committee Chairs of IFCC.

## 9.2. EMD Committees

### 9.2.4. Clinical Molecular Biology Curriculum (C-CMBC)

#### Membership

<b>Name</b>	<b>Position</b>	<b>Country</b>	<b>Term</b>	<b>Time in Office</b>
E. Lianidou	Chair	GR	2 <sup>nd</sup>	2017 01 - 2019 12
E. Capoluongo	Member	IT	1 <sup>st</sup>	2017 01 - 2019 12
V. Haselmann	Member	DE	2 <sup>nd</sup>	2017 01 - 2019 12
A. Ferreira Gonzalez	Consultant	US		

#### Terms of Reference

The objective of the C-CMBC is to develop curriculum and hold training courses in molecular biology techniques. In addition, C-CMBC will develop techniques for teaching clinical molecular biology in laboratory medicine and courses in teaching clinical molecular biology.

#### Projects

- Clinical molecular biology courses
- Symposia at international congresses
- Liaison with other special international groups
- Molecular biology courses at regional meetings

### 9.2.5. Analytical Quality (C-AQ)

#### Membership

Name	Position	Country	Term	Time in Office
A. Thomas	Chair	UK	2 <sup>nd</sup>	2017 01 - 2019 12
D. Grenache	Member	US	2 <sup>nd</sup>	2016 01 - 2018 12
A. Haliassos	Member	GR	2 <sup>nd</sup>	2017 01 - 2019 12
Q. Meng	Member	CA	1 <sup>st</sup>	2016 04 - 2018 12
L. Khorovskaya	Member	RU	1 <sup>st</sup>	2017 01 - 2019 12

#### Terms of Reference

- To provide education and training on the various aspects of analytical quality in the clinical laboratory which include:
  - methods and instrument validation
  - traceability concepts
  - measurement uncertainty
  - internal quality control procedures
  - external quality assessment programmes
  - pre and post-analytical variables
- To address the educational and training needs of emerging nations on analytical quality
- Education and training will be provided in many ways including:
  - written material
  - electronic teaching
  - workshops and seminars
  - invited lectures
  - consultations
- To collaborate with other IFCC committees or working groups to achieve these aims projects:
  - Maintain a directory of global EQA providers.
  - To identify, evaluate and maintain educational resource library on Analytical Quality.
  - To organize and deliver workshops on Analytical Quality
  - To produce monographs on Quality to address the needs of developing countries.

### 9.2.7. Evidence Based Laboratory Medicine (C-EBLM)

#### Membership

Name	Position	Country	Term	Time in Office
A. Zemlin	Chair	ZA	1 <sup>st</sup>	2018 1 - 2020 12
A. Don Wauchope	Member	CA	1 <sup>st</sup>	2018 1 - 2020 12
J. Wils	Member	FR	2 <sup>st</sup>	2018 1 - 2020 12
K. Rodriguez Capote	Member	CA	2 <sup>nd</sup>	2017 1 - 2019 12
N. Giménez Gomez	Member	ES	1 <sup>st</sup>	2017 1 - 2019 12
C. Florkowski	Comsultant	NZ		

#### Terms of Reference / Mission

To promote the methodology and practice of evidence-based medicine in the laboratory profession.

#### Aims and Objectives

The aims and objectives of the Committee on Evidence-based Laboratory Medicine are to:

- Promote the understanding and the methodology of EBLM by educating laboratory professionals about:
  - How to find the evidence
  - How to appraise the evidence
  - How to act on evidence
- Support rational laboratory use by implementation of results from EBLM into daily practice. This can be achieved by methodological research, international surveys and by educating laboratory professionals in the following topics:
  - How to perform primary diagnostic studies
  - How to carry out systematic reviews in laboratory medicine
  - How to make evidence-based guideline recommendations in laboratory medicine
  - How to implement evidence-based diagnostic guidelines in clinical practice
- Promote the international dissemination of and collaboration in EBLM

### Projects

Workshops and training in Evidence Based Laboratory Medicine

Collaborative projects on the methodology and application of systematic reviews

Research in evidence-based guideline development and implementation

Promoting STARD (STAndards for Reporting of Diagnostic accuracy)

