The new tool for implementation of learning programs in Laboratory Medicine

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What has the IFCC been doing?

- Development of the new website started 5 years ago and was divided into two phases:
  - Phase 1: Total revamping of the website
  - Phase 2: Advanced, interactive features
- The first phase is now fully implemented
- www.ifcc.org
- Improved interaction compared to old site
- Formation of C-DL and C-IeL to facilitate development of educational content.
Committee-Distance Learning (C-DL)

- Chair: Janet Smith
- Tasked with developing content by interaction with IFCC committees, task forces and working groups
- Undertook a survey of National Representatives in 2012
- Developed an IFCC ‘curriculum’.
- Curriculum is the basis for the eAcademy structure
The IFCC Curriculum

Design objective:

To create a framework for learning both theoretical and practical aspects of laboratory medicine to the level of knowledge required for expert professional practice.
Curriculum Structure

- Molecular Genetics
- Blood Sciences
- Microbiology
- Laboratory Organisation & Management
- Clinical Chemistry and Immunology
- Haematology
Curriculum Structure

Laboratory Organisation & Management

- Laboratory procedures and principles
- Senior management
Laboratory Procedures and Principles

- Specimen collection
- Specimen preparation
- Pre-analytical variables
- Biological variation
- Standard operating procedures
- Document control
- Internal quality control
- External quality assessment
- Method evaluation
- Standard curves
- Reference intervals
- Temperature monitoring
Senior Management

• Total quality management and quality systems
• Accreditation and ISO15189
• Budget management
• Personnel management
• Risk management
• Facilitating training and CPD for all department staff
• Professional ethics
• Instrumentation and method selection
Senior Management

- Laboratory information systems (LIS), hospital information systems (HIS) and interfaces
- System design
- Advanced communication skills
- Evidence-based laboratory medicine
- Point of care testing policies and management
- Medico-legal requirements and legislation
- Clinical and professional liaison
- Initiation of and collaboration in research activities
- Requesting and reporting policies
- Laboratory design and construction
Curriculum Structure

- Blood Sciences
  - Clinical Chemistry and immunology
    - Analytical
    - Clinical
      - Instrumentation and Methodology
      - Analytes
Curriculum Structure

Analytical

Instrumentation and Methodology

Basic

Analytes

Specialist
Instrumentation and Methodology
Basic

Concepts:

• Quantities and Units
• Balances
• Centrifuges
• Waterbaths
• pH meters
• Microscopes
Instrumentation and Methodology: Basic (2)

Techniques:

- Volumetric measurement
- Pipetting
- Weighing
- Buffer preparation
- Extractions

- Dialysis
- Centrifugation
- Filtration
- Ultrafiltration
- Freeze drying
Instrumentation and Methodology: Specialist

• Spectrophotometry
• Luminescence and fluorescence
• Flame emission photometry
• Atomic absorption
• Spectrophotometry and ICP-MS
• Principles of chromatography

• Mass spectrometry
• Nephelometry and turbidimetry
• Main analyser platforms and automation.
• Ion selective electrodes
• Acid-base measurement
• A curriculum based approach to catalogue and access educational material on the IFCC website
• Development of a Learning Management System (LMS)
• Allow users of website to find relevant material more easily and to also receive ‘credit’ for accessing material (CPD)
Learning Management System

- System to allow tracking of an individual's access to educational material and knowledge of material via online 'examination'
- Also allows a hierarchical approach to learning through completion of curriculum based modules
- Examples include Moodle, and Blackboard
Insoft Digital has developed the concept, description and functionality.

Initial release included the most common features.

Next phase will include more advanced features including membership options, for tracking and crediting and producing CPD reports.
Development of Material

- Currently sourcing material from national associations such as AACB and EFLM
- Recording of webinars at IFCC auspiced events
- Targeted recordings utilising the present.me platform.
Upload

1. Choose what you want to create

- Slides and Video
  - Record video
  - Upload video
- Slides and Audio
  - Record audio
- Slides
- Video
Present.me recording
Thank you!

For further information visit www.ifcc.org