

ISHLT 2023 Annual Meeting Awards Showcase Advances in Treatment of Advanced Heart and Lung

Disease

Fourteen presenters from six countries were recognized for excellence for their presentations on machine learning, non-invasive therapy techniques, barriers to donor acceptance, and more.

CHICAGO, USA – 2 June, 2023 – The International Society for Heart and Lung <u>Transplantation</u> 43rd Annual Meeting & Scientific Sessions included more than 1,250 presentations on improving outcomes for patients with advanced heart and lung disease from investigators from around the world.

The Society recognized selected 14 presentations for excellence within each of the ten professional communities that make up ISHLT's multidisciplinary membership, as well as specific awards to recognize excellence from early career investigators. All conference abstracts are available in a <u>special supplement</u> to the *Journal of Heart and Lung Transplantation*'s April 2023 issue.

The <u>Philip K. Caves Award</u>, <u>Early Career Scientist Award</u>, and <u>Early Career Clinical Case</u> <u>Dilemmas Best Presentation Award</u> encourage and reward original high-quality research from trainees, residents, fellows, graduate students, and young researchers in fields across advanced heart and lung disease and transplantation.



Philip K. Caves Award

Awarded to: Brian Wayda, MD, MPH Stanford University School of Medicine in Stanford, CA USA Presentation Title: <u>Prediction of Donor Heart Acceptance for Transplant:</u> <u>Results From the Donor Heart Study</u>

Purpose: Despite a scarcity of potential donors for heart transplantation in the

United States, a minority are actually accepted for transplantation. The team evaluated donor characteristics associated with heart acceptance in the USA and applied modern analytic methods to improve the prediction of heart acceptance.



Early Career Scientist Award

Awarded to: Sambavan Jeyakumar University of New South Wales in Sydney, Australia Presentation Title: <u>Retinal Microvascular Remodelling Predicts Adverse Events</u> <u>in Continuous-Flow Left Ventricular Assist Device Supported Patients</u> Purpose: Continuous-flow left ventricular assist device (cfLVAD) support

affects flow pathways within the microcirculation. The team aimed to profile changes within retinal microvasculature and its association with adverse events.





Early Career Clinical Case Dilemmas Best Presentation Award Awarded to: Rossa Brugha, BMBCh, MA(Oxon), MRCPCH, PhD Great Ormond Street Hospital in London, UK Presentation Title: <u>Cytotoxic T-Lymphocyte Therapy for Post-transplant</u> <u>Lymphoproliferative Disease in an Adolescent Following Lung Transplantation</u> Purpose: This case study examines a patient with post-transplant Lymphoproliferative disease who was treated with cytotoxic T-lymphocytes to

clear her cancer.

The ISHLT Professional Community Awards for Excellence recognize the

contributions made across the care continuum by ISHLT members, encouraging investigation and professional excellence in a wide variety of specialties.



Anesthesiology & Critical Care Professional Community Award for Excellence

Awarded to: Leonardo Salazar, MD, MSc Fundación Cardiovascular de Colombia in Floridablanca, Colombia Presentation Title: <u>Left Ventricular Assist Device Implantation Outcomes:</u> Single-Center Experience in a Latin American Advanced Heart Failure

<u>Reference Program</u>

Purpose: The team examined durable left ventricular assist device (LVAD) experiences in an advanced heart failure program in a developing country, evaluating the actuarial survival and adverse events rate in a cohort of patients implanted in the largest MCS program in Colombia.



Cardiology Professional Community Award for Excellence

Awarded to: Christos Kyriakopoulos, MD University of Utah in Salt Lake City, UT USA Presentation Title: <u>Multicenter Development and Validation of a Machine</u> Learning Model to Predict Myocardial Recovery During LVAD Support: The UCAR Score

Purpose: The team sought to create a pre-LVAD clinical tool to assess the likelihood of functional and structural cardiac improvement following LVAD support, independently of the complex and confounded decision of LVAD removal/weaning.



Cardiothoracic Surgery Professional Community Award for Excellence Awarded to: Ezequiel Molina, MD, FACS

Awarded to: Ezequiel Molina, MD, FACS Piedmont Heart Institute in Atlanta, GA USA Presentation Title: <u>The Impact of Small Left Ventricular Dimension on</u> <u>Outcomes after HeartMate 3 LVAD Implantation</u>



Purpose: A patient-specific risk score, which includes Left Ventricular End Diastolic Diameter (LVEDD) <55mm as one of 6 core components, was developed to predict survival following HeartMate 3 (HM3) left ventricular assist device (LVAD) implantation. The team compared this finding with comprehensive clinical outcomes in a prospective clinical trial cohort.



Infectious Diseases Professional Community Award for Excellence Awarded to: Saima Aslam, MD, MS University of California San Diego in San Diego, CA USA Presentation Title: <u>Development of Burkholderia Cepacia Complex Targeted</u> <u>Clinical Registry and Phage Library</u>

Purpose: The team developed a multi-center international registry of BCC-infected patients with CF and/or lung transplant and used their bacterial

isolates to develop a new targeted library of 25 lytic phages that cover 85% of isolates. This phage library will be used for treatment in both compassionate use and clinical trial settings.