Monitoring and updating of a systematic reviews data base in laboratory medicine

### 9.2.9. Clinical Laboratory Management (C-CLM)

#### Membership

Name	Position	Country	Term	Time in Office
S. Yenice	Chair	TR	2 <sup>nd</sup>	2017 1 - 2019 12
M. Orth	Member	DE	2 <sup>nd</sup>	2018 1 - 2020 12
E. Randell	Member	CA	1 <sup>st</sup>	2016 4 - 2018 12
A.A. Khine Wamono	Member	ZA	1 <sup>st</sup>	2016 4 - 2018 12
P. Sharma	Member	IN	1 <sup>st</sup>	2017 3 - 2019 12

#### Terms of Reference

The committee's mandate is to produce monographs and/or guides on basic clinical laboratory management, quality requirements recognized in major quality management guidelines and to offer training modules, seminars, workshops and expertise to laboratory professionals whose purpose is to define organisational structure and carry out crucial activities necessary to achieve quality in routine clinical laboratory services. The committee aims to produce standardised workshop material for basic and advanced management courses and also focuses on addressing the challenges and needs of clinical laboratories in developing countries who have the aim to continually improve towards ensuring patient safety and/or to meet accreditation standards.

The primary goals of the C-CLM are:

- to provide education and training on good laboratory practice and structuring laboratory management in compliance with the globally recognised framework of quality system essentials;
- to help set standards/guidelines/requirements for implementing quality management that impact day-to-day work in the clinical or medical laboratories and, finds solutions to conformity assessment issues in fulfilling their regulatory requirements;
- to promote good leadership and management practices in clinical laboratories and to assist with the development of these skills among clinical laboratory professionals;

- to produce monographs and/or guides for those embarking on executing a quality management system and seeking accreditation.

### Planned Activities

The C-CLM purpose will be accomplished through activities in the following key areas:

- Promoting development of strong leadership and good management skills among laboratory professionals.
- Pursuing a laboratory leadership training programme.
- Producing educational materials on leadership, project management, and basic quality improvement methods.
- Providing presentations related to the topics on clinical laboratory management through the IFCC e-Academy.
- Conducting surveys to determine needs and demands.
- Collaborating with other EMD committees and working groups and closely co-operating with the Visiting Lecturer Program.
- Communicating with corresponding members for assistance with piloting questions to be associated with various learning tools and distributing survey questions toward research questions.

### 9.2.10 Internet and Distance Learning (C-IDL)

#### Membership

Name	Position	Country	Term	Time in Office
L. Langman	EMD Co-Chair	US	1 <sup>st</sup>	2018 01 - 2020 12
E. Freggiaro	CPD Co-Chair	AR	1 <sup>st</sup>	2018 01 - 2020 12
R. Shrestha	Member	NP	1 <sup>st</sup>	2017 05 - 2019 12
J. Grant	Web Editor	AU	2 <sup>nd</sup>	2017 01 - 2019 12
H.Sakamoto	Member	JP	1 <sup>st</sup>	2018 02 - 2020 12
K. Sztefko	Member	PL	1 <sup>st</sup>	2018 02 - 2020 12
R. Greaves	Consultant	AU		
J. Smith	Consultant	UK		

The CPD Co-Chair of this committee is the IFCC Publications & Distance Learning coordinator and is a member of the CPD Executive Committee.

#### Terms of reference

The purpose of this committee is:

- To maintain the IFCC curriculum on which the e-Academy is based, and in line with the IFCC strategy for distance learning,
- To create and promote web-based e-learning and educational activities. to satisfy the content requirements of the IFCC curriculum and National Societies' needs.
- To solicit suggestions from National Societies, IFCC Committees, Task Forces and Working Groups to identify distance learning topic areas of value to IFCC;
  - The committee promotes a multidisciplinary approach to patient care by obtaining educational material, making it available on the web site and by providing links to other relevant resources.
- To identify and evaluate existing distance learning programmes in relevant areas and, with permission and collaboration, modify these as necessary to fit IFCC requirements;
- To develop new distance learning programmes where none already exist.
- To explore and apply new educational technologies that could be helpful for IFCC distance learning

### 9.2.11 Education Use of Biomarkers in Diabetes (C-EUBD)

#### Membership

Name	Position	Country	Term	Time in Office
G. John	Chair	UK	1 <sup>st</sup>	2016 01 – 2018 12
E. English	Member	UK	1 <sup>st</sup>	2016 01 – 2018 12
R. Erasmus	Member	ZA	1 <sup>st</sup>	2016 01 – 2018 12
D. Sacks	Member	US	1 <sup>st</sup>	2016 01 – 2018 12
C. Weycamp	Member	NL	1 <sup>st</sup>	2016 01 – 2018 12

