Chapter 9 Education and Management Division

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List of Addresses

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

Chair: Prof. Nader RIFAI (US)

Vice-Chair: Dr. Vanessa STEENKAMP (ZA)

Corporate Representative and Secretary: Dr. André ZIEGLER (CH)

Member and VLP Chair: Prof. Sedef YENICE

Member: Prof. Tomas ZIMA (CZ)

CHAIRS OF EDUCATION AND MANAGEMENT DIVISION COMMITTEES AND WORKING GROUPS

9.1. Executive Committee

N. Rifai (US)

9.2. Committees

9.2.4.	Clinical Molecular Biology Curriculum (C-CMBC)	V. Haselmann (DE)
9.2.7.	Evidence Based Laboratory Medicine (C-EBLM)	A. Zemlin (ZA)
9.2.9.	Clinical Laboratory Management (C-CLM)	P. Sharma (IN)
9.2.11	. Education in the Use of Biomarkers in Diabetes	E. English (UK)
	(C-EUBD)	
9.2.12	. Clinical Applications of Cardiac Biomarkers (C-CB)	F. Apple (US)
9.2.13	. Kidney Disease (C-KD)	F. Alcantara (BR)
9.2.14	. Point of Care Testing (C-POCT)	A. Khan (CA)
9.2.16	. Value Proposition for Laboratory Medicine	A. St. John (AU)
	(C-VPLM)	
9.3. Wor	king Groups	
9.3.8.	Laboratory Errors and Patient Safety (WG-LEPS)	M. Plebani (IT)
9.3.11	Personal Support	G. Beastall (UK)
9.4. Spec	cial Projects	
9.4.1.	Visiting Lecturer Programme (VLP)	S. Yenice (TR)

9.4.2. Flow Cytometry (WG-FC) C. Lambert (FR)

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
N. Rifai	Chair	US	1 st	2021 01 - 2023 12
V. Steenkamp	Vice Chair	ZA	1 st	2021 01 - 2023 12
A. Ziegler	Corp. Rep. and Secretary	CH	2 nd	2021 01 - 2023 12
S. Yenice	Member & VLP Chair	TR	1 st	2021 01 - 2023 12
T. Zima	Member	CZ	1 st	2021 01 - 2023 12

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 programmes 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 the Executive Board, Divisions and Committee Chairs of IFCC.

9.2. EMD Committees

9.2.4. Clinical Molecular Biology Curriculum (C-CMBC)

Membership				
Name	Position	Country	Term	Time in Office
V. Haselmann	Chair	DE	1 st	2020 01 - 2022 12
E. Capoluongo	Member	IT	2 nd	2020 01 - 2022 12
O. Diez	Member	ES	1 st	2020 01 - 2022 12
G. Russomando	Member	PY	1 st	2021 04 – 2023 12
A. Ferreira Gonzalez	Consultant	US		
E. Lianidou	Consultant	GR		

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

9.2.7. Evidence Based Laboratory Medicine (C-EBLM)

Membership				
Name	Position	Country	Term	Time in Office
A. Zemlin	Chair	ZA	2 nd	2021 1 - 2023 12
A. Don Wauchope	Member	CA	2 nd	2021 1 - 2023 12
R. Khalil	Member	EG	1 st	2020 3 - 2022 12
S. Barghava	Member	IN	1 st	2019 3 - 2021 12
N. Giménez Gomez	Member	ES	2 nd	2020 1 - 2022 12
C. Florkowski	Consultant	NZ		
K. Rodriguez-Capote	Consultant	CA		

Terms of Reference / Mission

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

Aims and Objectives

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

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
P. Sharma	Chair	IN	1 st	2020 1 - 2022 12
E. Randell	Member	CA	2 nd	2019 1 - 2021 12
A.A. Khine Wamono	Member	ID	2 nd	2019 1 - 2021 12
M.S. Güngören	Member	TR	1 st	2020 1 - 2022 12
R. Elina	Member	MY	1 st	2021 3 - 2023 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 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 cooperating 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.

