

# 2024 TRAVELLING FELLOWSHIP REPORTS

The following reports are sent in by our young CSANZ Travelling Fellowship winners who are asked to write a report on their experience at the International Meetings that they attended and presented their work.

## ACC.24 Travelling Fellowship Report



**Dr. Sara Hungerford MBBS PhD**

**Visiting Fulbright Fellow, Tufts Medical Center (Boston, MA USA) and Royal North Shore Hospital, Sydney, NSW**

I would like to thank CSANZ for the Travelling Fellowship award, which enabled me to attend the **ACC 2024 Annual Scientific Session** held in Atlanta, GA.

I was fortunate to have three abstracts presented at this year's conference, showcasing key findings from my research on cardiovascular hemodynamics and valvular heart disease.

My oral presentation, titled "Optimal Modelling for Right Ventricular Afterload Assessment in Pulmonary Hypertension," was selected to be presented as featured, original highlighted research. This work focused on advancing the evaluation of right ventricular afterload in pulmonary hypertension using innovative hemodynamic modelling techniques, specifically refining the measurement of pulmonary arterial compliance (PAC) for better prognostication and patient management.

My moderated presentation, titled "Hemodynamic Determinants of Transvalvular Flow Rate in Low-Flow Low-Gradient Aortic Stenosis," explored the interplay of hemodynamic factors such as ventricular contractility, vascular afterload, and valve dynamics. We demonstrated transvalvular flow rate was critically influenced by the interaction between these determinants, highlighting potential diagnostic implications for this challenging subset of patients with aortic stenosis.

Lastly, my abstract, titled "The Effect of Increased Vascular Afterload on Flow Rate in Aortic Stenosis," examined how elevated vascular afterload impacts forward flow across the aortic valve. Our findings underscore the importance of tailoring afterload-reducing therapies in managing patients with aortic stenosis to optimize outcomes.

A particular highlight of the conference was the opportunity to engage with peers and experts during discussions about my abstracts, which provided valuable insights into refining the practical application of these findings. I was also inspired by the broader conference content, including late-breaking trials such as:

- DanGer Shock, which revealed a significant reduction in mortality with the use of Impella CP in STEMI patients complicated by cardiogenic shock, offering promising new strategies for improving outcomes in this critically ill population.
- EMPACT-MI, which assessed empagliflozin in post-myocardial infarction patients. Although no significant reduction in the primary composite endpoint was observed, the findings suggested a potential trend toward reduced heart failure hospitalizations.

I am deeply grateful to CSANZ for this opportunity to present my work on an international stage, engaging in cutting-edge discussions on heart failure hemodynamics and structural heart disease.

## ACC.24 Travelling Fellowship Report



**Dr Eleanor Rye**

**Cardiologist, St Vincent's Hospital Sydney  
Cardiac Amyloidosis Fellow, Victor Chang Cardiac Research Institute**

I was fortunate to be awarded a 2024 CSANZ Traveling Fellowship which allowed me to attend my first major international meeting at the **American College of Cardiology Scientific (ACC.24)** sessions in Atlanta.

I enjoyed the opportunity to present two pieces of research (one oral presentation and one moderated poster) which were completed during my cardiology advanced training at Royal North Shore Hospital. This work explored the haemodynamic determinants of transvalvular flow rate, an echocardiographic parameter that shows promise for the assessment of low-gradient aortic stenosis.

It was wonderful to meet some of our international collaborators in person, and the opportunity to network with other researchers in the field will undoubtedly lead to further collaborative research. I was amazed by the scale and quality of research presented at the meeting and often struggled to pick which session to attend with a jam-packed program. I particularly enjoyed the sessions on advanced cardiac imaging and structural heart disease.

Attending this meeting has renewed my passion and enthusiasm for research and I would like to extend my thanks to my supervisor Dr Sara Hungerford (pictured below), collaborators, and the CSANZ for their support of my research.

**Abstracts:**

Hungerford, S, Rye, E, Sritharan, H. et al. Hemodynamic determinants of transvalvular flow rate in low-flow low-gradient aortic stenosis. JACC. 2024 Apr, 83 (13\_Supplement) 2138. [https://doi.org/10.1016/S0735-1097\(24\)04128-7](https://doi.org/10.1016/S0735-1097(24)04128-7)

Hungerford, S, Song, N, Rye, E. et al. The effect of increased vascular afterload on flow rate in aortic stenosis. JACC. 2024 Apr, 83 (13\_Supplement) 2199. [https://doi.org/10.1016/S0735-1097\(24\)04189-5](https://doi.org/10.1016/S0735-1097(24)04189-5)



# ESC Congress 2024 - Travelling Fellowship Report



**Dr Daniel Akrawi**

**Cardiology Advanced Trainee at Liverpool and Campbelltown Hospitals, NSW.  
PhD Candidate at Western Sydney University, NSW**