#### Terms of Reference

- To maintain and further develop the network of reference laboratories for the measurement of HbA1c (through collaboration with C-TLM)
- To work in partnership with WHO and IDF to continue to promote the reporting of HbA1c in line with the consensus statement
- To work in partnership with WHO and IDF to facilitate the development and implementation of international guidelines for the use of HbA1c in the diagnosis of diabetes
- To work with IFCC Corporate Members to develop a consensus position on the information to be included in the Instructions for Use (IFU) as it relates to the clinical use of HbA1c methods
- To develop quality targets for the measurement of HbA1c and other biomarkers, and on the basis of these targets, and in conjunction with professional bodies, advise on the use of biomarkers for monitoring, diagnosis and screening of diabetes and glucose intolerance.
- To work with WHO and TF-POCT to recommend best practice in the use of POCT methods for the measurement of HbA1c
- To evaluate the clinical value of emerging biomarkers (e.g. glycated albumin) for the management of patients with diabetes and to establish whether there is a case for method harmonisation of effective new biomarkers
- To evaluate the emerging importance of post translational modification derived products (PTMDPs), and especially Advanced Glycation End-Products (AGEs), and work with Professional bodies on the best way of developing these for use in diabetes.
- To monitor the literature and advise on best practice in relation to laboratory aspects of diabetes

### 9.2.12 Cardiac Biomarkers (C-CB)

#### Membership

Name	Position	Country	Term	Time in Office
F. Apple	Chair	US	1 <sup>st</sup>	2017 01 - 2019 12
P. Kavsak	Member	CA	1 <sup>st</sup>	2017 01 - 2019 12
G. Lefevre	Member	FR	1 <sup>st</sup>	2017 01 - 2019 12
K. Pulkki	Member	FI	1 <sup>st</sup>	2017 01 - 2019 12
A. Saenger	Member	US	1 <sup>st</sup>	2017 01 - 2019 12
R. Body	Member	UK	1 <sup>st</sup>	2017 01 - 2019 12
SPC. Lam	Member	SG	1 <sup>st</sup>	2017 01 - 2019 12
T. Omland	Member	NO	1 <sup>st</sup>	2017 01 - 2019 12
P. Collinson	Consultant	UK		
A. Jaffe	Consultant	US		
J. Ordonez-Llanos	Consultant	ES		

### Terms of Reference

- Education: bridging the gap between laboratory medicine and clinical practice for established and novel cardiac biomarkers
- Clinical laboratory / analytical issues pertaining to cardiac biomarker assays: defining normality, i.e. 99<sup>th</sup> percentile upper reference limits, delta values, biological variation, interferences, statistical models, quality specifications of assays
- Clinical utilisation of cardiac biomarkers: defining myocardial injury, diagnostics (early rule out/rule in of disease) risk outcomes assessments, guiding therapy
- Collaboration with industry, regulatory agencies, and clinical societies

### Current Projects

- Education, education, education
- Development of educational materials for a) high-sensitivity, contemporary and point of care cardiac troponin and b) natriuretic peptide assays used in clinical practice.
- Development of publishable laboratory medicine, interdisciplinary, expert opinion materials and present global workshops in collaboration with industry and clinical societies
- Yearly updating of cardiac troponin and natriuretic peptide assay tables by both manufacturer claims and from peer-reviewed literature
- Continuation of distribution of educational posters and mouse-pads, as well as pocket-cards, addressing high sensitivity cardiac troponin and natriuretic peptide assays at IFCC (laboratory medicine) and clinical society meetings
- Development of a searchable 'APP' that will be the educational tool for cardiac biomarker assays used in clinical practice
- Development of a study model to define a 'clinical scorecard' for high sensitivity cardiac troponin assays

### 9.2.13 Chronic Kidney Disease (C-CKD)

#### Membership

Name	Position	Country	Term	Time in Office
F. Alcantara	Chair	BR	1st	2016 02 - 2018 12
P. Datta	Member	US	1st	2017 05 - 2019 12
A. Grubb	Member	SE	1st	2017 05 - 2019 12
M. Mussap	Member	IT	1st	2017 05 - 2019 12
V. Radišić Biljak	Member	HR	1st	2017 05 - 2019 12
T. Wada	Member	JP	1st	2017 05 - 2019 12
J. H. Eckfeldt	WASPALM Nominee	US		

#### Aim

To promote, support and co-ordinate international activities related to laboratory testing in Chronic Kidney Disease (CKD).

