CITATION BY PROFESSOR JOHN WONG SENIOR VICE PRESIDENT (HEALTH AFFAIRS), NATIONAL UNIVERSITY OF SINGAPORE PUBLIC ORATOR FOR SIR RICHARD BROOK SYKES HONORARY DEGREE OF SCIENCE RECIPIENT AT THE HONORARY DEGREE CONFERMENT CEREMONY MONDAY, 6 JULY 2015, 11.00 AM AT THE UNIVERSITY CULTURAL CENTRE, NATIONAL UNIVERSITY OF SINGAPORE

If any non-Singaporean has helped shape the Biomedical Science landscape in modern Singapore, it is Sir Richard Sykes.

Born in 1942 in a village outside Huddersfield, West Yorkshire to a family with modest means, Sir Richard started work at 17 in a hospital pathology laboratory before completing his education with first-class honours in Microbiology and later a Doctor of Science at the University of London, and a PhD in Microbial Biochemistry at the University of Bristol.

By 29 he was heading Glaxo's antibiotic research unit distinguishing himself with major contributions to microbiology. At the age of 39, while at the Squibb Institute of Medical Research, his seminal work on screening soil samples for beta lactams culminated in the discovery of the world's first monocyclic B-lactam antibiotic, aztreonam, which we use so widely today.

Sir Richard was lured back to Glaxo where he became global head of R&D and shortly thereafter was appointed Chief Executive and Chairman, where he then led the largest corporate merger in the United Kingdom at that time of Glaxo with first Wellcome, and then SmithKline Beecham, to form what is now GSK which he led as Chairman. For his services to the pharmaceutical industry, Sir Richard was honoured in the 1994 New Year's Honours list with his Knighthood.

Sir Richard has gone on to lead numerous institutions in science, education, and business. Let me cite just a few: Chairman of the UK Bioscience Leadership Council; Chairman of the Royal Institution of Great Britain, the world's oldest scientific body; Chancellor of Brunel University; Chairman of Imperial College Healthcare; Rector of Imperial College, London; Chairman of the UK Stem Cell Foundation; Chairman of the National Health Service (NHS) London; and Senior Independent Director of Rio Tinto.

Among his numerous honours, he is a Fellow of the Royal Society and Academy of Medical Sciences for his distinction as a scientist and for his contributions to the British pharmaceutical industry, and has been honoured by universities across the United Kingdom and Spain.

But we are gathered here today to honour what Sir Richard has done for Singapore since 1987, when he was global head of R&D at Glaxo. In 1990, Glaxo established a \$50 million scholarship scheme to send some of our best students to leading universities globally, with over 300 of Singapore's students benefitting from this. In 2009, GSK donated another S\$30 million matched by S\$20 million from Singapore to create the GSK-EDB trust fund, supporting a range of GSK-EDB scholarships to this day. In 1993, Sir Richard was instrumental in setting up the Centre for Natural Product Research, a joint venture between Glaxo, the Institute of Molecular and Cell Biology, then part of NUS, and the Economic Development Board, which went on to become Merlion Pharmaceuticals, one of Singapore's early biotechnology companies. During his Chairmanship, Glaxo invested heavily in Singapore with the building of two manufacturing and development facilities and establishment of their regional HQ in Singapore.

In 2000, Sir Richard was instrumental in assisting Mr Philip Yeo and Professor Sydney Brenner launch Singapore's Biomedical Sciences Initiative as co-chair of the International Advisory Council, advising the Government on development of this field as a key pillar of Singapore's economy. Sir Richard played a major role in bringing some of the world's leaders in industry and academia, including a whole host of Nobel Laureates, to advise us. It was a tribute to his stature and credibility that no-one turned him down. The International Advisory Council has played a key role in helping to shape the Biomedical Science landscape in Singapore. The development of Biopolis with all its institutes; the transformation of the Kent Ridge and Outram Campuses into Academic Health Systems; the establishment of corporate laboratories by GSK, Novartis, Roche, and Lilly to name a few; the Translational and Clinical Research Flagship Programs; and the formation of the Biologics Cluster with the BIO*One Lonza joint venture producing a substantial amount of GSK, Baxter, Genetech, and Novartis biological therapeutics has benefitted Singapore enormously.

For his outstanding contributions to the economic and biomedical sciences development in Singapore, Sir Richard was awarded the Singapore National Day Public Service Star Award in 1999, and Honorary Citizenship of Singapore in 2004, the highest form of state recognition that may be conferred on non-citizens.

Sir Richard will never forget his first visit in 1987 to the Institute of Molecular and Cell Biology which was at that time in NUS' Kent Ridge campus. This is because he came across a large sleeping python. Thankfully the python continued its slumber, allowing us the opportunity for this ceremony.

It is fitting that the National University of Singapore today honours someone who has contributed so much to shaping the biomedical sciences landscape in Singapore as we know it today.

Mr Chancellor, may it please you to confer on Sir Richard Brook Sykes, the Honorary Degree of Doctor of Science.