

Speech of
Prof. Luigi Mastroianni
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 & Excellencies,
Distinguished Guests,
Ladies and Gentlemen,

Today marks the eighth occasion of awarding the King Faisal International Prizes. Past medical topics which were singled out for the prize have included such conditions as malaria, diarrheal disease, hepatitis, diabetes, and blindness. These share a characteristic in common: each exerts an Impact not only on the individuals affected out also on the larger society. This year's subject, infertility, is also a condition with far-reaching, social implications. Clearly, anything that would effect the reproductive potential of individuals would have broader consequences in societal terms.

Paradoxically, reproductive biology, which serves as the underpinning for new developments in infertility treatment, equally address fundamental

issues of family planning. As we come to understand how it is that the procreative process is “turned off” as it were, we are in a better position to know how to control it. There are those who would take the position that the major problem in the world is not infertility, but hyper fertility, expressed in terms of the dramatic increase in world population with its consequent strain on world resources. It is clear that we do not have, at this point, methods of family planning that are appropriate and acceptable to all segments of global society. Yet, it is estimated that one of ten couples are involuntarily infertile. Even in areas of the world where population growth has been most dramatic, infertility is also endemic. If we are to ask individuals to consider limiting their family size, must we not be willing to use resources to help those who do not have at least one child? for me, as a clinician-investigator with responsibility for individual patients the importance of infertility is expressed best not in demographic terms but rather in terms of its impact on the lives of individuals. We must especially consider the devastating impact of childlessness on women, which, in some cases, can lead ‘to isolation and even divorce. For both men and women, infertility is, at the very least, associated with a sense of frustration, disappointment, and lack of fulfillment. There are few support systems to address these issues.

The past two decades have witnessed dramatic breakthroughs in our understanding of human reproduction. These have led to improved and sometimes startling methods of infertility treatment. There are newer and better methods to treat tubal diseases, to evaluate and induce ovulation, and to manage deficiencies in sperm production. These have resulted in successful treatment in cases, which, in times past, would have been adjudged hopeless. Certainly the most dramatic of these breakthroughs has been in vitro fertilization. This approach, which has captured the imagination of the public, has done more to focus attention, on the importance of basis research in human reproduction than has any other major advance.

I am especially honored to be sharing this prize with Professor Edwards, who along with the late Patrick Steptoe, fostered the first successful pregnancy from in vitro fertilization. Their work speaks to the importance of the interface between the basic scientist, and the Clinical Scientist, and it is through such collaboration that the most expeditious technology transfer is accomplished.

I can only look upon this award as an acknowledgement of the contributions of the colleagues with whom I have been associated over more than three decades. I was fortunate to have worked under the tutelage of some extraordinary pioneers and, along the way, to have had interaction with younger colleges at the University of Pennsylvania’s Division of Reproductive Biology. They have come from all continents, and they have reflected diverse cultural and religious backgrounds. They have taught me the importance of mutual respect, and that basic human values are no different, really, from one land to the next. As the fields of reproductive

biology and human reproduction are explored further, it is hoped that Procreative function will be sufficiently understood such that all persons will have genuine options; we look forward to the time when pregnancy can be almost always achieved when it is desired, and when every child born into the world is a wanted child.