

# UNDERSTANDING LABORATORY MEDICINE

## International Federation of Clinical Chemistry and Laboratory Medicine (IFCC): A Unifying Organization for Laboratory Scientists Worldwide

The IFCC, representing over 86 countries, provides leadership in the practice of clinical chemistry and clinical laboratory medicine through service, education and research.

The IFCC achieves this by:

- Establishing standard practise documents for laboratory medicine
- Communicating via electronic media and conferences with government, industry and healthcare associations, in the interest of the general public
- Developing competency and education within member countries

**FOR MORE  
INFORMATION,  
PLEASE VISIT:**

- [www.ifcc.org](http://www.ifcc.org)
- [www.labtestsonline.org](http://www.labtestsonline.org)
- <http://labsarevital.ascp.org>



[www.linkedin.com/  
groups?gid=3866810](http://www.linkedin.com/groups?gid=3866810)



## Laboratory Medicine, Critical to Healthcare Delivery and Patient Care

Laboratory medicine is an integral component of healthcare delivery systems worldwide. Up to 80% of routine patient care is dependent on a wide range of test results from the laboratory. Highly trained laboratory staff test patient samples to ensure the results are accurate, yet timely for medical decisions. Clinical staff use the test results to assist in medical diagnosis, prognosis and treatment monitoring.



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## Critical Role of the Laboratory in Optimal Delivery of Healthcare



### ROUTINE PATIENT CARE

- Up to 80% of routine care requires laboratory testing



### SPEED AND ACCURACY OF RESULTS

- Laboratory equipment and methods improved
- High throughput, automated platforms



### QUALITY LABORATORY RESULTS

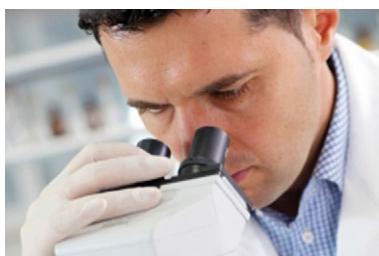
- Evidence-based decisions and diagnosis
- Monitor disease progression/treatment

## A Key Discipline of Laboratory Medicine: Clinical Chemistry

Laboratory medicine includes several main disciplines – clinical chemistry, haematology, microbiology, molecular biology and anatomical pathology. Examples of common tests performed in laboratories include the determination of blood glucose to diagnose diabetes, determination of blood groups for blood transfusions, screening for cystic fibrosis and examination of tumours.



## Key Professionals in the Field of Laboratory Medicine



### PATHOLOGISTS

- Interpret pathology results
- Medical qualification
- Pathology specialist training



### CLINICAL LAB SCIENTISTS

- Perform test analysis
- Verify results
- Scientific qualification – Degree level



### TECHNICIANS

- Assist scientists in laboratory
- Scientific qualification – Diploma level



### PHLEBOTOMISTS

- Collect blood, urine and other samples from patients
- Blood collection certificate



### SPECIMEN RECEPTIONISTS

- Specimen handling & identification
- Patient data entry