#### Objectives

- Obtain information on the current state of co-ordinated national and international activity in the area of pathology testing in CKD.
- Assess current best practice in CKD-related testing.
- Assess best practice for implementation of best practice for CKD-related testing.
- Provide assistance where required for member organisations and others in planning and implementing CKD testing policies and guidelines.
- Identify other relevant areas of laboratory related issues in CKD.

## Delivery

- A report on the current status of guidelines on CKD pathology testing.
- A review of the items covered in CKD pathology testing guidelines.
- A review of best practice processes for implementing change in CKD-related pathology testing.
- An assessment of areas of likely relevant future activity in CKD testing.

### 9.2.14 Point of Care Testing (C-POCT)

#### Membership

Name	Position	Country	Term	Time in Office
R. Tirimacco	Chair	AU	extra	2018 01 - 2018 12
M. Vaubourdolle	Member	FR	1 <sup>st</sup>	2017 01 - 2019 12
A.I. Khan	Member	CA	extra	2018 01 - 2018 12
J. Shaw	Member	CA	1 <sup>st</sup>	2018 05 - 2020 12
E. Jacobs	Corp. Rep./Abbott	US	1 <sup>st</sup>	2018 05 - 2020 12
M. Schwertfeger	Corp. Rep./Roche	CH	1 <sup>st</sup>	2017 04 - 2019 12

#### Terms of Reference

- To promote quality in the use, performance, interpretation and reporting of POCT across the full spectrum of clinical chemistry and laboratory medicine
- To create a forum for high level discussion on a wide range of POCT related topics
- To provide international leadership for developing the clinical practice of POCT in Laboratory Medicine.

#### Objectives

- Creation of a communication network for specialists who are expert in POCT. To include other POCT specialist groups; expert individuals in IFCC Full, Affiliate and Corporate Members; regulatory agencies and users of POCT
- Definition, implementation, evaluation and reporting of a range of defined POCT projects. To include projects that address quality in POCT performance, the appropriate clinical use of POCT, connectivity and the cost effectiveness of POCT. Projects should complement rather than duplicate projects being undertaken by other POCT specialists
- Preparation of educational support material for those using or considering the use of POCT
- Creation of a library of publications that document the clinical effectiveness of POCT and the impact on clinical outcomes. To include clinical chemistry, haematology, microbiology and other disciplines of laboratory medicine, as appropriate

### C-POCT Working Group on “How should Glucose Meters be Evaluated for Critical Care - (WG-GMECC)”

#### Membership

Name	Position	Country	Term	Time in Office
C. Bowman	Chair	US	2 <sup>nd</sup>	2016 01 - 2018 12
E. Bigot-Corbel	Member	FR		
S. Cunningham	Member	IE		
E. Guillen Barua	Member	PY		
P. Luppá	Member	DE		
T. Malati	Member	IN		
D. Sacks	Member	US		

R. Slingerland	Member	NL
B. Solnica	Member	PL
P. St.Louis	Member	CA
F. Vanstapel	Member	BE
R. White	Member	AU
M. Mulder	Corp. Rep./Roche	DE
E. Ntrivalas	Corp. Rep./Nova	UK
D. Bruns	Consultant	
B. Clarke	Consultant	
B. Karon	Consultant	
D. Mesotten	Consultant	
J. Nichols	Consultant	
M. Scott	Consultant	

### Terms of Reference

1. To evaluate the clinical practice of using blood glucose meters for critically ill patients.
2. To determine the requirements a glucose meter need to full fill in order to be used for critically ill patients
3. To propose what internal- and external quality control systems that should be present.
4. To evaluate which, if any, of the present instruments in the market fulfil these criteria.
5. To provide recommendations for training and competency of users in critical care areas.
6. To ensure recommendations align with other stakeholders.

### 9.2.15 Proficiency Testing (C-PT)

#### Membership

Name	Position	Country	Term	Time in Office
A. Haliassos	Chair	GR	2 <sup>nd</sup>	2017 01 - 2019 12
B. Aslan	Member	CA	2 <sup>nd</sup>	2017 01 - 2019 12
A. Carobene	Member	IT	2 <sup>nd</sup>	2017 01 - 2019 12
A. Perret-Liaudet	Member	FR	2 <sup>nd</sup>	2017 01 - 2019 12
C. Weykamp	Member	NL	2 <sup>nd</sup>	2017 01 - 2019 12
J. Dai	Corp. Rep./Siemens	US	2 <sup>nd</sup>	2017 01 - 2019 12
M. Rottmann	Corp. Rep./Roche	DE	2 <sup>nd</sup>	2017 01 - 2019 12

#### Terms of Reference:

- Facilitate the introduction of international proficiency testing schemes for uncommon but clinically important measurands.
- Use the information to select measurands that may be suitable for method harmonization as a means of improving patient outcomes.

