

**ANNOUNCEMENT FROM THE GENERAL SECRETARIAT OF
THE KING FAISAL INTERNATIONAL PRIZE
ON THE RESULTS OF THE SELECTION COMMITTEES
IN THEIR MEETINGS HELD
BETWEEN 13/9/1421H-16/9/1421H
CORRESPONDING TO 9/12/2000G-12/2/2000G**

Riyadh, 12 December 2000. At an official dinner held at Riyadh's AI Khozama Centre, HRH Prince Khaled AI Faisal, Director-General of King Faisal Foundation, announced the winners of the prestigious King Faisal International Prize for 2001.

Professor Sir Roy Yorke Calne (Emeritus Professor of Surgery, University of Cambridge, UK), **Professor Norman Edward Shumway** (Professor and Chairman of the Department of Cardiothoracic Surgery, Stanford University, California, USA), and **Professor Thomas Earl Starzl** (Professor of Surgery, University of Pittsburg, Pennsylvania, USA) have jointly been awarded the King Faisal International Prize for **Medicine** for their outstanding contributions in the field of organ transplantation.

Professor Calne's pioneering experimental and clinical research on the use of immunosuppressive drugs and other aspects of transplantation has led to the introduction into clinical practice of 6-mercaptopurine (1960), azathioprine (1961) and, most importantly, cyclosporin (1970). Professor Caine's research on these drugs paved the way for heart, lung, liver, pancreas and kidney transplantation to become standard procedures throughout the world, thereby benefiting huge numbers of patients. Professor Caine also pioneered the use of monoclonal antibodies to prevent graft rejection and made the seminal discovery that liver transplantation is of itself immunosuppressive. This has led to the concept that it may be possible to reduce the use of immunosuppressive drugs in recipients of liver and other organ transplants.

Professor Shumway is considered to be the father of heart transplantation. The first human heart transplant, performed by Dr. Barnard, was based entirely on Professor Shumway's work. He introduced endo yocardial biopsy for the diagnosis of rejection, a major advance in managing these patients. Introduction of cyclosporin allowed the Stanford program to expand and establish the efficacy of clinical heart transplantation.

Professor Shumway is credited with the first successful transplantation of the heart and both lungs, which is now an established therapy for patients with end-stage cardiopulmonary disease.

Professor Starzl's pioneering work has influenced all aspects of organ transplantation. He was the first to develop the surgical techniques without which successful liver transplantation would not have been possible. He was also the first to introduce the important immunosuppressive drugs, corticosteroids, into clinical transplantation. In addition, he pioneered the use of FK506 (tacrolimus) to prevent the rejection of liver, small bowel, and multiple visceral organ transplants. Professor Starzl has also put forth some of the most challenging scientific concepts, such as microchimerism, which stimulated an immense amount of research in the field of transplantation.

The prize for Science has been jointly awarded to **Professor Sajeev O. John** (Professor of Physics, University of Toronto, Canada) and **Professor Chen Ning Yang** (Albert Einstein Professor Emeritus, State University of New York at Stony Brook, USA) for their outstanding contributions in the field of physics.

Professor John is being recognized for proposing a new method for the processing and transmission of information by optical means. It is hoped that the use of electrons to transmit messages within telecommunications devices and computers can be replaced by light. This would lead to faster, cheaper, and more versatile tools and would transform the computer and telecommunications industries.

Professor Chen Ning Yang is one of the most eminent contemporary physicists. Among his many fundamental contributions to the field of physics, Professor Yang proposed a theoretical framework which later became the basis of the present theory of the structure of matter at the smallest scales and highest energies.

The prize for **Arabic Literature** has been jointly awarded to **Professor Ibrahim A. Al-Saafin** (Professor of Arabic Literature, University of Jordan) and **Professor Mansour I. Al-Hazimi** (Professor of Arabic Literature, King Saud University, Saudi Arabia) for their contributions to the study of the various genres of modern Arabic prose.

Professor Al-Saafin has written numerous books and articles on the Arabic novel, short story, and play. He has studied the ancient Arabic narrative tradition and its expressions across the ages.

Professor Al-Hazimi is one of Saudi Arabia's foremost literary critics. He has studied the modern Arabic historical novel and played a pioneering role in researching the Saudi novel and short story.

The Saudi Arabian High Commission for Donations to Bosnia-Herzegovina has been chosen for its humanitarian efforts towards the beleaguered people of Bosnia-Herzegovina as the recipient for the 2001 Service to Islam prize. Even under difficult conflict conditions, the Commission managed to provide much-needed supplies to war-ravaged communities and to assist in the reconstruction of homes and infrastructure.

Because none of the candidates met the standards of the Selection Committee, the 2001 prize for Islamic Studies has been withheld.

Notes to Editors:

- Professor Sir Roy Calne, FRCS, FRS, was born in the UK in 1930 and received his medical training at Guy's Hospital, London. He later spent two years as a Research Fellow in Surgery at Harvard Medical School. Upon his return to UK, Professor Calne held surgical posts at St. Mary's and Westminster Hospitals before he became Professor of Surgery at the University of Cambridge, a post which he held until he retired in 1998. Professor Calne is a Fellow of the Royal Society and a recipient of the Lister Medal and the Medawar Prize.

- Dr. Norman Edward Shumway was born in the USA in 1923. He obtained his M.D. degree from Vanderbilt University and Ph.D. from the University of Minnesota. He pursued his postdoctoral training at the National Institutes of Health. Dr. Shumway began his academic career as an instructor in surgery at Stanford University where he remains as the Frances and Charles D. Field Professor and Chairman of the Department of Cardiothoracic Surgery. His contributions are documented in almost 500 publications. He received the 1992 Medawar Prize.

- Professor Thomas Earl Starzl was born in the USA in 1926. He received his MD and PhD degrees from Northwestern University in Chicago, and his surgical training at Johns Hopkins Hospital, the University of Miami, and the Chicago Veterans Administration Research Hospital. Professor Starzl began his pioneering work in organ transplantation in the Department of Surgery at Northwestern University in Chicago. Later, he moved to the University of Colorado where he was promoted to Professor and Chairman of Surgery. In 1981, Professor Starzl joined the University of Pittsburgh where he became the director of the world renowned Thomas E. Starzl Transplant Institute. Professor Starzl has published more than 3000 research papers and he is among the most cited of all medical scientists. He has also trained a large number of surgeons from all over the world. Professor Starzl received the Sir Peter Medawar Prize in 1992.

- Professor Yang was awarded the Nobel Prize for his major discovery of the non-conservation of parity which proved that nature, contrary to general expectation, does distinguish between left and right in weak nuclear interactions.

The topics for the 2002 King Faisal International Prize are: *Medicine-Pathophysiology of Chronic Heart Failure*; *Science-Mathematics*; *Arabic Literature-Modern Palestinian Literature*; *Islamic Studies-The Objectives of Islamic Legislation*. The deadline for all nominations is 30 April 2001.