SPEECH OF
DR. ANTHONY E. BUTTERWORTH
at the ceremony of awarding him the Prize

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Your Royal Highness, Prince Abd Allah Ibn Abd Al-Aziz,
The Crown Prince,
Your Highnesses, the Princes,
Your Eminencies and Excellencies,
Distinguished guests,
Ladies and gentlemen,

I feel it a very great honour to be awarded, jointly, this year's King Faisal International Prize in Medicine, following some outstanding scientists and physicians from earlier years: and, as far as I am concerned, there are three particular reasons for being especially delighted with this award.

The first is the choice of subject matter, schistosomiasis. In spite of the introduction about fifteen years ago of safe and effective drugs for the treatment of all three species of schistosome that affect man, the disease remains an intractable public health problem in many tropical countries, affecting some 200 million people throughout the world and causing extensive chronic morbidity and some mortality, especially among children and young adults. The identification of shcistosomiasis as an appropriate subject for this year's prize emphasises the continuing importance of the disease, and should therefore provide a major boost to further research, not only in my own group but also among all those who are concerned with the development of' improved methods of control

The second reason is that this is an award made jointly, among others, with my good friend and colleague Professor Andre Capron.. Andre and I have now worked together for many years, pursuing independent but complementary lines of research: for my part, I know that I have benefited enormously from this close collaboration, which I think has been a good example of the way in which cooperative scientific research can transcend national boundaries.

And the third reason for being particularly pleased is that, although this prize must necessarily be awarded to an individual or small number of individuals, it does in fact reflect the work of many close colleagues and junior staff, who have every reason to feel equally pleased and proud. In my case, I am referring not only to my scientific collaborators in Cambridge, especially David Taylor, David Dunne and Jane Havercroft, but also to many collegues in Kenya, with whom I have worked very closely over the past fifteen years. Much of what we do involves field studies in endemic communities, and in these I have relied heavily on John Ouma and his team in the Kenya Ministry of Health, while laboratory studies in Kenya have been done in collaboration with Davy Koech and the staff of the Kenya Medical Research Institute. To all of these people, both in Cambridge and in Kenya, I owe a debt of thanks.

As I mentioned, safe and effective drugs are now available for the

treatment of schistosomiasis in man, and part of the work that we have done in Kenya has been to develop methods for their effective delivery. We have found over the past few years that treatment of infected children only is a highly effective, and also very practicable, control method: we have recommended, that this approach be adopted in a national schistosomiasis control programme shortly to be established in Kenya, and we hope that it might be equally applicable to other endemic countries. In the long term, though, the use of drugs is not an ideal method of control: they are extremely expensive and, since children in particular become rapidly re-infected after treatment, their use must be continued indefinitely. Along with Andre Capron, therefore, we have also been concerned with vaccine development as a preferable approach to schistosomiasis control in the future. We have managed to demonstrate that older individuals do develop an immunity, to infection, and we have learnt something about its mechanisms: this, together with the genetic engineering of schistosome antigens that Professor Capron has described, now offers reasonable hope for the development of a schistosome vaccine in the not-too-distant future. As I have been interviewed by members of the press over the past few weeks, they have tended to ask: "What is the breakthrough in schistosomiasis that you have made?" The answer is that there is no single, identifiable breakthrough, but rather a steady accumulation of new knowledge and understanding that may slowly allow us to improve our ability to tackle this major human disease. I am most honoured and extremely grateful that this cautious approach should have been recognized through the award of the King Faisal Prize.