**Professor Dame Frances Ashcroft - Biography**

Frances Ashcroft is Professor of Physiology at the University of Oxford, a Fellow of Trinity College Oxford, and a Fellow of the Royal Society of London. She received her PhD from the Cambridge University and did post-doctoral studies with Drs Peter Stanfield (University of Leicester) and Susumu Hagiwara (UCLA). She established her own group at the University of Oxford in 1983, with a focus on the regulation of insulin secretion from the pancreatic beta-cell and how this process is impaired in diabetes. She discovered that the KATP channel serves as the molecular link between changes in the blood glucose concentration and insulin secretion and (together with Professor Andrew Hattersley) that mutations in KATP channel genes cause neonatal diabetes. This has enabled patients with this disorder to switch from insulin injections to drug therapy. Her current focus is how chronic hyperglycaemia in diabetes impairs beta-cell metabolism and thereby insulin secretion. She has won several awards for her work including the Croonian Lecture (Royal Society), the L'Oréal/UNESCO For Women in Science Award (European Laureate), the Manpei-Suzuki Prize for Diabetes Research, the Albert Renold Prize, the Banting medal, and the Lewis Thomas Prize for Science Writing (Rockefeller University). In 2015 she was made Dame Commander of the Order of the British Empire. She has also written two popular science books: *Life at the Extremes - the science of survival* (HarperCollins, 2000) and *The Spark of Life - electricity in the human body,* (Penguin 2012).