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## Structural Heart Disease Australia (SHDA)

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Structural Heart Disease Australia

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Structural Heart Disease Australia (SHDA) is a rapidly evolving multidisciplinary group of health care professionals which provides a forum focussed on understanding the rapidly advancing management of structural cardiac disease via Free Open Access Medical Education (FOAM).

### Profile

Structural Heart Disease Australia (SHDA) provides a rapidly evolving community forum for the many specialty and allied health disciplines involved in the management of patients with certain anatomical cardiac diseases, both congenital and acquired. In a very short time — since inception, in late 2014 — SHDA has grown from a fledgling group of enthusiasts to a national and international forum. This invited Profile describes the origins, overarching principles, activities, achievements and aspirations of our relatively young, and we think, enterprising Australian association.

### How Did the SHDA Come About?

Cardiac scientist and perfusionist, Sharon Kay, works with a wide variety of sub-specialists involved in the management of cardiac patients in many settings, from the cardiac catheter labs and operating theatres of urban hospitals to rural areas and developing countries. Kay noted the increasing specialisation of medicine was accompanied by a corresponding compartmentalisation of clinical care, resulting in a “disconnect” between clinicians, not only between, but also within, hospitals. For example, referring physicians who have not been in a cardiac catheter laboratory or operating theatre for some years may not be aware of the full range of more advanced therapeutic options becoming available for their patients. With this in mind, several one-day

single disease educational symposiums were organised, catering to all specialties involved in structural heart decision management; and, a website providing easy access to all things structural heart was created.

Structural Heart Disease Australia was the result — a not-for-profit association governed by a board of eight founding members representing several of the different specialty areas involved in the management structural heart disease (Box 1).

Early challenges were met largely by networking and by word of mouth — including gaining financial sponsorships, setting up a website with streaming capabilities, and learning of marketing opportunities.

Beyond the early established governance group, there is now also a larger group of health professionals, across many disciplines — cardiologists (imaging, interventional, clinical and rural), cardiothoracic surgeons, nurses (cath lab, surgical, ward, outreach and practitioners), cardiac anaesthetists, intensivists, cardiac technicians and echo cardiographers as well as trainees in these areas, all actively involved in the Association’s activities.

### What Are SHDA’s Overarching Principles?

Early on, the Association clearly defined its goals and positioning, in a discipline which was just emerging in its own right — Structural Heart Disease. The overarching principle is to deliver not-for-profit, “Free Open Access Medical Education” (FOAM or FOAMed) and communication,

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## Box 1

**Board of Structural Heart Disease Australia**

Sharon Kay, Perfusion and Cardiac Scientist  
 Michael Vallely, Cardiothoracic Surgeon  
 Peter Hansen, Interventional Cardiologist  
 Greg Scalia, Imaging Cardiologist  
 Paul Forrest, Perfusion, Cardiac Anaesthetist  
 Chris Barnes, Cardiologist, Intensivist  
 Michael Seco, Resident Medical Officer  
 David Celermajer, Cardiologist

particularly online and through social media. Thus, SHDA provides an accessible, low-cost forum for everybody involved in the clinical management of patients with structural disease — whatever their discipline, and wherever they are geographically located. Our primary goal is the effective transmission of rapidly evolving, relevant skills and techniques through communication.

## What Are SHDA's Key Activities?

Education first and foremost, communication and collaboration between specialties, and providing resources for programs as they evolve have naturally evolved to become SHDA's main areas of activity.

We have established a program of biannual symposiums, commencing with a focus on a single cardiac structure (such as the aortic or the mitral valve), its anatomy and associated pathological processes from diagnosis through management, including both transcatheter and surgical interventions, to follow-up (Box 2).

These symposiums are one-day seminars, with hundreds of attendees (Figure 1), and are streamed not only nationally but also internationally (especially within Southeast Asia) to,

## Box 2

**Topics of SHDA Symposia**

- Left atrium – July 2016, Melbourne
- Mitral valve – February 2017, Sydney
- Rheumatic and adult congenital – July 2017, Sydney
- Left Ventricle – February 2018, Sydney
- Right heart – July 2018, Melbourne

now, literally thousands of participants eager to learn more about this evolving “discipline” of structural cardiac disease.

