

Meet the Rojas Lab



Mauricio Rojas, MD

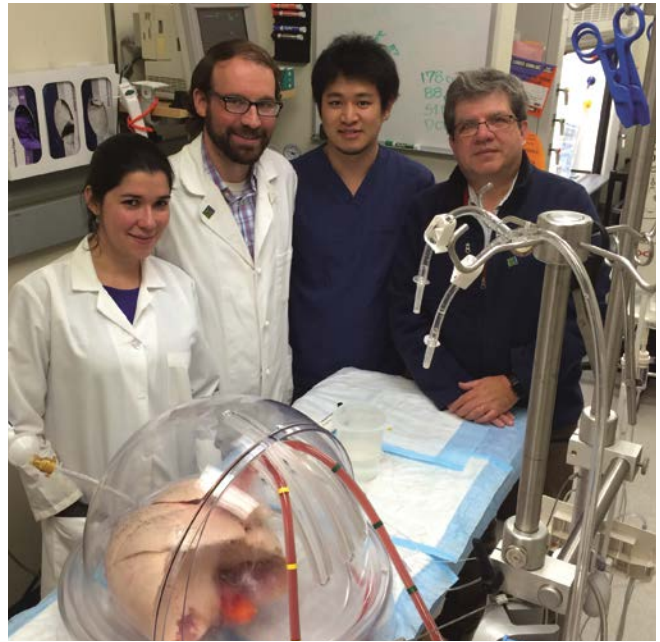
Mauricio Rojas, MD, is Associate Professor of Medicine and Scientific Director of the Simmons Center. Dr. Rojas and his wife Ana (see her article on the role of mitochondria in IPF on page three) joined the University of Pittsburgh in 2010. Their daughter Paula, an alumna of Pitt, will attend law school in the fall. Since 2004, the research in Dr. Rojas' lab has focused on the use of bone marrow-derived mesenchymal stem cells, or MSCs, as an alternative therapy for lung repair after acute and chronic injury. His seminal observations using MSCs in animal models derived into clinical trials using MSCs in acute lung injury.

In collaboration with Jonathan D'Cunha, Chief of Lung Transplantation/Lung Failure at UPMC, Dr. Rojas created the Center for Advanced Organ Perfusion, in which donated lungs are perfused and ventilated for several hours to improve lung quality using different approaches, including MSCs, with the purpose of increasing the number of lungs that are suitable for transplant. This model has also been used by Dr. Rojas to complete preclinical studies of new drug candidates developed in our division.

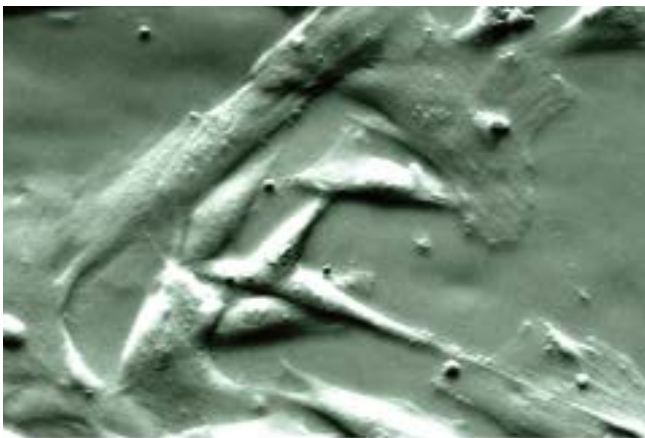
Recently, his lab has concentrated on aging, and more particularly, on the consequences of aging in the lung. Because age is a major risk factor for many lung diseases, Dr. Rojas' research is now focused on understanding how aging contributes to the pathogenesis of advanced lung disease such as IPF.

Members of the Rojas lab come from all over the world. They are dedicated to the mission of the Simmons Center and are

passionately driven to perform cutting-edge research to translate bench research into the clinic to find a cure IPF. The quality of their work has been recently recognized by multiple awards in local and international conferences.



Human lungs are perfused, ex vivo



Cultured human bone marrow derived mesenchymal stem cells



Rojas Lab Team Members