PRESS RELEASE  
WINNERS ANNOUNCED  
1984/1404H KING FAISAL INTERNATIONAL PRIZE  
In  
MEDICINE  

Topic: Diarrhoeal Diseases

The King Faisal International Prize in Medicine was awarded for work on Diarrhoeal Diseases which are a major cause of sickness and death throughout the World. According to a recent estimate made by the World Health Organisation over 1 billion episodes of diarrhoeal occur every year and these lead to the death of more than 5 million children under 5 years of age.

The research carried out by two groups in this field has been outstanding and the work of each has complemented that of the other. The Prize has therefore been divided equally between:

Professor John S. Fordtran,  
and  
Dr. William R. Greenough III together with Professor Michael Field.

Dr. Fordtran is chief of the Department of Internal Medicine at Baylor University Medical Centre in Dallas, Texas. His extensive and highly original studies stretching over 20 years have provided fundamental knowledge on the absorption of water and salts by the human intestine. This has led to a logical new classification of diarrhoeal diseases and formed the basis for their rational treatment. In addition, this work has stimulated a considerable amount of research by other investigators. Dr. Fordtran's meticulous clinical experimental approach to the study of intestinal physiology has gained him an international reputation as the leader in his field. He and his team have published over 100 scientific papers and he is the co-editor of one of the world's leading textbooks on gastroenterology. Dr. Fordtran is 52 years of age.

Dr. Greenough first joined the International Centre for Diarrhoeal Disease Research, Dhaka, Bangladesh in 1962 and is currently its director.
Professor Michael Field is professor in the Department of Pharmacological and Physiological Sciences University of Chicago. Working at Johns Hopkins (to which Dr. Greenough returned in 1968) and Harvard Universities they succeeded in elucidating the chemical mechanism by which cholera and other pathogenic bacterial toxins cause diarrhoeal by stimulating the intestine to secrete an excessive quantity of salt instead of absorbing it. Their observations have generated much work worldwide on the secretory mechanisms of the intestine and the pathogenesis of diarrhoeal. Dr. Greenough had, prior to these studies, already demonstrated the value of certain antibiotics in shortening the course of the disease in cholera. The research of both these workers and Dr. Fordtran's group helped to explain the reasons underlying the success that met the use of a glucose and salt mixture in the oral rehydration treatment of diarrhoeal. Dr. Greenough subsequently returned to Bangladesh. Dr. Greenough is 51 and Professor Field 50 years of age.

The staff of the famous centre in Dhaka have achieved international renown for pioneering the use of glucose salt solutions for the treatment of cholera and other diarrhoeal diseases, a form of therapy that has undoubtedly saved the lives of countless thousands of patients, especially children in the developing countries. The award of the King Faisal Prize jointly to these scientists recognizes not only their own major accomplishments but also the important contributions of a succession of their associates over the last two decades, especially at the International Centre in Dhaka.