Acceptance Speech of **PROFESSOR SIR ROY YORKE CALNE**

Co-Winner of the 2001 King Faisal International Prize for Medicine

Friday 16 February 2001 (22 Dhu Al-Qedah 1421H)

Your Royal Highness, Prince Abd Allah bin Abd Al-Aziz
The Crown Prince, Deputy Chairman of the Council of Ministers
and
Head of the National Guard
Your Royal Highnesses
Your Excellencies
Distinguished Guests

I am deeply honoured and grateful to the King Faisal International Prize Selection Committee that they have chosen organ transplantation for this year's Prize and that I am a corecipients.

Organ transplantation was a dream that came to fruition. The surgery and preservation of the organ during the procedure is now well established but the biology of rejection still remains a partially unsolved problem.

I have been involved in organ transplantation for 42 years and have tried to address both the surgery and the biology of transplantation with a special interest in methods of preventing graft rejection. Over the years a variety of drugs and biological antibodies has been investigated and found to be extremely

powerful but all have side effects. Therefore learning to use them in the best way has been a difficult and long lesson which we have not fully completed. With the dawn of the 21st century there is every hope that avoidance of rejection will be managed with less harmful regimens. The better the results, the greater the demand for the operation and an increasing shortage of donor organs.

We have come a long way since kidney grafting was first done successfully between identical twins by Dr. Joseph Murray in the 1950s. The biology of transplantation continues to be a fascinating area worthy of study by the brightest of young graduates in medical science.

I would like to end by paying a tribute to Arabian mathematics, which was the vital tool necessary for the advancement of modern science. The ancient Chinese, Egyptians and Greco-Roman civilisations each exhibited astonishing achievement but could not progress further without mathematical advance. The numerical system and mathematical developments of ancient Arabia paved the way for the marvels of modern science with the perceived and obvious benefits to humanity. We must, however, diligently monitor our discoveries with extreme care to prevent misuse of science that could destroy us and our planet.

I am particularly happy that my wife, Patricia, who has been a constant and enthusiastic supporter of my endeavours for 42 years, often through difficult times, is with me today to share in this honour, and that my old friends and scientific colleagues, Norman Shumway and Thomas Starzl are co-recipients of the award.