

SCIENTIFIC DIVISION

The mission of the Scientific Division (SD) is to advance the science of Clinical Chemistry and Laboratory Medicine by facilitating its application in clinical practice. The main goals of this Division are standardisation through the definition of metrologically-sound reference systems (reference methods, reference materials and networks of reference laboratories) and the definition of diagnostic strategies for new analytes.

The SD 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 Organisations. The SD ensures that each of its Committees and Working Groups are functioning under clear terms of reference together with an agreed schedule of activity.

Scientific Division history

The Precursors

1971-1988 → Creation of Expert Panels reflecting current needs (Instrumentation, pH and Blood Gases, Immunoassays, etc.)

1979 → CS changed to Scientific Committee (SC), Robert Zender (CH) (First Chair); The concept of Working Groups introduced

1966 → A Committee of Standards (CS), Martin Rubin (US) (First Chair), was established

The Scientific Division

1987 → SC changed to a Division (SD) and Expert Panels elevated to Committees

Past sixty years at glance:

- Development of theme-oriented Committees and task-oriented Working Groups
- Publication of Recommendations and Guidelines
- Over 150 scientific publications in leading Laboratory Medicine journals
- Development of Reference Measurement Procedures
- Production of Reference Materials, in collaboration with national and international organisations (WHO, IRMM, NIBSC)
- Establishment of Reference Laboratory Networks
- Formal collaboration agreement with IRMM, CLSI and NIST
- Master Discussion Conferences (Bergmeyer Conference, Beckman Ortho Clinical Diagnostics Conference, etc.)

Diamond Accomplishments

2012	Magdal U, Dybkaer R, Olesen H.	Properties and units in the clinical laboratory sciences, Part XXIII. The NPU terminology, principles and implementation - a user's guide (Technical Report 2011) (IFCC-IUPAC). Clin Chem Lab Med. 2012 Nov 18;50(1):35-50.
2011	Schumann G., Klauke R., Canalias F., Bossert-Reuther S., Franck P.F.H., Gella F.J., Jørgensen P.J., Dongchon Kang7, Lessinger J.M., Panteghini M., Ceriotti F.	"IFCC primary reference procedures for the measurement of catalytic activity concentrations of enzymes at 37 °C. Part 9: Reference procedure for the measurement of catalytic concentration of alkaline phosphatase" Clin Chem Lab Med 2011;49(9):1439-1446.
2010	Helander A, Wielders JPM, Jeppsson JO, Weykamp C, Siebelder C, Anton RF, Schellenberg F, Whitfield JB.	Toward standardization of carbohydrate-deficient transferrin (CDT) measurements: II. Performance of a laboratory network running the HPLC candidate reference measurement procedure and evaluation of a candidate reference material Clin Chem Lab Med, 2010; 48: 1585-92.
2009	de Kieviet W., Frank E., Stekel H.	Essentials of Clinical Laboratory Management in Developing Regions - IFCC Series.
2008	Weykamp C, John WG, Mosca A, Hoshino T, Little R, Jeppsson J-O, Goodall I, Miedema K, Myers G, Reinauer H, Sacks DB, Slingerland R, Siebelder C.	The IFCC Reference Measurement System for HbA1c: A 6-Year Progress Report. Clin Chem 2008; 54: 240-8.
2007	Thienpont LF, Beastall G, Christophides ND, Faix JD, leiri T, Jarrige V, Miller WG, Miller R, Nelson JC, Ronin C, Ross HA, Rottman M, Thijssen JH, Toussaint B.	Proposal of a candidate international conventional reference measurement procedure for free thyroxine in serum. Clin Chem Lab Med 2007; 45: 934-6.
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2005	Ben Rayana MC, Burnett RW, Covington AK, D'Orazio P, Fogh-Andersen N, Jacobs E, Kulpmann WR, Kuwa K, Larsson L, Lewenstam A, Maas AH, Mager G, Naskalski JH, Okoroduo AO, Ritter C, St John A.	Guidelines for sampling, measuring and reporting ionized magnesium in undiluted serum, plasma or blood. Clin Chem Lab Med 2005; 43:564-569.
	D'Orazio P, Burnett RW, Fogh-Andersen N, Jacobs E, Kuwa K, Kulpmann WR, Larsson L, Lewenstam A, Maas AH, Mager G, Naslalski JW, Okoroduo AO.	Approved IFCC Recommendation on Reporting Results for Blood Glucose (Abbreviated). Clin Chem 2005; 51:1573-1576.
2004	Dati F, Tate JR, Marcovina SM, Steinmetz A.	First WHO/IFCC Reference Reagent for Lipoprotein(a) for Immunoassay. IFCC Code Lp(a) SRM 2B. Clin Chem Lab Med 2004;42:670-6.
2003	Birken S, Berger P, Bidart JM, et al.	Preparation and characterization of new WHO reference reagents for human chorionic gonadotropin and metabolites. Clin Chem 2003;49:144-54.
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1994	Whicher JT, Ritchie RF, Johnson AM, et al.	New International Reference Preparation for Proteins in Human Serum (RPPHS). Clin Chem 1994;40:934-8.
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1979	Dybkaer R.	Approved Recommendation (1978). Quantities and Units in Clinical Chemistry. J Clin Chem Clin Biochem 1979;17:807-21.
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