#### Objectives:

- Create an online database - web application liaising measurands (analytes) with EQA-PT schemes through the world.
- Establish a small group of clinical and scientific experts who represent both suppliers and users of 'uncommon but clinically important' laboratory medicine methods.
- Agree to a definition of an 'uncommon but clinically important' measurand and the body of evidence that is required to meet that definition.
- Survey IFCC Members and IFCC functional units to receive suggestions for 'uncommon but clinically important' measurands.
- Prioritize the suggestions received and assess the potential for international

- proficiency testing and the likely support of manufacturers of available methods.
- Establish the availability of proficiency testing schemes for the identified measurands. Where proficiency testing schemes exist, assess their potential for expansion at an international level.
- Invite bids to provide measurand specific proficiency testing in accordance with the agreed specification in the absence of suitable proficiency testing schemes.
- Recommend, to the Executive Board, proficiency testing schemes that may be set up under the auspices of IFCC.
- Monitor performance in IFCC supported proficiency testing schemes and support the preparation of scientific publications at appropriate points in time.
- Use performance data from IFCC supported proficiency testing schemes to propose measurands for harmonization in line with [www.harmonization.net](http://www.harmonization.net).

#### **Cooperation:**

1. The Committee will closely cooperate with the IFCC Committee for Analytical Quality (C-AQ)
2. The Committee will closely cooperate with the IFCC Committee Traceability in Laboratory Medicine (C-TLM)
3. The Committee will closely cooperate with the IFCC Committee Nomenclature, Properties and Units (C-NPU)
4. The Committee will liaise with EQALM and the other relevant international providers of proficiency testing in laboratory medicine

#### **9.2.16. Value Proposition for Laboratory Medicine (C-VPLM)**

##### **Membership**

<b>Name</b>	<b>Position</b>	<b>Country</b>	<b>Term</b>	<b>Time in Office</b>
A.St. John	Chair	AU	1 <sup>st</sup>	2018 1 – 2020 12
R.Christenson	Member	US	1 <sup>st</sup>	2018 3 – 2020 12
M.O’Kane	Member	UK	1 <sup>st</sup>	2018 3 – 2020 12
P.Juelicher	Member	DE	1 <sup>st</sup>	2018 3 – 2020 12
F.Curcio	WASPaLM Rep.	IT		
M.Oellerich	WASPaLM Rep.	DE		
I.Parwati	WASPaLM Rep.	ID		
N.Massakazu Sumita	WASPaLM Rep.	BR		
R.Verna	WASPaLM Rep.	IT		
C. Price	Consultant	UK		

##### **Terms of Reference and Current Projects**

- To advocate adoption of the value proposition in laboratory medicine/healthcare.
  - Continuing work in the form of peer-reviewed publications, congress symposia and presentations to local meetings is required to describe and define the value proposition in laboratory medicine and to advocate its widespread adoption. During the first 3 years of this committee it is intended that this work would be restricted to laboratory medicine professionals albeit with interaction with appropriate clinical specialists relevant to the particular tests. As the group expands the body of knowledge on the value proposition in firstly laboratory medicine and then in other healthcare disciplines then this work can be extended.
- To develop a compendium of tools for laboratory medicine specialists to establish the value for individual medical tests within individual health care systems.
  - Case studies will be undertaken for specific medical tests according to the principles of the value proposition in specific healthcare systems. There is a need to develop

the principles for the preparation of such case studies for publication in the current peer-reviewed journals in order that they reach the appropriate audience. This work has been commenced and will continue for 3 years. It will include test laboratories applying the value proposition framework to a particular medical test and assessing the outcomes. At the end of this period it is proposed that a compendium of tools generalisable for the preparation of documents demonstrating the value proposition for any medical test will be described in a major review publication.