Nursing and Allied Health Professional Community Award for Excellence

Awarded to: Kathy Grady, PhD, RN, MS, FAAN Northwestern University in Chicago, IL USA Presentation Title: <u>A Comparison of Quality-Adjusted Life Years in Older Adults</u> <u>after Heart Transplantation Versus Long-Term Mechanical Support: Findings</u> <u>from SUSTAIN-IT</u>

Purpose: The Quality-Adjusted Life Year (QALY) is a measure of the burden of disease and its treatment that combines survival and health-related quality of life (HRQOL). The study aims to describe QALYs in 3 groups of older patients with heart failure (HF) who undergo heart transplantation (HT) or long-term MCS, if ineligible for HT.



Pathology Professional Community Award for Excellence

Awarded to: Francesca Lunardi, MD, ScD, PhD University of Padova in Padova, Italy Presentation Title: <u>Phosphorylated S6 Ribosomal Protein as an Additional</u> <u>Marker of Antibody-Mediated Rejection in Lung Allografts: A Multicentre Study</u> **Purpose:** The mammalian target of rapamycin pathways, specifically p-S6RP, is associated with cardiac pAMR and recently correlated with de novo donor-

specific antibodies in lung transplantation. The main goal of this study was to assess tissue p-S6RP expression in patients with lung AMR in an attempt to identify tissue biomarkers useful for more sensitive diagnosis of AMR.





Pediatrics Professional Community Award for Excellence Awarded to: Madeleine Townsend, MD Cleveland Clinic Children's in Cleveland, OH USA Presentation: <u>Statin Use May Not Benefit Pediatric Heart Transplant</u> <u>Recipients: A PHTS Analysis</u>

Purpose: Despite robust data in adults supporting the use of statin medications to prevent development of post-heart transplant cardiac allograft

vasculopathy (CAV), there is no large-scale data in children showing benefit from statins. Through a retrospective study of children from the Pediatric Heart Transplant Society database, the team sought to evaluate the contemporary prevalence and trends of statin use in pediatric HTRs and the association between statin use and graft failure, CAV, and rejection.

Pharmacy Professional Community for Excellence



Awarded to: Erik Henricksen, PharmD Stanford Medicine in Stanford, CA USA Presentation Title: <u>Bye-Bye Biopsy? Comparing Short and Long-Term</u> <u>Outcomes after Adopting Early Non-Invasive Rejection Surveillance</u> Purpose: This single center study sought to assess the impact of the early

introduction of ddcfDNA, and later paired with GEP as compared to a strategy of GEP testing alone on the number of endomyocardial biopsies and clinical outcomes at three years.



Pulmonology Professional Community Award for Excellence Awarded to: Reda Girgis, MD Spectrum Health / Michigan State University in Grand Rapids, MI USA Presentation Title: <u>Predictors of Early Mortality after Lung Transplantation for</u> <u>Primary Pulmonary Hypertension: A UNOS Analysis</u>

Purpose: Idiopathic pulmonary arterial hypertension (formerly PPH) continues to have a high mortality rate, despite medical therapy. However, long-term

survival conditional upon 3 m survival is among the best. This research analyzed the UNOS transplant database to assess the determinants of early mortality after lung transplantation for primary pulmonary hypertension.

Research and Immunology Professional Community Award for Excellence (Two Recipients)



Awarded to: Pieterjan Kerckhof, IR, MD KU Leuven in Leuven, Belgium Presentation Title: <u>Morphometric Airway Changes in Explanted Human Lungs</u> <u>with Chronic Lung Allograft Dysfunction</u>

Purpose: Chronic lung allograft dysfunction (CLAD) remains a major complication after lung transplantation, encompassing two main phenotypes:

bronchiolitis obliterans syndrome (BOS) and restrictive allograft syndrome (RAS). This study's aim was to characterize the morphological airway changes in end-stage BOS and RAS.



Research and Immunology Professional Community Award for Excellence (Two Recipients)



Awarded to: Kristina Andrijauskaite, PhD, MS, MEd Vascular Perfusion Solutions, Inc. in San Antonio, TX USA Presentation Title: <u>Novel Portable Hypothermic Perfusion Preservation Device</u> <u>Enhances Cardiac Output of Donated Human Hearts</u>

Purpose: Heart transplant remains the gold standard treatment for patients with advanced heart failure. However, the list of patients waiting for a heart

transplant continues to increase. The team developed a portable hypothermic oxygenated machine perfusion device, the VP.S ENCORE[™], to extend the allowable preservation time. After demonstrating successful preservation of cardiac grafts in preclinical animal models, the purpose of this study was to test the efficacy of the VP.S. ENCORE[™] using deceased donors derived hearts.

For more information about each of the awards, visit <u>https://ishlt.org/research-data/grants-awards/scientific-abstract-awards</u>.

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About ISHLT

The International Society for Heart and Lung Transplantation is a not-for-profit, multidisciplinary professional organization dedicated to improving the care of patients with advanced heart or lung disease through transplantation, mechanical support and innovative therapies. With members in more than 50 countries, ISHLT is the world's largest organization dedicated to the research, education and advocacy of end-stage heart and lung disease. ISHLT members represent more than 15 different professional disciplines. For more information, visit <u>www.ishlt.org</u>.