PRESS RELEASE
WINNERS ANNOUNCED
1996/1416H KING INTERNATIONAL PRIZE
FOR MEDICINE

Topic: Management of the Premature Infant

The Selection Committee of The King Faisal International Prize for Medicine has awarded the 1996 prize jointly to:

Professor Bengt A. Robertson
and
Professor Tetsuro Fujiwara

in recognition of their pioneering studies into the aetiology, prevention, and treatment of respiratory distress syndrome (RDS), a major cause of death in premature infants.

Professor Bengt A. Robertson, a Swedish national born in Stockholm in 1935, graduated in medicine at the Karolinska Institute in 1960. During the following decade he and his team, working with animal models, carried out much of the pioneering work on the physiology and pathophysiology of the respiratory tract in relation to respiratory distress syndrome (RDS). They showed for the first time that the introduction of surfactants into the upper airways of premature primates prior to the first breath could prevent respiratory distress. Subsequently the curative value of administering surfactants to premature infants has been established. Professor Robertson is the Director of the Division of Paediatric Pathology at the Karolinska Institute, Stockholm.

Professor Tetsuro Fujiwara, born in 1931 in Morioka, Japan, qualified in medicine in Iwate Medical University in 1956. He subsequently carried out research on gaseous metabolism in premature infants and then devoted many years to seeking improved methods of treating RDS. The discovery that RDS is a surfactant-
deficiency state led him towards the search for improved synthetic surfactants and the eventual development of a novel compound. Professor Fujiwara reported the first successful use of surfactant replacement therapy in human premature infants. His studies with a diagnostic test for the prediction of the development of the RDS (the "micro-bubble test" which is carried out on amniotic fluid from the mother or gastric aspirate from the newborn) made another invaluable contribution to the improved management of this condition. Recent multi-center clinical studies have confirmed the value of prophylactic surfactant therapy compared with its application for the treatment of established RDS. Professor Fujiwara is currently the Professor and Chairman of the Iwate Medical University School of Medicine.

Surfactant analogues have proved to be a milestone in the management of premature infants. The pioneering experimental and clinical studies of Professors Robertson and Fujiwara have been responsible for a major increase in the survival of these highly vulnerable babies throughout the world.