All SHDA talks are published on our open access website at <https://shda.org.au>, which is a key forum for providing FOAM, sometimes also referred to free online access “meducation”.

Structural Heart Disease Australia supports delegates to attend not only our conferences but also other relevant workshops. These delegates then “blog/summarise” the event (e.g., EACTS 2015/Echo Australia 2015 and 2016/3D echo 2016 Perth and ANZCA SIG Darwin 2015, CSANZ/ANZET 2016, ANZSCTS 2016, TAVI implants, Mitraclip procedures and more) for subsequent broadcast as web resources.

With the needs of our target audience in mind, we publicise other educational opportunities, such as upcoming meetings of interest.

To improve two-way communication between referring and receiving clinicians, we also provide a forum for medical staff from rural, regional and smaller city hospitals to attend “live case days” in operating theatres and catheter laboratories to see procedures first hand.

We believe we are creating a unique ‘one stop shop’ for resources that could, otherwise, be hard to find, by developing a repository of educational materials on our website from a wide variety of sources, including YouTube, and links to other resources.



**Figure 1** An expert guest speaker addresses hundreds of attendees at an SHDA symposium.

## Achievements and Some Surprises

Perhaps our greatest achievement-to-date has been to bring together a unique blend of delegates who would not previously have attended symposiums/conferences; this has created new relationships. Further, the provision of live streaming to other health institutions across our vast country (e.g., Adelaide, Perth, Orange, Townsville) and internationally (e.g., Bangalore, India; Jakarta, Indonesia; Serdang, Malaysia; Singapore; Bangkok, Thailand; and, Guangdong, China) has created dialogue at these sites that was previously unavailable.

We are proud of the development of an inclusive, accessible educational framework for everybody who has an interest in SHD, and of the powerful, and sometimes surprising, level of interaction and cross-discipline interest exhibited between the SHD players. There is a real “appetite” for specialties to learn from each other — for example, surgeons learning percutaneous wire skills, interventionists learning relational 3D anatomy, and echo-cardiographers learning angiographic and computed tomography (CT) imaging techniques.

We are also pleased to have “promoted” speakers and educators, with vast knowledge bases to share, who previously have not taught at a national level.

The biggest surprise has been the level of previously unmet interest in SHD, as evidenced by the exponential growth in attendance at our symposiums — from 160 delegates at the first symposium to 590 delegates at the third. This momentum has surprised and encouraged us greatly, and SHDA has enjoyed growth far beyond our initial expectations.

## Future Goals

Our ongoing goals are to make this endeavour sustainable and, thereby, to steer our user group along a clear and

altruistic pathway in line with our initial vision, to share knowledge and promote the treatment of patients with structural cardiac conditions. So, in line with our multi-disciplinary approach, we plan to encourage cross-disciplinary research at a national level.

We already know that there are many rural Australian specialists who benefit from our association’s activities. And, it is exciting to look forward to having South East Asian communities also experience this benefit, especially as their capabilities increase.

The advent of transcatheter and minimally invasive surgical therapies for our ageing population has brought together, by necessity, clinicians and scientists from various disciplines who previously worked mostly in their own areas, or “silos”. We want to bring together the four major professional groups across Australia and New Zealand into one dialogue about structural heart disease — the Australian and New Zealand College of Anaesthetists (ANZCA), the Australia and New Zealand Endovascular Therapies meeting group (ANZET), the Australian and New Zealand Society of Cardiac and Thoracic Surgeons (ANZSCTS) and the Cardiac Society of Australia and New Zealand (CSANZ).

In five years’ time, we would like to see SHDA as a key and trusted forum for doctors and allied health professionals engaged in the management of patients with structural cardiac disease. Not just as a forum but a leader, an advocate and above all, a repository and melting-pot for knowledge, teaching and learning in what we see as an exciting, important new cardiac discipline – Structural Heart Disease.

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