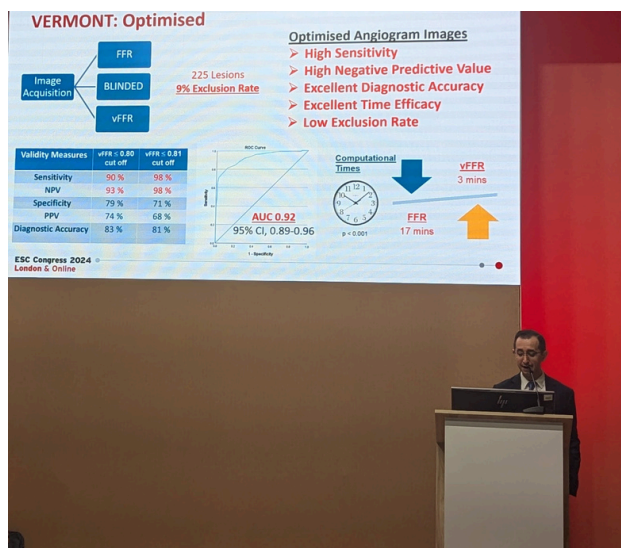
I had the great privilege of attending the **ESC Congress 2024** in London with the support of a CSANZ Travelling Fellowship.

I'm a final year Cardiology Advanced Trainee at Liverpool and Campbelltown Hospitals in Sydney, and a PhD Candidate at Western Sydney University. I was thrilled to present my abstract as an oral presentation in the functional testing in coronary artery disease session. My presentation was entitled 'VERMONT non-optimised: can baseline diagnostic catheter images be used to measure angiography based CAAS-vFFR?'. My area of research focuses on the use of angiogram based FFR in the local setting, with our results revealing excellent diagnostic accuracy, high sensitivity and negative predictive values using both optimised and non-optimised angiogram cine images. This reflects the potential for CAAS-vFFR to be utilised as a physiological screening tool for intermediate coronary artery lesions.

Presenting my research at ESC allowed me to engage in enriching discussions that expanded my understanding of the broader implications of my work. I received insightful questions and comments that challenged my approach and highlighted potential areas for future exploration. It was also a great networking opportunity, where I was able to connect with academics and industry experts from institutions worldwide, fostering collaborations that have enhanced the impact and scope of my research and have led to potential fellowship opportunities abroad. Additionally, the Congress offered a wealth of educational sessions across various sub-specialties, providing me with fresh knowledge and career insights.

Outside of the Congress, I enjoyed some downtime in London, including watching Hamilton and Sister Act on the West End, cycling through Hyde Park, and catching some English Premier League action.

I'd like to sincerely thank my PhD supervisors Professor Annemarie Hennessy, Dr. Kishor Kadappu and Dr. James Xu for their invaluable support and guidance. I'm also deeply grateful to CSANZ for their generous contribution in helping me attend and present my research at ESC 2024.



Link to Presentation:  
<https://esc365.escardio.org/presentation/283811>

## ESC Congress 2024 - Travelling Fellowship Report



**Dr Lisa Chen**

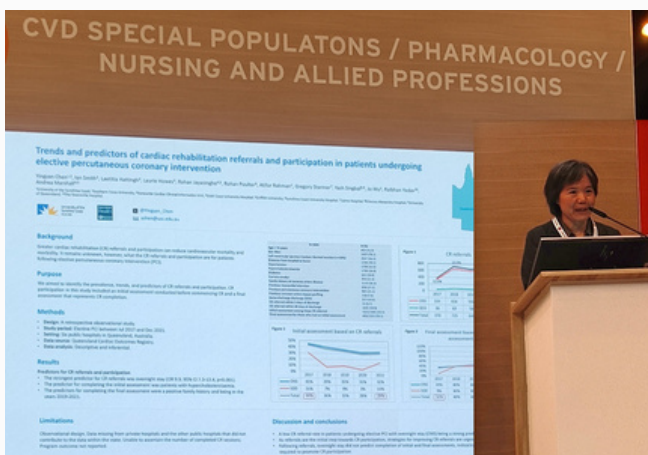
**Nursing Lecturer, University of the Sunshine Coast, QLD at the time she attended the ESC Congress 2024.**

**Now, Senior Lecturer at Monash University, Victoria.**

It was my absolute honour to receive the **2024 CSANZ ESC Congress** Travel Fellowship, which enabled me to attend the ESC 2024 in London. As this was my first time at the ESC, I was amazed by how well the conference was organised and by the experience of attending such a prominent event. It's no wonder the ESC is the world's largest cardiovascular congress; I had the opportunity to meet many outstanding nurse researchers from all over the world. During the conference, I enjoyed one-on-one mentoring moments with nurse expert researchers who I approached before the conference and met an outstanding Australian researcher and cardiologist. This was an excellent networking opportunity, and I am now in contact with these experts for potential future research collaborations.

