ISHLT and ISHLT Foundation Fund Lung and Heart Transplant Research with Grants

The International Society for Heart and Lung Transplantation (ISHLT) announced \$112,000 USD, funded by the ISHLT Foundation, in funding for research designed to improve care for patients with advanced heart and lung disease.



ISHLT Acellular Ex Vivo Lung Perfusion (EVLP) Research Grant, supported by Lung Bioengineering

Awarded to: Matthew Hartwig, MD, MHS
Duke School of Medicine in Durham, NC USA

Research Title: Interleukin-4 Therapy for Rehabilitation of Acutely Injured Donor

Lungs

The ISHLT Acellular Ex Vivo Lung Perfusion (EVLP) Research Grant, supported by Lung Bioengineering, funds research that aims to develop further advancements in acellular EVLP technology. Dr. Hartwig's study investigates the therapeutic potential of interleukin-4 (IL-4) in EVLP for the rehabilitation of acutely injured donor lungs and addresses the critical shortage of transplantable lungs by exploring a novel approach to recover organs typically discarded due to acute injuries, such as gastric aspiration. With the funding, Dr. Hartwig's team will continue to explore optimizing strategies and targets for enhancing lung transplant outcomes utilizing gene therapy.



ISHLT Novel Approaches for FDA Cleared Preservation Systems in Donation
After Circulatory Death (DCD) Heart Transplantation Research Grant,
supported by Paragonix

Awarded to: Douglas Overbey, MD, MPH

Duke University Medical Center in Durham, NC USA

Research Title: Impact of Warm Ischemia on Pediatric Partial Heart Transplant

The ISHLT Novel Approaches for FDA Cleared Preservation Systems in Donation After Circulatory Death (DCD) Heart Transplantation Research Grant, supported by Paragonix Technologies, funds clinical research into novel techniques to expand the donor pool by making the recovery and transportation of DCD organs more cost-effective. This research will focus on the use of FDA cleared hypothermic (4-8°C) preservation systems.

With the funding, Dr. Overbey's team will evaluate the differential impact of warm ischemia on procured human and porcine myocardium with an emphasis on viability of valves and partial heart transplants at different time intervals. These variable periods of warm ischemia will be followed by preservation in a preservation device known as a SherpaPak®, and evaluated histologically to determine if the tissue remains viable. After ascertaining the limit of viability, a similar interval will

be observed followed by transplantation into a porcine model to demonstrate in-vivo viability. The project aims to increase the availability of donation after circulatory death hearts available for partial heart transplantation.

For more information about ISHLT and ISHLT Foundation Research Grants, visit <u>ishlt.org/grants-and-awards/research-grants</u>.