PRESS RELEASE
WINNERS ANNOUNCED
2000/1420H THE KING FASAL INTERNATIONAL PRIZE
FOR MEDICINE

Topic: AGEING

The King Faisal international Prize in Medicine has been awarded to:

PROFESSOR CYNTHIA JANE KENYON

Professor Kenyon, a US citizen, was born in Chicago and obtained her first degree in chemistry and biochemistry at the University of Georgia in 1976. She then moved to the Massachusetts Institute of Technology where she carried out studies on gene regulation in a bacterium, *Escherichia coli*, for which she was awarded a PhD in 1981. She then took up a postdoctoral fellowship at the Medical Research Council Laboratory of Molecular Biology in Cambridge, UK, where her advisor was a former winner of the 1992 Prize for Science, Professor Sydney Brenner. In 1986 she was appointed to the post of Assistant Professor in the University of California in San Francisco where she has since remained, being promoted to Professor in the Department of Biochemistry and Biophysics in 1992.

The work that Professor Kenyon accomplished there has opened up the field of ageing to the discipline of molecular biology. Her research on the genes that are involved in extending the life of *Caenorhabditis elegans* have shown, for the first time, that the process of ageing is controlled hormonally through the insulin receptor system. The choice of this animal which is now known to possess some 19,000 genes, as a model system, has allowed her to make rapid advances in identifying important genes that are conserved in higher animals up to and including man. Her scientific findings are in agreement with observations by other research workers on the molecular changes associated with caloric restriction which is the only effective way so far identified of extending the lifespan of organisms ranging from yeast to mammals. Thus we now have available a very detailed outline of the nature of ageing, with a central hormone unit that integrates both environmental and intrinsic factors in the ageing process. The important outcome of Professor Kenyon's research is that ageing can now be considered to be not a fixed and
immutable process but one that is amenable to the possibility of hormone-based, therapeutic intervention.

Professor Kenyon has published a large number of key papers in leading scientific journals and has received several important academic honors that include the Herbert Boyer Distinguished Professorship of Biochemistry and Biophysics in 1997 and the Ellison Medical Foundation Fellowship in 1998.