

Chapter 11

Emerging Technologies Division

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11. Emerging Technologies Division (ETD)

The IFCC Emerging Technologies Division (ETD) is a new Division proposed and formally ratified by the IFCC Executive Board in 2017. The ETD formally takes effect on 1st January 2018. Two Task Forces previously under the Executive Committee (Task Force on Paediatric Laboratory Medicine (TF-PLM) and the Task Force on Geriatric Laboratory Medicine (TF-GLM)) are now part of the ETD.

11.1. ETD Executive Committee (ETD-EC)

Membership

Name	Position	Country	Term	Time in Office
S. Bernardini	Chair	IT	1 st	2018 01 - 2020 12
P. Fortina	Vice-Chair	US	1 st	2018 01 - 2020 12
R. Greaves	Secretary	AU	1 st	2018 01 - 2020 12
D. Gruson	Member	BE	1 st	2018 01 - 2020 12
M. Roessler	Corporate M.	DE	1 st	2018 01 - 2020 12
P. Yin	Corporate M.	US	1 st	2018 01 - 2020 12
M. Ferrari	Consultant	IT	1 st	2018 01 - 2020 12
L. Kricka	Consultant	US	1 st	2018 01 - 2020 12

11.1.1. Mission Statement

The ETD is a functional unit responsible for identifying and assessing emerging technologies and for translating the emerging and disruptive diagnostic and data analysis procedures from academic laboratories to clinical laboratories and from clinical laboratories to market.

11.1.2. Strategy

The ETD initiates and manages projects through its Committees and Working Groups (WG). Work is conducted in strict cooperation with other IFCC units and with relevant national and international organisations. The ETD ensures that each of its Committees and Working Groups are functioning under clear terms of reference together with an agreed upon schedule of activity. The ETD will assist in the development of project proposals and will undertake an annual review of progress and review as well as approve documents arising from such projects.

11.1.3. Responsibilities

- The application of emerging technologies and methods including mass spectrometry, high-throughput genotyping techniques, mobile health technologies and data analysis to clinical diagnostic protocols focused on Precision Medicine;
- Defining for each emerging technology the clinical needs and criteria of education of specialists in Laboratory Medicine and caregivers;
- Defining for each emerging technology and method the appropriate infrastructure and laboratory organization;
- Defining for each emerging technology and method pre-analytical, analytical and post-analytical processes necessary for clinical laboratory applications;
- Defining for each emerging technology and method quality programs and certifications required to meet criteria for accreditation up to ISO151811 standard;
- Assess the clinical value of each test with regard to addressing unmet clinical need.

11.1.4. Terms of Reference

The ETD is a functional unit of the IFCC involved in the production of publications arising from activities relating to the application of emerging and disruptive technologies to clinical laboratories.

All ETD activities are well-defined projects, which work within a specified time frame, and are intended to result in a document (an IFCC official document or manual, guideline, or a scientific paper in a refereed international journal), in a product (reference system, service or device), or within the framework of an international activity (scientific workshop, symposium or congress).

The ETD is responsible to the EB and Council to ensure the highest standards of work in its units and for the actions of its members.

11.1.5. Projects

The ETD initiates and manages projects with its own resources or through its Committees and Working Groups. Work is conducted in cooperation with other IFCC units and with relevant national and international organizations. The ETD ensures that each of its Committees and WGs are functioning under clear terms of reference together with an agreed upon schedule of activity. The ETD-EC will assist in the development of the project proposals, and will undertake an annual review of progress as well as review and approve any documents that result from the work. Project applications should be made on the ETD Project Proposal Form (available from the IFCC Executive Board webpage).

- The ETD Executive Committee, as the overall managing group for the Division, will ensure the progress of each project, will terminate completed or non-productive projects, and will review the contributions of the members of each functional unit, on a yearly basis.
- Work of the ETD units is carried out in cooperation with other IFCC units, with relevant national and international organizations, and with individuals specifically proficient in a defined area of competence.
- Work within ETD units is to be clearly defined in the goals, terms of reference and a specific timetable for each project.
- An annual review will be carried out by each functional unit for every project within its responsibility.
- The ETD Executive Committee will actively seek, under the appropriate guideline(s) and together with the Corporate Representative on the IFCC Executive Board (EB), the necessary funding to achieve the completion of appropriate scientific projects.
- Outside funding for projects is permitted, but only within the IFCC guidelines for this action (see “Guidelines for Funding from Industry and Other Sources”), and must be approved by the Division Executive Committee and by the IFCC EB. Administration of such funds will be through the IFCC Treasurer’s office.
- The ETD Executive Committee will assign a liaison officer to each of its Committees to monitor the progress of the projects under its responsibility.
- All project proposals will be reviewed by the Divisional Executive Committee and submitted to the IFCC EB for concurrence.
- Preparation of all documents must follow IFCC regulations for publications (see “Guidelines for Preparation of IFCC Documents”).
- The ETD Executive Committee will ensure that Committee and WG Chairs are aware of their responsibilities and of the IFCC resources available to them, and that they communicate promptly and effectively with all corresponding members nominated to their unit.