Attending the ESC not only allowed me to connect with experts but also gave me the chance to disseminate my research findings. I presented my e-poster on behalf of my research team, titled Trends and Predictors of Cardiac Rehabilitation Referrals and Participation in Patients Undergoing Elective Percutaneous Coronary Intervention. I received positive and constructive feedback during my presentation, which will guide my future research. The abstract has been published in the European Heart Journal and can be accessed [here](#).

Once again, I am extremely grateful to the CSANZ committee for supporting my attendance at this world-renowned cardiac conference. My sincere appreciation will be shown in my continued commitment to improving health outcomes for patients with cardiovascular disease through my passion and involvement in cardiovascular nursing research.



Additionally, I was fortunate to meet CSANZ's Executive Officer, Julianne James-Smith, (pictured above) and we discussed the ESC and future CSANZ conferences.

## ESC Congress 2024 - Travelling Fellowship Report



**Dr Paolo D'Ambrosio**

**Heart, Exercise & Research Trials (HEART) Lab, St Vincent's Institute  
Department of Medicine, University of Melbourne  
Department of Cardiology, Royal Melbourne Hospital, Victoria**

It was a pleasure to travel to the ESC Congress 2024 in London with the support of the CSANZ Travelling Fellowship to present my research on arrhythmias associated with endurance exercise. I am currently in my 2nd year of my PhD and final year of EP fellowship at Royal Melbourne Hospital.

In addition to presenting my own work and supporting team members from my lab, the 2024 ESC Congress provided opportunity to meet with my international research collaborators in person, network with influential figures in international cardiology and electrophysiology and to listen to a variety of interesting talks from leaders in the field.

At this meeting, I presented a moderated e-poster entitled "Atrial and ventricular arrhythmias in young, lifelong & retired elite endurance athletes". This work combines multi-modal cardiac imaging with Holter monitoring in endurance athletes and showed that master endurance athletes have a high prevalence of arrhythmias like atrial fibrillation and non-sustained ventricular tachycardia, with no difference in arrhythmia prevalence regardless of whether they are actively exercising or retired/detrained.

I hope to have the opportunity to present my other research at future national and international meetings and thank the CSANZ for their support to attend and present at the ESC Congress 2024.

I would also like to thank my PhD supervisors, Professor Andre La Gerche, Professor Jonathan Kalman and Professor Peter Kistler for their mentorship and support.

## ESC Congress 2024 - Travelling Fellowship Report

**Dr Nalin Dayawansa**

**PhD Candidate & Interventional Fellow  
The Baker Institute & The Alfred Hospital, Melbourne, Victoria**

Cardiology is always an exciting and energetic field to work and do research in, but joining with over 32,000 attendees from 171 countries at **ESC 2024** was unlike anything I had experienced before.

Thanks to the support of a 2024 CSANZ Travelling Fellowship, I was able to travel to London to present some of my research, which looked at the outcomes of complex PCI procedures at peripheral hospitals without cardiac surgery.

As a PhD candidate and Interventional fellow, ESC 2024 was a great opportunity to meet colleagues and absorb new ideas from not just Europe, but the wider world of Cardiology.

The conference was full of stimulating late-breaking trials, novel science and fascinating case studies, and I returned to The Alfred with a range of new clinical insights, and dozens of new research ideas. Attending ESC was an invaluable experience, and it would not have been possible without the support of my supervisors, co-authors, department and the CSANZ.

Abstract link: <https://doi.org/10.1093/eurheartj/ehae666.2387>



## ESC Congress 2024 - Travelling Fellowship Report



**Dr Sarah Gauci**

**A SOLVE CHD research fellow in behavioural cardiology  
Institute for Mental and Physical Health and Clinical  
Translation Institute, Deakin University, Victoria**

I am honoured to have been awarded the CSANZ Travelling Fellowship to attend the European Society of Cardiology (ESC) Congress 2024 in London. This was my first international conference since completing my PhD during the COVID-19 pandemic, and it provided a significant opportunity for my professional development and international networking.

At the conference, I had two abstracts accepted for presentations.

The first, **Hearts and Minds: A community-based systems diagram exploring mental health following a cardiac event**, led to insightful conversations about the importance of mental health in holistic cardiac recovery.

My second presentation was titled **Ultra-processed food consumption and risk of cardiovascular mortality in Australia: Preliminary results from a prospective observational study**, which highlighted new findings on the relationship between diet and cardiovascular mortality and generated discussions on the need for specific guidelines relating to ultra-processed food consumption and cardiovascular risk.