### 9.3. EMD Working Groups

#### 9.3.8. Laboratory Errors and Patient Safety (WG-LEPS)

##### Membership

Name	Position	Country	Term	Time in Office
L. Sciacovelli	Chair	IT	2 <sup>nd</sup>	2017 1 – 2019 12
M. Plebani	Past Chair	IT		
K. Furtado Veira	Member	BR		
I. Garcia del Pino Castro	Member	ES		
A. Ivanov	Member	EE		
G. Lippi	Member	IT		
Z. Sumarac	Member	SRB		
J. West	Member	UK		

##### Mission

The WG mission is to stimulate studies on the topic of errors in laboratory medicine, to collect available data on this topic and to recommend strategies and procedures to improve patient safety.

##### Terms of Reference

- To focus on addressing errors in laboratory medicine.
- To improve the safety of laboratory testing.
- To improve the knowledge in the field at an international level.
- To recommend the development and application of standardised operating protocols.

##### Current Projects

- Improve awareness of laboratory professionals regarding the topic of errors and patient safety.
- Implement pilot studies to evaluate laboratory errors frequency and types.
- Implement projects for error reduction through the design of safer procedures and processes.
- Cooperate with other scientific organizations (WHO, AACC, ASCP, etc.) for assuring improvements in the field of patient safety.
- Organise meetings and scientific sessions on the topic of laboratory errors and patient safety.
- Support the publications of papers on the topic of laboratory errors and patient safety in scientific journals and monographs.
- Harmonise the Quality Indicators management in Laboratory Medicine through the use of the same list of Quality Indicators in clinical laboratories all over the world, a uniform method for data collection and a centralized data elaboration. The final goal is to comply with requirements of International Standard ISO 15189:2012, contribute to identify a reliable state-of-the-art about the error rate for all phases of Total Testing Process (TTP), identify performance specifications for each quality indicator, stimulate

- the decreasing of error rates and improve the patient safety in laboratory testing.
- Selection and appointment of a National Leader to coordinate and encourage the use of Quality Indicators in his/her Country and co-operate with members of the WG-LEPS providing valuable suggestions for improving the project.

### 9.3.10 Harmonisation of Interpretive Comments External Quality Assessment (WG-ICQA)

#### Membership

Name	Position	Country	Term	Time in Office
S. Vasikaran	Chair	AU	2 <sup>nd</sup>	2018 01 - 2020 12
M.Plebani	Member	IT		
E. Kilpatrick	Member	UK		
T. Bradrick	Member	AU		
K. Sikaris	Member	AU		
J. French	Member	UK		
J. Osypiw	Member	UK		
M. Metz	Member	AU		
M. Turzyniecka	Member	ZA		

#### WG-ICQA Sub-group for harmonisation of reporting of protein electrophoresis and serum free light chains, and quantification of small monoclonal proteins:

#### Membership

Name	Position	Country	Term	Time in Office
J. Tate	Chair	AU	1 <sup>st</sup>	2017 01 - 2019 12
M. Graziani	Member	IT		
M. Moss	Member	CA		
M. Willrich	Member	US		

#### Mission

This new WG will seek harmonisation in the operation of EQA schemes for interpretive comments with a view to increasing the possibility of obtaining evidence to demonstrate benefit to patients

#### Terms of Reference

- To bring together representatives of current and potential organisers of national EQA schemes for interpretive comments and experts in the area.
- To develop harmonised goals for EQA of IC.
- To devise standard methods of assessment, nomenclature and marking scales for EQA of interpretive comments.
- To establish minimum standards of performance for participants.
- To construct plan to collect evidence to demonstrate the impact of participation in EQA for IC on patient outcome.

### 9.3.11 Personal Support (WG-PS)

#### Membership

Name	Position	Country	Term	Time in Office
G. Beastall	Chair	UK	1 <sup>st</sup>	2018 01 - 2020 12
D. Young	Member	US		

## Mission

The WG-PS will offer personal support to individual scientists in two areas:

- Scientific Experts willing to share their expertise
- Senior professionals willing to act as Mentors to prospective laboratory medicine directors

Typical beneficiaries will be young scientists, especially from emerging nations, but there will no restriction of access to the WG.