11.2. ETD Committees

11.2.1 Committee for Emerging Pediatric Laboratory Medicine (C-EPLM) (previously Task Force on Paediatric Laboratory Medicine – TF-PLM)

At the time of publication of this handbook, the proposed ETD Committee had not been formally ratified by the IFCC Executive Board and are therefore the information listed here refers to the IFCC Task Force.

Please refer to the IFCC website under the ETD to view the current ratified Committee.

Membership

Name	Position	Country	Term	Time in Office
M. Metz	Chair	AU	1 st	2015 01 - 2017 12
T. Lang	Vice-Chair	UK	1 st	2015 01 - 2017 12
V. L. Grey	Past-Chair	CA	1 st	2015 01 - 2017 12
M. Hersberger	Member	CH	1 st	2015 01 - 2017 12
T.P. Loh	Member	SG	1 st	2015 01 - 2017 12
I. Papassitiriou	Member	GR	1 st	2017 07 - 2019 12
M. Turzyniecka	Member	ZA	1 st	2015 01 - 2017 12
S. Geaghan	Consultant	US		
P.M. Jones	Advisor	US		
K. Kohse	Advisor	DE		

Improving diagnosis and management of patients from birth to adolescence:

The purpose of this Task Force is to develop procedures and processes to improve the diagnosis and management of patients from birth to adolescence

This Task Force will:

- Coordinate activities worldwide directed towards the establishment of reference intervals for laboratory test results in pediatric patients of all age groups
- Form a sound support basis for the continuation of the International Congresses of Pediatric Laboratory Medicine which have been very successful over the past 25 years
- Create a worldwide network of scientists working in laboratories specialized in Pediatric Medicine

Why Pediatric laboratory medicine?

Children are not simply small adults - this holds especially true when they become patients. Pediatric patients comprise a group with special problems, also with regards to the results of laboratory investigations.

Local and regional activities exist in which an exchange of ideas and concepts for the role of the laboratory in the care of children's health take place, but in general, these activities are not linked to each other. In spite of a variety of activities in the past years, reference intervals for laboratory test results are often not very well defined for the pediatric population, a situation which is even worse in adolescent medicine.

The subject of the Task Force is obviously relevant to large numbers of people - a substantial proportion of our patients are children.

Especially in pediatric patients, the role of the laboratory is crucial for diagnosis and follow-up, e.g., in metabolic disorders or genetically determined diseases.

Activities of the Task Force will include:

- Coordination, promotion and development of existing IFCC SD research activities associated with reference intervals. Existing regional groups within IFCC, e.g.,

the Nordic States (Denmark, Sweden, Norway, Finland and Iceland) are currently engaged in the development of Pediatric Reference values. By close interaction with this group and the IFCC SD, the Task Force will expand these activities to other regions of the world

- Establishment of a concept for the next International Congresses of Pediatric Medicine. As the preferred setting, the Congress will be held in conjunction with an IFCC meeting or a meeting taking place under the auspices of IFCC
- Regularly publish reports on the progress of the Task Force's activities and other relevant articles in the field of Pediatric Laboratory Medicine in the IFCC Journal

11.2.2. Committee on Mobile Health and Bioengineering in Laboratory Medicine (C-MHBLM)

11.2.3. Committee for Omics Translation (C-OT)

At the time of publication of this handbook, the proposed ETD Committees have not been formally ratified by the IFCC Executive Board and are therefore not detailed here. Please refer to the IFCC website under the ETD to view the current ratified committees.

11.3. ETD Working Groups

At the time of publication of this handbook, the proposed ETD WGs have not been formally ratified by the IFCC Executive Board and are therefore not listed here. Please refer to the IFCC website under the ETD to view the current ratified WGs.

11.4. Corporate Member Activities

The Corporate Members bring relevant industry expertise, experience and support to the Division to facilitate more involvement, voice, support from IFCC industry members and help drive Executive Committee's missions and projects. IFCC Corporate Members may propose projects.

11.5. List of addresses

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