

Professor Sir Peter Ratcliffe was awarded the 2019 Nobel Prize in Physiology or Medicine for his pioneering work on the mechanism by which cells sense and respond to oxygen. Peter Ratcliffe has long been studying the regulation of the hormone erythropoietin that stimulates the production of red blood cells under low oxygen tension (hypoxia). He and co-workers made the ground breaking discovery that cells regulate oxygen levels by hydroxylation and degradation of a target molecule, allowing cells to adapt to changes in oxygen. This molecular machinery is critical for many oxygen-dependent diseases, e.g. cancer, cardiovascular diseases and musculoskeletal disorders and its discovery may lead to new treatments.

Professor Ratcliffe studied Medicine at the University of Cambridge and completed his specialisation in nephrology in Cambridge and Oxford. He is currently a Distinguished Scholar of the Ludwig Institute for Cancer Research at the University of Oxford and Director of Clinical Research at The Francis Crick Institute, London.

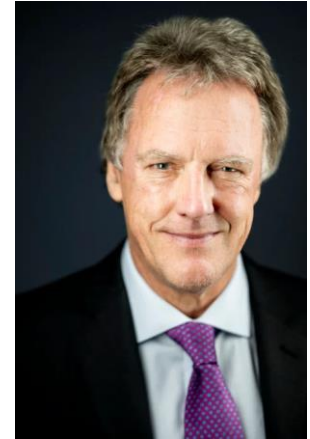
Link

<https://www.nobelprize.org/prizes/medicine/2019/ratcliffe/biographical/>

<https://www.nobelprize.org/prizes/medicine/2019/ratcliffe/biographical/>

<https://www.ndm.ox.ac.uk/team/peter-ratcliffe>

<https://www.crick.ac.uk/research/labs/peter-ratcliffe>



© Nobel Media.