## Terms of Reference

- To consolidate the IFCC Register of Experts (RoE) into WG-PS, refreshing its membership and operation
- To consolidate the IFCC Mentoring Programme for Developing Countries (WG-MENT) into WG-PS, refreshing its membership and operation
- To create WG-PS pages on the IFCC website to replace those of RoE and WG-MENT
- In collaboration with the IFCC Office to create a common portal for individuals to access Experts or Mentors according to defined criteria
- To produce and distribute publicity material to promote WG-PS through IFCC Members, Young Scientist networks and social media
- To set targets for expected use of both Experts and Mentors and to monitor performance against those targets
- To seek and evaluate annual feedback from Experts and Mentors and those that use their support services

## Delivery

- WG-PS will produce an annual report, with statistics of use and recommendations for future operation
- WG-PS will produce a twice-yearly e-newsletter for all linked to the WG. Extracts from this e-newsletter will be submitted for publication in IFCC e-News
- WG-PS will use webinars and social media to produce personal accounts of the benefits to individuals of using the services of the WG

## 9.4. EMD Special Projects

### 9.4.1. Visiting Lecturer Programme (VLP)

#### Membership

Name	Position	Country	Term	Time in Office
N. Rifai	Chair	US	1 <sup>st</sup>	2018 05 - 2020 12

#### Terms of Reference

This programme supports international cooperation in educational activities through funding of lectureships on professional, educational and managerial topics. National Societies are invited to apply for a visiting lecturer on a specific subject and/or request a lecturer.

#### Projects

- Promoting the VLP programme
- Additional visiting lectureships

### 9.4.2. Flow Cytometry (WG-FC)

#### Membership

Name	Position	Country	Term	Time in Office
U. Sack	Chair	DE	extra	2017 01 - 2018 12
C. Lambert	Member	FR		
A. Spittler	Member	AU		
K. Psarra	Member	GR		
C. Rodriguez	Member	AR		
A.M. Ivanov	Member	RU		
M. Schiemann	Member	DE		

#### Terms of Reference

The Working Group will promote and encourage applications of flow cytometry in diagnostics and clinical research through publication of educational material and the organisation of courses and symposia.

#### Projects

- Organisation of flow cytometry courses on the alternating topics of clinical and research applications of flow cytometry in haematology & oncology and immunology & haemostasis.
- Publication of course handbooks and other relevant material on flow cytometry.
- Organisation of symposia on new trends in cellular diagnostics.
- Publication of symposia proceedings.

### 9.4.3. Developing Quality Competence in Medical Laboratories (DQCML)

#### Membership

Name	Position	Country	Term	Time in Office
E. Amann	Chair	DE	1 <sup>st</sup>	2017 01 - 2019 12
J. Smith	Corresponding Member	UK		
R. Greaves	Corresponding Member	AU		
V. Daka	Corresponding Member	ZM		

#### Terms of Reference

This major initiative for the EMD is aimed at informing emerging laboratory services on all aspects of quality, but concentrating particularly on internal quality control, external quality assessment and working towards laboratory accreditation with the adoption of a quality system in line with the international standard ISO 15189.

#### Projects

Educational modules, transferable to countries and regions requesting assistance in these areas have been developed and pilot projects in Vietnam (in collaboration with the Australian Association for Clinical Biochemistry) and Sri Lanka have been supported. The Project has delivered lectures in Russia, Romania, Uruguay and Nigeria as well as workshops in Ecuador delivered in Spanish. For 2018, workshops are being planned to develop country-specific EQA programs in Malawi and Nepal.

The project success is built on close working between the committees of EMD and the generous sponsorship of Abbott Diagnostics, via the VLP initiative and Siemens Healthcare, with whom work has been done in developing distance learning packages.

## List of Addresses

### EMD EXECUTIVE COMMITTEE

**Prof. Leslie LAI**

Suite 7.09  
MOB, Gleneagles Intan Medical Centre  
282 Jalan Ampang  
50450 Kuala Lumpur - Malaysia  
E-mail: Lesliecharleslai@gmail.com

**Prof. Nader RIFAI  
Member**

Boston Children's Hospital Department  
of Laboratory Medicine  
300 Longwood Avenue Boston  
MA 02115 USA  
E-mail: Nader.Rifai@childrens.harvard.edu

**Dr. Ana Leticia MASELLI  
Member**

6a. Ave. 8-92 zona 9  
Guatemala City  
Guatemala  
E-mail: analeticiamaselli@yahoo.com

**Dr. André ZIEGLER  
Corporate Representative**

Roche Diagnostics International Ltd.  
Medical & Scientific Affairs  
Bldg 05/10<sup>th</sup> floor/ Room 1.34  
Forrenstrasse 2 CH-6343 Rotkreuz  
Switzerland  
E-mail: andre.ziegler@roche.com

### EMD COMMITTEES

**Prof. Evi LIANIDOU**

Laboratory of Analytical Chemistry  
Analysis of Circulating Tumor Cells  
(ACTC) Lab  
Dept of Chemistry  
University of Athens, Greece  
E-mail: lianidou@chem.uoa.gr

