

5th Research Meeting on Pulmonary Hypertension

From 3 to 5 February, researchers from the Molecular Biomarkers and Functions Group at CIC biomaGUNE will participate in the [5th Research Meeting on Pulmonary Hypertension](#), organised by the Pulmonary Hypertension Research Area at the Networked Biomedical Research Centre for Respiratory Diseases (CIBERES).

The group's lead researcher, Ikerbasque Professor Jesús Ruiz Cabello, participates in the organisation of the meeting every year: 'as in previous years, our aim is to organise thematic sessions in which different groups working both in the specific field of pulmonary hypertension and in relation other pulmonary vascular diseases, present the research in which they are currently engaged from a variety of different perspectives. Presentations are grouped in accordance with thematic area in order to foster debate and the exchange of experiences'. Given the current circumstances, this year's meeting will be held online.

Participants will include researchers from many different centres, including the Barcelona Clinical Hospital, the 12 de Octubre Hospital in Madrid and the Virgen del Rocío Hospital in Seville. Basic researchers from CNIC, UCM and CIC biomaGUNE (among others) will also be in attendance, as will various patient associations, including the Foundation against Pulmonary Hypertension. 'This Foundation raises funds every year for a project in which all participants are involved, called [Project Empathy](#),' adds Ruiz-Cabello.

Various members of the group will be participating as speakers. Rahul Kumar will present the results of the Computer Flow Dynamics (CFD) application, which is used to understand haemodynamic parameters as potential image biomarkers. Angel Gaitán, a medical physicist working at the 12 de Octubre Hospital, and whose thesis Ruiz-Cabello is currently supervising, will present the outcomes of a study conducted with group 2 pulmonary hypertension patients, focusing on the analysis of MRI flow images. The studies being presented by Kumar and Gaitán are complementary. For her part, Zuriñe Blasko will present the abstract of a study focused on determining the role of Notch receptor signalling in controlling the proliferation of pulmonary artery smooth muscle cells and how these cells communicate with endothelial cells, something which is vital if we hope to understand the different processes involved in this disease. Finally, Jose Luis Izquierdo, who up until just a few days ago was a post-doctoral researcher with the group and is now working at the Complutense University in Madrid, will present the results of a study focusing on the plasma metabolomic profiles of patients suffering from pulmonary hypertension. These profiles are used to monitor the severity of the disease and to predict the adverse phenomena to which these patients may be susceptible.