



Charles Rodolphe Brupbacher Foundation

The
Charles Rodolphe Brupbacher Prize
for Cancer Research 2009
is awarded to

Sir Richard Peto

for his contributions
to cancer epidemiology, in particular the causation of premature death
by tobacco smoking.

The President
of the Foundation

Mrs. Frédérique Brupbacher

The President
of the Scientific Board

Prof. Dr. Klaus W. Grätz

Laudatio

Paul Kleihues

No human cancer is so tightly linked to a causal environmental factor as lung cancer is to smoking. Although this relationship is now universally accepted, it took a surprisingly long time to appreciate the magnitude of the adverse effects that smoking has on human health.

Today, we honour Sir Richard Peto, a scientist who has made groundbreaking studies on tobacco and cancer. His early studies with the late Sir Richard Doll showed a clear causal relationship, but the relative risk was not fully recognized. We now know that the risk of lung cancer in life-long smokers is more than 20 times that of non-smokers and that risk for cancer in many other organs is increased, including head and neck, urinary bladder, kidney, oesophagus and pancreas. It was the pioneering work of Doll and Peto that demonstrated the enormous burden of mortality associated with smoking. In the famous study on a cohort of more than 34 000 male British doctors who were monitored over five decades (1951-2001), it was revealed that the life expectancy of persistent cigarette smokers is markedly reduced. Men born in 1900-1930 who smoked only cigarettes and continued smoking died on average 10 years younger than lifelong non-smokers. On the positive side, this work also showed that cessation of smoking significantly reduces the risk of lung cancer even after extensive periods of smoking. Stopping smoking at age 30 largely diminished the adverse effect on life expectancy and cessation as late as at age 50 gained about 6 years of life expectancy and reduced the risk of dying of lung cancer before age 75 by more than 50%. An important conclusion from this study is that public health action should not only concentrate on discouraging young people from taking up the smoking habit, but that equal emphasis should be placed on persuading present smokers to quit.

Importantly Sir Richard Peto has adopted a global approach to epidemiology, extending his research on smoking to other world regions, and in particular to India and China. Peto has estimated that in the 20th century worldwide more than 100 million people died prematurely from smoking and that the high prevalence

of smoking in populous Asian countries will ultimately cause a much higher death toll in the 21st century.

Local opinion in some developing countries had favoured the view that smoking-related disease is an exclusive problem of western nations. Professor Peto demonstrated that after a typical lag period, the same disease burden could be seen in all communities, largely independent of ethnicity and lifestyle factors other than smoking. A large study in India revealed that smoking was associated with a reduction in survival of 8 years for women and 6 years for men and that in 2010, smoking will cause about 930,000 adult deaths in India. Of these, about 70% will occur between the ages of 30 and 69 years.

Through the weight of his studies and as outspoken critic, Richard Peto was and probably still is, the nemesis of the tobacco industry. However, times have changed. Even tobacco producers now have to admit that they sell a deadly product and their public denial of nicotine addiction has further weakened their credibility.

Sir Richard Peto has been awarded multiple honours, many of which reflect his particular contributions to health and medical research generally. Fellowship of the Royal Society was accorded for introducing epidemiological meta-analyses. From such meta-analyses he demonstrated not only the life-saving effects of tamoxifen for breast cancer treatment but also the life-saving effects of many treatments for heart disease. He received the European Award for Excellence in Stroke Research.

Notwithstanding these and many other contributions, however, his work on smoking has been his greatest life-saving achievement. Sir Richard's work has clearly shown that tobacco abuse is world-wide by far the most important avoidable cancer risk. His empathic presentation of these findings has been a key factor in persuading governments to adopt anti-smoking policies to extend the lifespan of smokers able to quit and to protect non-smokers from starting.

Sir Richard Peto

Curriculum vitae and Publications



Date of birth	14 May 1943
Home address	University of Oxford Nuffield Department of Clinical Medicine CTSU Richard Doll Building Old Road Campus Roosevelt Drive Oxford, OX3 7LF UK
Current position	Professor of Medical Statistics & Epidemiology, University of Oxford; Co-director, with Professor Rory Collins, of the University's Clinical Trial Service Unit & Epidemiological Studies Unit (CTSU)

Education

1965	BA Natural Sciences, University of Cambridge
1967	MSc Statistics (with distinction), University of London