Sir John Robert Vane FRS

John Vane studied chemistry at Birmingham University, before taking a degree in pharmacology at Oxford. He graduated in 1949 and went on to a DPhil, spending a year out to lecture in pharmacology at Sheffield University. In 1953, he went to Yale University, Connecticut, for two years, and then returned to England to the Royal College of Surgeons’ Institute of Basic Medical Sciences, which he joined as a senior lecturer in 1955. He spent 18 years there, and became Professor of Experimental Pharmacology. Sir John gathered scientists from around the world to study vasoactive hormones – in particular, the newly discovered prostaglandins and their role in the pulmonary circulation. This work also helped trigger the development of the anti-inflammatory drugs the cyclooxygenase-2 (COX 2) inhibitors.

In 1973, Sir John became Research and Development Director at Wellcome, taking with him a group of researchers from the Royal College. At Wellcome in 1976, when searching for tissues other than platelets that would make thromboxane A₂, Vane and his colleagues identified a vasodilating substance they called PGX that also inhibited platelet aggregation. PGX, or prostacyclin, is now known to be the main product of arachidonic acid in vascular tissue. The cascade superfusion bioassay – a series of strips of smooth muscle tissue bathed in saline solution or blood – the technique that John Vane developed and perfected is among his greatest legacies. It played a part in some of his most important discoveries. Sir John's contribution to society was the science underpinning the finding that a daily low dose of aspirin prevents heart attacks and strokes, saving millions of lives each year, and the development of angiotensin converting enzyme (ACE) inhibitors for the treatment of hypertension.

In 1974, Sir John was made a Fellow of the Royal Society, in 1977, he won the Albert Lasker Basic Medicine Research Award, and in 1982, he shared the Nobel Prize for Physiology or Medicine (with Sune Bergström and Bengt Samuelsson) for his work on prostaglandins and aspirin. He was knighted in 1984, and over the years was awarded 50 other honorary degrees, fellowships and medals including honorary fellowship of the Royal College of Physicians.

In 1986, Sir John founded the William Harvey Research Institute at St Bartholomew's Hospital Medical College to study cardiovascular and inflammatory disease. It is now one of the top 20-most cited UK pharmacological research establishments. Although Sir John stepped down as Director of the Institute in 1997, he stayed on as honorary president.

Sir John was invited by Martine Rothblatt in the late 1990s to become Chairman of the United Therapeutics Scientific Advisory Board because of his discovery of prostacyclin and expertise in the development of prostacyclin analogues and other drugs.

Born in Tardebigg, Worcestershire, UK, on March 29, 1927, he died, aged 77, on Nov 19, 2004, in Farnborough.