# ISHLT Drives Innovation with Research Grants

Society awards fund studies to improve care and outcomes for patients with advanced heart and lung disease.









Kathleen Grady

Maziar Khorsandi

Thomas Schlöglhofer

Berta Sáez-Giménez

**CHICAGO, 6 May, 2022** – The International Society for Heart and Lung Transplantation (ISHLT) awarded grants to three researchers its 2022 Annual Meeting. ISHLT grants fund research to improve the care of patients with advanced heart and lung disease through transplantation, mechanical circulatory support (MCS), and innovative therapies.

"I am absolutely delighted to be presenting three awards to exceptional investigators on behalf of the ISHLT and our industry partners," said **Kathleen Grady, PhD, RN, MS, FAAN**, Chair of the ISHLT Grants and Awards Committee and Professor of Surgery and Medicine at the Feinberg School of Medicine and Administrative Director of the Center for Heart Failure at Northwestern University in Chicago, IL USA. "These awards are very important, providing funds for translational research through the Frazier Award, VAD coordinator development through the ISHLT/ICCAC VAD Coordinator Career Development Award; and transplantation and immunology research through our newest ISHLT Innovative Challenge Award. On behalf of the Grants and Awards Committee, I'm grateful to industry supporters Abbott, CareDx, and Medtronic for their support of these grants!"

The ISHLT/O.H. Frazier Award in MCS Translational Research was presented to Maziar Khorsandi, MD, FRCS C/Th, cardiothoracic surgeon and Assistant Professor of Surgery at the University of Washington Medical Center in Seattle for "Utility of CardioMEMS HF system data in management of patients supported with durable left ventricular assist devices (LVAD)—Implications for development of a closed-loop LVAD controller," designed to facilitate determination of optimal LVAD speed for each patient, and to allow patients with CardioMEMS to avoid repeated and ongoing testing to adjust pump speed. The award was supported by Abbott and Medtronic.

With the funding, Dr. Khorsandi's interdisciplinary team will use pulmonary artery pressure measurements to determine optimal LVAD speed by correlating to echocardiographic findings and use pulmonary artery diastolic pressure to adjust LVAD speed during exercise.

The ISHLT/ICCAC VAD Coordinator Career Development Award, given by ISHLT in partnership with the International Consortium of Circulatory Assist Clinicians (ICCAC), was presented to Thomas Schlöglhofer, MSc, VAD coordinator at the Medical University of Vienna in Vienna, Austria, for "Cold atmospheric plasma therapy for the treatment of driveline infections in patients with left ventricular assist devices." The study will investigate the effect of cold atmospheric plasma (CAP) on microbiological pathogens and the role of redox species in wound healing of LVAD patients with deep driveline exit-site (DLES) infections.

The study will include recipients of the HeartMate 3 or HVAD system and will explore whether CAP DLES infection treatment makes a difference on successful DLES treatment, time from infection detection to successful treatment, and freedom from DLES reinfection.

The **ISHLT Innovation Challenge Award**, supported by **CareDx**, is a new award that supports investigation testing the utility of the combination of donor-derived cell-free DNA (dd-cfDNA) and gene expression profiling (GEP) in heart transplantation, or the utility of dd-cfDNA in lung transplantation.

The first ISHLT Innovation Challenge Award was presented to **Berta Sáez-Giménez**, **MD**, **PhD**, of the Hospital Vall Hebrón in Barcelona, Spain, providing funding for her project "Dd-cfDNA to monitor CLAD treatment." The project aims to focus on the correlation of dd-cfDNA and CLAD, which is the main complication hampering survival in patients at her clinic. In particular, the team will evaluate the utility of dd-cfDNA to assess response to CLAD treatment. It is the hope of Dr. Sáez-Giménez's research team that early detection of immunologic complications might help to understand the underlying physiopathological mechanisms that lead to CLAD.