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

Membership

Name	Position	Country	Term	Time in Office
E. English	Chair	UK	1 st	2021 04 – 2023 12
A. Sato	Member	JP	1 st	2019 03 – 2021 12
D. Sacks	Member	US	2 nd	2019 01 – 2021 12
C. Weycamp	Member	NL	2 nd	2019 01 – 2021 12
To be nominated	Member			

E. Lenters-Westra Consultant

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 based on 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

Membership				
Name	Position	Country	Term	Time in Office
F. Apple	Chair	US	2 nd	2020 01 - 2022 12
P. Kavsak	Member	CA	2 nd	2020 01 - 2022 12
O. Hammarsten	Member	SE	1 st	2020 01 - 2022 12
A. Saenger	Member	US	2 nd	2020 01 - 2022 12
R. Body	Member	UK	2 nd	2020 01 - 2022 12
SPC Lam	Member	UK	2 nd	2020 01 - 2022 12
K. Moberg Aakre	Member	NO	1 st	2021 01 - 2023 12
P. Collinson	Consultant	UK		
A. Jaffe	Consultant	US		
T. Omland	Consultant	NO		
J. Ordonez-Llanos	Consultant	ES		

9.2.12 Clinical Application of Cardiac Biomarkers (C-CB)

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., 99th percentile upper reference limits, delta values, biological variation, interferences, statistical models, quality specifications of assays
- Clinical utilisation of cardiac biomarkers: defining myocardial injury and heart failure, 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 from manufacturer claims and from peer-reviewed literature
- Continuation of distribution of educational posters and mousepads, as well as pocketcards, addressing high sensitivity cardiac troponin and natriuretic peptide assays at IFCC (laboratory medicine) and clinical society meetings
- Development of a searchable 'APP' that will 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

 Work closely with industry and global professional organizations to provide educational workshops and symposiums, utilizing online webinars during the COVID-19 pandemic

9.2.13 Kidney Disease (C-KD)

Membership				
Name	Position	Country	Term	Time in Office
F. Alcantara	Chair	BR	2 nd	2019 01 - 2021 12
P. Datta	Member	US	2 nd	2020 01 - 2022 12
J. Delanghe	Member	BE	1 st	2020 03 - 2022 12
M. Mussap	Member	IT	2 nd	2020 01 - 2022 12
V. Radišić Biljak	Member	HR	2 nd	2020 01 - 2022 12
JH. 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
Al. Khan	Chair	CA	1 st	2019 01 - 2021 12
P. Oliver Saez	Member	ES	1 st	2019 01 - 2021 12
M. Vaubourdolle	Member	FR	2 nd	2021 01 - 2023 12
J. Shaw	Member	CA	2 nd	2021 01 - 2023 12
P. Jarvis	Corp.Rep./Abbott	UK	1 st	2019 01 – 2021 12
P. Pamidi	Corp.Rep./Instrum	entation Labor	ratory1 st	2021 03 – 2023 12
R. Tirimacco	Consultant	AU		
S. Sandberg	Consultant	NO		
G. Kost	Consultant	US		
E. Jacobs	Consultant	US		

Terms of Reference

1. To promote quality in the use, performance, interpretation and reporting of POCT across the full spectrum of clinical chemistry and laboratory medicine

- 2. To create a forum for high level discussion on a wide range of POCT related topics
- 3. 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

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

Membership				
Name	Position	Country	Term	Time in Office
A. St John	Chair	AU	2 nd	2021 1 – 2023 12
R. Christenson	Member	US	2 nd	2021 1 – 2023 12
M. O'Kane	Member	UK	2 nd	2021 1 – 2023 12
P. Juelicher	Member	DE	2 nd	2021 1 – 2023 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
M. Plebani	Chair	IT	1st	2020 1 – 2022 12
L. Sciacovelli	Member	IT		
V. De Guire	Member	CA		
K. Furtado Veira	Member	BR		
A. Galoro	Member	BR		
W. Shcolnik	Member	BR		
I. Garcia del Pino Castro	Member	ES		
A. Ivanov	Member	EE		
G. Lippi	Member	IT		
W. Qingtao	Member	CN		
Z. Rui	Member	CN		
Z. Sumarac	Member	SRB		
J. West	Member	UK		

Mission

The WG mission is to stimulate studies on the topic or 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.

9.3.11 Personal Support (WG-PS)

Membership

Name	Position	Country	Term	Time in Office
G. Beastall	Chair	UK	2 nd	2021 01 - 2023 12

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

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- 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

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9.4.1. Visiting Lecturer Programme (VLP)

Membersnip				
Name	Position	Country	Term	Time in Office
S. Yenice	Chair	TR	1 st	2021 1 – 2023 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
C. Lambert	Chair	FR	2 nd	2021 01 - 2023 12

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.

List of Addresses

EMD EXECUTIVE COMMITTEE

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EMD SPECIAL PROJECTS

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