**Dr Annette THOMAS**

Director, Quality Laboratory, Cardiff and  
Vale University Health Board  
Unit 6, Parc Ty Glas, Llanishen  
Cardiff CF14 5DU - UK  
E-mail: Annette.Thomas2@wales.nhs.uk

**Dr. Annalise ZEMLIN**

University of Stellenbosch and Tygerberg  
Hospital,  
Cape Town, South Africa  
E-mail: azemlin@sun.ac.za

**Prof. Sedef YENICE**

Istanbul Bilim University  
and Director of Clinical Laboratory  
Gayrettepe Florence Nightingale  
Hospital  
Istanbul, 34349 Turkey  
E-mail: sedefyenice@gmail.com

**Prof. Loralie J. LANGMAN**

Department of Laboratory Medicine  
and Pathology  
Mayo Clinic  
200 2nd Street SW  
Rochester, MN 55905 - USA  
E-mail: Langman.Loralie@mayo.edu

**Prof. Garry JOHN**

Consultant Clinical Biochemist  
and Head of Clinical Biochemistry  
Norfolk and Norwich University Hospital  
UK  
E-mail: garry.john@nnuh.nhs.uk

**Dr. Fred APPLE**

Hennepin County Medical Center  
Professor, Laboratory Medicine and  
Pathology University of Minnesota  
School of Medicine  
701 Park Avenue  
Clinical Labs P4  
Minneapolis MN 55415 USA  
E-mail: apple004@umn.edu

**Dr Flavio F. ALCANTARA**

Section Chief at Central Laboratory  
Division  
Clinical Pathology Department  
Clinical Hospital  
University of Sao Paulo Medical School  
(HCFMUSP).  
Av Eneas de Carvalho Aguiar, 255 Bloco  
4, 2o Andar  
Sao Paulo 05403-000 - Brazil  
E-mail: flavio.alcantara@hc.fm.usp.br

**Mrs. Rosy TIRIMACCO**

Network Operations & Research  
Manager iCCnet  
Country Health SA Local Health Network Inc  
Mail box 28, Level 3B  
Mark Oliphant Building, Science Park  
Bedford Park  
South Australia 5042 - Australia  
E-mail: Rosy.Tirimacco@health.sa.gov.au

**Dr. Cynthia BOWMAN**

Baystate Health  
Department of Pathology  
759 Chestnut St.  
Springfield, MA 01199 - USA  
E-mail: cynthia.f.bowman@gmail.com

**Dr. Alexander HALIASSOS**

ESEAP - Greek Proficiency Testing  
Scheme for Clinical Laboratories  
GSCC-CB  
47 Alopekis Str  
GR-106 76 Athens – Greece  
E-mail: haliassos@moleculardiagnosics.gr

**Dr. Andrew St. JOHN**

ARC Consulting  
14 Learoyd Street  
MT Lawley, WA, 6050 - Australia  
email: astjohn@gmail.com

**EMD WORKING GROUPS****Dr. Laura SCIACOVELLI**

Centre of Biomedical Research  
Department of Laboratory Medicine  
University-Hospital of Padua - Italy  
E-mail: laura.sciacovelli@sanita.padova.it

**Dr. Samuel VASIKARAN**

Department of Clinical Biochemistry  
PathWest-Royal Perth Hospital  
GPO Box X2213  
Perth 6847, WA - Australia  
E-mail: samuel.vasikaran@health.wa.gov.au

**Dr. Graham BEASTALL**

University of Glasgow  
Mayfield, Birdston, Kirkintilloch  
Glasgow G66 1RW - UK  
E-mail: gbeastall@googlemail.com

**EMD SPECIAL PROJECTS****Prof. Nader RIFAI**

Boston Children's Hospital Department  
of Laboratory Medicine  
300 Longwood Avenue Boston  
MA 02115 USA  
E-mail: Nader.Rifai@childrens.harvard.edu

**Prof. Ulrich SACK**

Institute of Clinical Immunology  
University of Leipzig  
Max-Bürger-Forschungszentrum (MBFZ)  
Johannisallee 30  
04103 Leipzig - Germany  
E-mail: ulrich.sack@medizin.uni-leipzig.de

**Prof. Egon AMANN**

Hochschule Hamm-Lippstadt  
University of Applied Sciences  
Marker Allee 76-78  
59063 Hamm - Germany  
E-mail: egon.amann@hshl.de