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

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# **Award Winner Background**

### ISHLT/O.H. FRAZIER AWARD IN MCS TRANSLATIONAL RESEARCH

Supported by Abbott and Medtronic

After graduation from medical school at the University of Dundee, Scotland in 2010, Dr. Khorsandi completed core surgical training, followed by cardiothoracic surgery training in the UK. In 2017 and 2018, he completed a cardiopulmonary transplantation and mechanical circulatory support fellowship at Duke University, before returning to the UK and completing the intercollegiate board of cardiothoracic surgery, obtaining the Certificate of Completion of Surgical Training in Cardiothoracic Surgery, and becoming a Fellow of the Royal College of Surgeons. In 2020, Dr. Khorsandi was recruited to the University of Washington, where he currently serves as Assistant Professor in the Division of Cardiothoracic Surgery. To date, he has published 27 peer reviewed articles, on 15 of which he is a first author. He is the organizing editor of the Oxford Specialist Handbook of Cardiopulmonary Transplantation and Mechanical Circulatory Support, a multi-national collaboration, which is currently in press for publication.

### ISHLT/ICCAC VAD COORDINATOR CAREER DEVELOPMENT AWARD

Co-presented by ISHLT and ICCAC, Supported by Abbott and Medtronic

Thomas Schlöglhofer earned his Master of Science in Biomedical Engineering with distinction from the University of Applied Sciences Vienna in 2018. He is pursuing a PhD in Applied Medical Science at the Medical University of Vienna. Thomas served on the board of the ICCAC from 2015-2019 and as President in 2016; since 2017 as Board Member of the International Society for Mechanical Circulatory Support (ISMCS); and since 2019 as Board Member of the American Society for Artificial Internal Organs (ASAIO). Thomas received the Best Poster Award of the Austrian Society of Transplantation, Transfusion and Genetics in 2012, the Helmut Reul Young Investigator Award of the ISMCS in 2016, the ICCAC VAD Coordinator of the Year Award and the Best Poster Award of the ESAO in 2017, the Y. Nosé International Fellowship Award for Young Innovators of the ASAIO in 2018, and the Nursing and Allied Health Professional Community Award for Excellence of the ISHLT in 2021. He is active in ISHLT, currently serving as MCS Team Leader of the ISHLT 2022 Scientific Annual Meeting Program Planning Committee, and as editorial board member of the *Journal of Heart and Lung Transplantation* from 2021-2024.

#### ISHLT INNOVATION CHALLENGE AWARD

Supported by CareDx

Dr. Sáez-Giménez is a pneumologist at the Hospital Vall Hebrón in Barcelona, Spain. She earned both her MD and PhD at the Universitat Autònoma de Barcelona in 2008 and 2018, respectively. She completed her residency in pulmonology at the Hospital Vall Hebrón in 2013, and her fellowship in lung transplantation at the Hospital Vall Hebrón in 2018. She also completed an international fellowship at University Hospital Leuven in Belgium. Dr. Sáez-Giménez is an assistant professor in the Department of Cellular Biology, Physiology and Immunology at the Universitat Autònoma de Barcelona. She has published 20 original peer-reviewed papers to date, and has earned eight competitive grants to further her work. Her research originally focused on the field of tolerance and complications like venous thromboembolism, finalizing with the defense of her PhD. Her current research focuses on the field of CLAD and she has worked with dd-cfDNA for three years.

#### **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 more than 3,800 members in more than 45 countries, ISHLT is the world's largest organization dedicated to the research, education and advocacy of endstage heart and lung disease. ISHLT members represent more than 15 different professional disciplines. <a href="https://www.ishlt.org">www.ishlt.org</a>.

#### About Abbott

Abbott is a global healthcare leader that helps people live more fully at all stages of life. Our portfolio of life-changing technologies spans the spectrum of healthcare, with leading businesses and products in diagnostics, medical devices, nutritionals, and branded generic medicines.

www.abbott.com

#### About CareDx—The Transplant Company

CareDx, Inc., headquartered in South San Francisco, California, is a leading precision medicine solutions company focused on the discovery, development and commercialization of clinically differentiated, high-value healthcare solutions for transplant patients and caregivers. CareDx offers testing services, products, and digital healthcare solutions along the pre- and post-transplant patient journey.

## About ICCAC

www.CareDx.com

The International Consortium of Circulatory Assist Clinicians (ICCAC) is a professional mentoring organization of mechanical circulatory assist device clinicians whose mission is to share information, educate and support individuals in this field to achieve optimal outcomes for patients requiring mechanical circulatory support, and to support efforts in the area of device clinical research and development. *iccac.global* 

#### **About Medtronic**

Medtronic plc, headquartered in Dublin, Ireland, is among the world's largest medical technology, services, and solutions companies – alleviating pain, restoring health, and extending life for millions of people around the world.

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