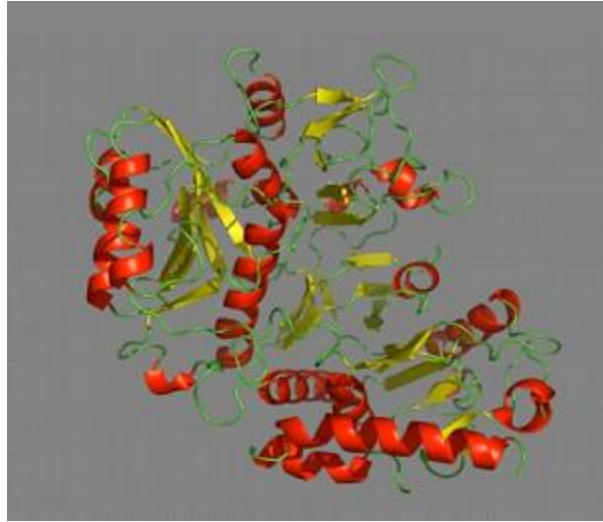


Brief



The department of medical biochemistry was established in 1971 in the College of Medicine and King Khalid University Hospital. The department has seven highly qualified staff members, three demonstrators, eight residents, one specialist and three technicians. The department offers courses in medical and clinical biochemistry, genetics, molecular biology and laboratory medicine to medical students as well as postgraduates and residents (males & females). Postgraduate courses emphasize recent findings as well as relevant fundamental background information. The training of interns and residents is one of the main tasks of the staff members.

Medical Biochemistry courses were designed for medical students having their first exposure to medical biochemistry (first and second year medical college). Upon completion of these courses, the student should have an excellent grasp of the metabolic basis of diseases. In order to understand the altered state, it is first necessary to study the normal pathways of metabolism, such as the biosynthesis of large molecules, the metabolism of small molecules involved in the generation and storage of energy and the use of molecular biology in diagnosis and treatment of diseases. Once the normal pathways are understood, defective steps causing diseases will be introduced. By teaching biochemistry via a disease oriented approach, students should have a greater appreciation for the role of clinical biochemistry in management of diseases.

King Saud program in pathology (Clinical Biochemistry) is available for the qualified medical candidates. The program is a joint program between four hospitals; King Khalid University Hospital, King Faisal Specialist Hospital, King Fahad National Guard Hospital and Armed Forces Hospital in Riyadh.

The residents who are enrolled in the program, will be actively involved in seminars, daily laboratory training in both routine and special biochemistry.

Departmental seminars give the residents the opportunity to actively participate in the discussion of most recent advances in the fields of medical sciences.

The department offers an excellent diagnostic services for the patients for 24 hours in the two university hospitals (King Khalid university hospital and King AbdulAziz university hospital) through up-to-date facilities (machines and techniques) for laboratories of clinical chemistry including fully automated analyzer, atomic absorption, electrophoresis, amino acid analyzer and instruments for hormonal assay .

The department has conducted good research programs in the fields of hemoglobinopathies, thalassaemia and enzymopathies as well as molecular basis of genetic disorders; causative factors, prevention and control and molecular basis of non communicable diseases as diabetes mellitus and gene diversity in health and disease.

In addition to the academic, research and diagnostic activities , the department offers annual training courses and workshops in the field of molecular biology, molecular genetics and applied clinical chemistry in collaboration with the medical education center in the college of medicine, King Saud University. These training courses and workshops present the most recent knowledge in that field.

The department offers the following undergraduate courses:

1- Medical Biochemistry courses:

A- MBC 141 course in the first year.

Starts with the chemistry and metabolism of substances found in the body such as carbohydrates, lipids,proteins, etc. together with control and integration of the metabolic pathways.

B- MBC 142 course in the second year:

Covers nucleic acids structure & metabolism, nutrition, vitamins, minerals and body fluids.

The courses of medical biochemistry are covered in two years and subdivided into lectures, practical and tutorial classes.

2- Medical Genetics (KATAB 105):

Undertaken in the second half of the first year of medical school.