

Research Activities

A well defined clinical/science group of a "Sickle Cell and Allied Disorders" study (SAS) was formed in 1989 to complement the national diagnostic laboratories "The National Referral Unit". The study group incorporating clinicians and scientists from various medical specialties, including haematology (internal medicine and paediatrics), nephrology, chest, community medicine, nuclear medicine, ophthalmology, orthopaedics and biochemistry was set up. A weekly case conference is held to enhance educational and health care of the patients at Medical Biochemistry Department.

More recently, WHO designated the haemoglobinopathies referral unit as a WHO Collaborating Centre following the visit of an W.H.O. Expert to the Department and assessment of its potential usefulness in this regard. As a result, the Department was designated as W.H.O. Collaborating Centre for Haemoglobinopathies, Thalassaemias and Enzymopathies initially for a period of 4 years (1991-1995) .(

Participation in research, involving clinical and biochemical patients care resulted in a more complete and effective approach. The diagnostic laboratory interest is directed towards the establishment of "normal reference ranges" for biochemical and haematological parameters and the investigations of biochemical profiles for the pre clinical diagnosis of disease states. Research is also being carried out in order to investigate the various associated biochemical abnormalities, with the aim of defining ways for early diagnosis of disease states. Diseases included in this study are diabetes mellitus, atherosclerosis, rheumatoid arthritis, heart, lung, liver and renal diseases, systemic lupus erythematosus etc. A nation wide multidisciplinary study on the prevalence and aetiology, clinical presentation and complications of diabetes mellitus in Saudis has been initiated. In addition, studies at the insulin gene level and association with HLA types are also conducted.

The scientific/medical and health care interest involve the nation-wide studies of congenital (particularly genetic) anomalies and the handicaps. A pilot study has begun on children handicaps problem in Saudi Arabia. Studies of molecular basis of genetic disorders and the work toward molecular diagnosis and probing lead to the recognition of the department as a "Resource centre for gene mapping of inherited diseases". Initial studies have also been initiated in preparation for a multicentre investigation of the project "A study of the human genome, normal and pathological."

“ The 9th Symposium On Genetics In Health And Disease – Implication For Individuals, Family And community” and The 4th Satellite Symposium On Recent Advances In Human Genetics – Positive Applications and negative Concerns In Islamic Communities It was held in Medical Biochemistry Department , College of Medicine, King Saud University Riyadh, Saudi Arabia during the period 25 –27 September 2004 (11 –13 Shaaban, 1425 AH). In this symposium we listen to a diversified experience from Saudi Arabia, the rest of Arab World and beyond on the state-of-art, on the currently hot subjects in genetics, including pathphysiology, epidemiology, counselling and management of affected cases. I do hope you all will find the symposium stimulating and gratifying. The input from medical/genetic expertise outside and inside the Arab/Islamic World, is enriching and lightening.