‘Shaping the Future of Laboratory Medicine: The Great Debate’

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Timetable of Debate

- 13.45h  Introduction
- 14.10h  Short presentations x5
- 14.35h  Open discussion:
  1. Drivers for change in laboratory medicine
  2. Divisions in laboratory medicine
  3. Shaping the future of laboratory medicine
  4. IFCC Proposals for change
- 15.35h  Conclusions, what happens next?
- 15.45h  End of Session 6
Central Role of Laboratory Medicine

Up to 70% of clinical decisions are informed by data from Laboratory Medicine (source UK Department of Health)

<5% spend
Laboratory Medicine Review: In Every Country

Laboratory Medicine

Quality
- Analytical quality
- Quality assurance
- Accreditation

Clinical Effectiveness
- Clinical outcomes
- Patient focus
- Timeliness

Cost Effectiveness
- Total cost
- Value for money
- Appropriate use

- Aging population
  - Chronic disease
- Rising costs
  - Inadequate budgets
- Medical tourism
  - Travel abroad for treatment
- Payers influence decisions
  - The 'informed' patient
- Philanthropy
  - Developing countries
- Non-MDs providing care
- Prevention
  - Wellness screening
- Technological advance
  - Personalised medicine
- Innovation and demand
  - Emerging countries
- Evidence based medicine
  - Clinical practice guidelines
- Environmental challenges
  - Water, air, food, congestion
- Global pandemics

Adapted from Harvard Business Report [http://hbr.org]
Laboratory Medicine: Future Priorities

- Continuous laboratory quality improvement
- Improvement in efficiency and cost effectiveness
- Improvement in clinical outcomes

Development will be ‘outside’ as well as ‘inside’ the laboratory

‘Added Value’
Drivers for Change in Laboratory Medicine

- Globalisation
- Adding Value to Improve Outcomes
- Technological Advance
- Integrated Diagnostics
- Smarter Working
Globalisation of Laboratory Medicine

Instant Global Communication

- Quality Standards
- Laboratory Practice
- Clinical Applications

Meeting the requirements of:
- Patients
- Clinicians
- Other Healthcare Interests
Technological Advance

- Proteomics
- Metabolomics
- Genomics
- Bioinformatics
- Nanotechnology and POCT
- Automation Robotics
- Mass Spectrometry

Impact on skills training and operational requirements
Smarter Working

- Ageing Population
- Medical Advances
- Rising Workloads

Pressure on healthcare budgets

- Improved Efficiency
- Workload Management
- Shared Resources

Impact on staffing levels and skill mix
Integrated Diagnostics

- Laboratory Medicine
- Imaging
- Endoscopy

Integrated Patient Pathways

- Informatics & Knowledge Management
- Erosion of traditional boundaries of Laboratory Medicine
Adding Value Cycle to Quality Laboratory Medicine Services Through the Application of ‘SCIENCE’

- Education of Others
- Standardisation/Harmonisation
- Cost Effectiveness
- Clinical Effectiveness
- Novel Applications
- Innovation
- Evidence-based Practice
### ‘Divisions’ in Laboratory Medicine

<table>
<thead>
<tr>
<th>Local</th>
<th>National</th>
<th>International</th>
</tr>
</thead>
<tbody>
<tr>
<td>What do we call ourselves?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Staff Grades</th>
<th>Sub-Specialty</th>
<th>Delivery Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Doctor</td>
<td>Clinical Chemistry</td>
<td>Public Laboratory</td>
</tr>
<tr>
<td>Clinical Scientist</td>
<td>Haematology</td>
<td>Private Laboratory</td>
</tr>
<tr>
<td>Technologist</td>
<td>Immunology</td>
<td>Managed POCT</td>
</tr>
<tr>
<td>Pharmacist</td>
<td>Microbiology/Virology</td>
<td>Unmanaged POCT</td>
</tr>
<tr>
<td>Technician</td>
<td>Genetics</td>
<td>‘Over the Counter’</td>
</tr>
<tr>
<td>Laboratory Assistant</td>
<td>Molecular Pathology</td>
<td>Via the Internet</td>
</tr>
<tr>
<td></td>
<td>Informatics</td>
<td></td>
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</tbody>
</table>

**Good for patients?**

**Good for profession?**
The ‘Inclusive’ Global Alternative

Patient

Clinical Team
Lab Medicine

Laboratory Team
- Medical Doctor
- Clinical Scientist
- Technologist
- Pharmacist
- Technician
- Laboratory Assistant

Laboratory Medicine
- Clinical Chemistry
- Haematology
- Immunology
- Microbiology/Virology
- Genetics
- Molecular Pathology
- Informatics

Delivery Mode
- Public Laboratory
- Private Laboratory
- Managed POCT
- Other

Quality standards and service specification
‘Shaping the Future of Laboratory Medicine’

A vision for the future

Arising from IFCC Strategic Plan

Launched May 2013 to all IFCC Members

One year consultation

Debate at IFCC Council

June 2014
‘Shaping the Future of Laboratory Medicine’

Aims of Consultation

1. To stimulate societies to consider solutions for their own country

2. To consider how IFCC may position itself for the future
Opportunities for IFCC

- Increased collaboration for Full & Corporate Members
- Improved range and quality of services for IFCC Members
- Increased credibility with global clinical organisations
- Increased focus on added value and clinical outcomes
- Increased influence with World Health Organisation
- More global standardisation & harmonisation
- More global practice standards & guidelines
- A more effective global voice for laboratory medicine
Opening Up the Membership of IFCC: Barrier

**IFCC Statute 4.1.1**
Full Members are drawn from either one established and recognised national society of clinical chemistry, or clinical chemistry and laboratory medicine, or one such organisation in a given geographical area.

Limits IFCC to one Full Member per country. (Most IFCC Full Members originated as Clinical Chemistry Societies. They have embraced wider laboratory medicine to a variable extent).

Can only be changed by a vote of the IFCC Council i.e. Current Full Members.
Survey of IFCC Full Members: Nov 2013

• 100% are active in clinical chemistry
• >70% are active in immunology and haematology
• >60% are active in microbiology, molecular pathology
• >50% are active in genetics and virology
• <50% are active in transfusion, transplantation, informatics
• Only 2 IFCC Full Members are active in anatomic pathology

Conclusions:
IFCC should not seek to include anatomic pathology
A case can be made for greater inclusivity in laboratory medicine
IFCC Proposals for Change

- Amend Statute 4.1.1 that restricts IFCC Full Membership to one society per country
- Adopt a similar inclusive approach to companies for Corporate Membership
- Open membership to any properly constituted society that is active in laboratory medicine
- Facilitate Full Membership from microbiology, genetics, transplantation, bioinformatics etc
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Examples of Good Practice Regarding the Future of Laboratory Medicine

Standardization linked to traceability
Lothar Siekmann (DE)

The Asian Pacific Region vision
Leslie Lai (MY)

Collaboration in Romania
Camelia Grigore (RO)

UK vision and achievements
Eric Kilpatrick (UK)

AACC strategic plan for the future
Gary Myers (US)
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Quality standards and service specification
Timetable of Debate

• 14.35h Open discussion:
  3. Shaping the future of laboratory medicine
     a) At national / regional level
     b) Opportunities for IFCC
     c) Implications for IFCC Corporate Members
  4. IFCC proposals for change
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