

Acceptance Speech of  
**PROFESSOR EUGENE BRAUNWALD**  
Co-Winner of the 2002  
King Faisal International Prize for Medicine

Your Royal Highness, Prince Sultan Ibn Abd Al-Aziz  
Second Deputy Premier, Minister of Defence and Aviation  
And Inspector General  
Your Royal Highnesses  
Your Excellencies  
Distinguished Guests

First, I would like to express my deep appreciation to the King Faisal

Foundation for this high honor. I also want to salute the Foundational for establishing these prizes. These important awards are particularly noteworthy this year because they come at a time which has been so unsettling for people all over the world, especially for people in this region as well as those in my country, the United States. These prizes, under the auspices of the King Faisal Foundation, celebrate activities that unite persons of good will everywhere – they celebrate efforts to advance civilization and human well being through progress in the arts and sciences.

The prizes in medicine which emphasize heart disease and heart failure are especially meaningful. Epidemiologic projections have shown that by the year 2020, only 18 years from now, cardiovascular disease will be numerically the most common cause of death world wide. Cardiovascular disease has been the most common cause of death in industrialized nations for more than a half century. With the reduction of childhood mortality from infectious diseases and malnutrition, more persons in the developing nations are surviving to adulthood, when they become candidates for heart disease.

Thus. It is no exaggeration that we are at the threshold of a worldwide pandemic of heart disease. Among the different forms of heart disease, congestive heart failure, the field in which I have worked is rapidly becoming the most frequent cause of death. This rise in the incidence of heart failure appears to be occurring despite improvements in the treatment of all forms of heart disease. It is due to the fact that while modern treatments may reduce early deaths from heart attacks or high blood pressure, these treatments do not cure the underlying conditions; they simply slow them and increase the fraction of the population at risk of developing heart failure.

I consider the war against heart disease and heart failure to be a noble war and one in which I have fought during my entire career. As a medical student at New York University, 50 years ago, I became seriously interested in heart failure. I worked in what was the first clinic devoted exclusively to the care of patients with heart failure and began research in one of the first hemodynamic laboratories that was devoted entirely to the study of this condition. I have been fortunate to have had extraordinary teachers. The first was Professor Ludwig Eichna at New York University; then I studied with the Nobel prize winner, Professor Andre Cournand at Columbia University, and then with Dr. Stanley Sarnoff, an outstanding physiologist at the National Institutes of Health. I have been equally fortunate to have had the opportunity to work with brilliant colleagues and students at three great institutions: first at the National Heart Institute, then at the University of California, and for the past 30 years at Harvard University and the Brigham and Women's Hospital. I also feel fortunate recently to have been given the opportunity, to continue my work on heart failure by leading a 60 center multinational trial to study new approaches to

the treatment of heart failure in patients with ischemic heart disease.

During the past half century I have been privileged to observe at close range, and sometimes to participate in, some extraordinary advances in the diagnosis, treatment, and most recently the prevention of heart disease. We have learned that alterations in the nervous system and in circulating hormones can greatly accelerate the course of heart failure and we now have drugs that can block these processes and prolong life. Very recently we have learned that the implantation of an electrical device, called an internal cardioverter-defibrillator, can prevent death from rhythm disturbances in heart failure and also prolong life.

As a representative, along with Professor Waggstein, of the large community of cardiovascular scientists worldwide, I wish to express my deep appreciation to the King Faisal Foundation for recognizing the importance of this field and for honoring me this evening.