The Sir John Vane Award for Best Publication in Pulmonary Vascular Research is a grant of £2,500, offered with the support of United Therapeutics Europe Ltd. The award aims to encourage a generation of new and visionary scientists in their quest to understand and make an impact in basic science/research in the field of pulmonary hypertension. The award is dedicated to the memory of Sir John Vane, an incredible scientist who, through his enthusiasm and unflagging thirst for knowledge, paved the way for the work in inflammation and pain with aspirin and the discovery that it inhibited the biosynthesis of prostaglandin, which earned him the Nobel Prize in Physiology or Medicine in 1982. The prize is given to the best recent publication on pulmonary vascular research that furthers our scientific understanding of the pharmacology, biology, genetics or pathophysiology of pulmonary hypertension.

The 2012 Sir John Vane Award is given to Professor David Montani, for "C-kit positive cells accumulate in remodeled vessels of idiopathic pulmonary hypertension", published in the American Journal of Respiratory and Critical Care Medicine in July 2011 (vol. 184, pp. 116–123).

Professor Montani, of the French National Referral Centre for Pulmonary Hypertension at the Hôpital Bicêtre, Paris, France, has a particular interest in the management of pulmonary veno-occlusive disease, pulmonary arterial hypertension (PAH) associated with drug exposure (dasatinib, benfluorex), PAH associated with orphan pulmonary diseases and the genetics (BMPR2, ACVRL1, NFI) of PAH. He coordinates a national multicentric study (DELPHI-2) focused on the early detection of PAH in presymptomatic subjects carrying BMPR2 mutations.

This specific publication is important to the field because it demonstrates the accumulation of c-kit+ cells (corresponding to both progenitors and mast cells) in the remodeled pulmonary arteries in idiopathic PAH. This is associated with an increase in the bone marrow-derived progenitor cell mobilising soluble factor c-kit and the mobilisation of circulating progenitors. Pulmonary arterial lesions are associated with an expansion of vasa vasorum (expressing CXCL12/SDF-1), within which c-kit+ cell progenitors and mast cells are localised. As such, this study adds significantly to our knowledge regarding the localisation of bone marrow-derived progenitor cells and mast cells in idiopathic PAH.

Supported by United Therapeutics Europe Ltd

The Sir John Vane Award for Innovation in Pulmonary Vascular Research ceremony will take place during the members’ meeting of the Clinical Physiology and Integrative Biology Assembly (Assembly 4), in Room A4 on Monday, 3 September, from 13:00.