During my time in London, I was also able to attend the inaugural **Global Cardiac Prevention and Rehabilitation Forum**. This event brought together 50 participants from 40 organisations worldwide. We explored common challenges in improving attendance at cardiac rehabilitation programs and collaboratively developed strategies to enhance access and participation in cardiac rehabilitation.

Attending the ESC Congress and the Global Cardiac Prevention and Rehabilitation Forum offered invaluable exposure to cutting-edge research, emerging therapies and diverse perspectives in cardiovascular health. I was able to network with international colleagues and engage in insightful discussions across various topics, exploring opportunities for future collaborations.

I extend my heartfelt gratitude to CSANZ for their support in making this experience possible. I left feeling inspired, motivated, and determined to advance my research efforts to improve cardiovascular and mental health outcomes for all.



## AHA 2024 - Travelling Fellowship Report



**Dr Jonathan Ciofani**

**Cardiology Advanced Trainee  
Royal North Shore Hospital, Sydney, NSW**

It was a great privilege to be supported by the CSANZ Travelling Fellowship to attend and present at the **AHA Scientific Sessions** in Chicago this year.

I was honoured to present a drug target Mendelian randomisation study of triglyceride lowering therapies for aortic stenosis on behalf of our team. Aortic stenosis is an increasingly prevalent disease for which there are currently no disease-modifying medical therapies available. There is substantial epidemiological data linking raised serum triglyceride levels with increased risk of aortic stenosis. The drug target Mendelian randomisation approach facilitates evaluation of predicted drug effects prior to committing to large, long and expensive randomised controlled trials. Our work found that genetically predicted APOC3 inhibition was significantly associated with reduced risk of aortic stenosis, highlighting this as a promising target to pursue in the clinical trial setting.

Link to abstract: ([doi.org/10.1161/circ.150.suppl\\_1.4138335](https://doi.org/10.1161/circ.150.suppl_1.4138335))

Attending AHA was a wonderful opportunity to connect with international leaders and establish collaborations for future research. I especially enjoyed the late-breaking sessions, talks on how we can accelerate the clinical application of advances in population genetics, and discussions focused on the expanding data for transcatheter valvular therapies.

I am particularly grateful for the support of my mentors Professor Ravinay Bhindi and Dr Usaid Allahwala, our domestic and international collaborators, and to CSANZ for supporting my travel to present our work in Chicago at AHA Scientific Sessions.

## AHA 2024 - Travelling Fellowship Report



**Dr Sonia Sawant**

**Cardiology Advanced Trainee  
St Vincent's Hospital Sydney, NSW**

It was a privilege to be awarded the CSANZ Travelling Fellowship to support my attendance and presentation at the American Heart Association Scientific Sessions 2024 which was hosted in Chicago.

I am a first year Cardiology Advanced Trainee at St Vincent's Hospital Sydney with a particular interest in heart failure and rheumatic heart disease. I feel grateful for the opportunity to present the research our team conducted at Alice Springs Hospital in the Northern Territory. My abstract evaluated the use of direct oral anticoagulants (DOACs) as an alternative therapeutic strategy to vitamin K antagonists (VKAs) in the setting of rheumatic heart disease-associated valvular atrial fibrillation (vAF). This was a real-world retrospective observational study examining rates of major adverse cardiac and cerebrovascular events (MACCE) for patients on VKAs or DOACs for vAF in Central Australia over a five-year period. Our study demonstrated that DOACs may represent a suitable alternative to VKAs for reducing MACCE in rheumatic heart disease-associated vAF, particularly in under-resourced contexts. This abstract stimulated interest from public health professionals, clinicians and pharmacologists.

Rheumatic heart disease disproportionately impacts minority groups worldwide and its negative impact on communities is propagated by resource-poor settings and limited access to healthcare. It was interesting to learn about various approaches to such public health-related challenges which included multidisciplinary collaboration and incorporation of artificial intelligence for screening. I was lucky to meet passionate individuals with similar interests from around the world and discuss future collaboration opportunities.

It was truly inspiring to attend presentations by experts in the field and learn about growing areas in Cardiology. This year there was a particular focus on novel approaches to heart failure management, use of genetics to advance therapeutics in rare diseases and the role of artificial intelligence in diagnosis and disease prevention. In addition, I attended the Get With The Guidelines course which provided education on the database and guidance on how to use the available data to answer research questions. As it was my first visit to Chicago, I used my time outside the conference to explore the city. Highlights included the architectural boat tour, seeing Cloud Gate (the 'Bean') and trying deep dish pizza.

I would like to thank my supervisor Dr Angus Baumann for providing guidance and supporting me to attend my first international conference. I would also like to thank CSANZ for supporting early career researchers such as myself to attend such inspiring conferences.

