

NEWS FROM THE PRESIDENT OF SA HEART®

Dear SA Heart® Members

I am most humbled and grateful for the opportunity to serve as SA Heart® President. I firstly wish to express my gratitude and admiration to Professor Liesl Zühlke, who tirelessly led us over the past 2 years. Much has been achieved and I plan to build on her accomplishments. Liesl has been especially passionate about inspiring and supporting the careers of young cardiologists/cardiac surgeons and has initiated our Emerging Leaders' Programme. With her guidance, SA Heart® is now a growing and stronger association. I plan to call upon her counsel for advice and support. I know well that I have "big shoes to fill", but I stand ready to contribute with inclusivity and agility.

We are supported by a strong board, national council, SIGs and standing committees. The board recently met in Cape Town to discuss future strategy and direction. We need SA Heart® to be "fit for the future". Our vision is to ensure cardiovascular healthcare for all South Africans. Our mission is to champion equitable, sustainable healthcare, to lead, innovate and educate professionals, our members, and the community. We also wish to influence cardiovascular healthcare policy. We need to have our voice heard by the policy-makers, especially with NHI looming. I plan to approach the Minister of Health with a strong delegation to discuss our role and the future standards of universal healthcare. Advocacy will be a major role for SA Heart® – which surely encompasses the leaders in cardiovascular medicine in South Africa.

Membership will also be one of our key pillars. In this regard, I plan to travel to each of the academic units to explain our vision, and, importantly, to encourage the younger members to get involved. We need the young blood to join our various SIGs and committees. I am convinced that a strong membership drive will lead to a bigger SA Heart® – not just in size, but in terms of impact and achievement.

This year is the 20th Anniversary of SA Heart®. We are also proud that the SA Heart® 2019 Congress will be held in conjunction with the Pan African Society of Cardiology (PASCAR), Africa PCR and the Cardiovascular Magnetic



Dr David Jankelow, newly elected SA Heart® President.



Prof Liesl Zühlke and Dr David Jankelow.

Resonance Congress of South Africa (SA-CMR). The coming together of four major groups will be an important milestone for each of us. We are also back at the Sandton Convention Centre, and I feel that we are coming home after my involvement with SA Heart® 2017. Our Scientific

Continued on page 58

NEWS FROM THE PRESIDENT *continued*

Programme Committee, the Durban branch of SA Heart®, will be led by Dr Rob Dyer. The congress theme, “Meeting the Needs for Africa” is highly relevant to a changing landscape and epidemic of cardiovascular disease in Africa. It is also now timeous and most appropriate to hold SA Heart® 2019 in association with Africa PCR, a practical case-based interventional cardiology programme. PCR encompasses interventional cardiology in Africa, and this blends extremely well with the overall congress theme. SA Heart® 2019/PASCAR/Africa PCR/SA-CMR will stimulate a creative exchange of ideas and will offer many opportunities to network with international and local colleagues. An out-

standing line-up of leaders will provide for four days of scintillating cardiovascular science and medicine. We all look forward to welcoming you all to Sandton on 31 October this year.

Lastly, I would ask you all for input and suggestions. Please be free to email me with constructive suggestions.

I wish you all well and also a successful new year.

David Jankelow
President, SA Heart®
djankelow@icon.co.za

CARDIAC ARRHYTHMIA SOCIETY OF SOUTHERN AFRICA

CASSA EVENTS 2019

ANNUAL CASSA SYMPOSIA

The 2019 annual CASSA symposia will be held in Johannesburg (23 February 2019 – Maslow Hotel) and Cape Town (2 March 2019 – Vineyard Hotel). These popular annual symposia are a highlight on the CASSA calendar. This year we will focus on an update in cardiac arrhythmias, and invited speakers include 2 international electrophysiologists – including Associate Prof Chris McLeod from the Mayo clinic, USA, and Dr Timothy Betts from Oxford, United Kingdom.

COLLABORATION WITH THE EUROPEAN HEART RHYTHM ASSOCIATION (EHRA)

CASSA has once again been invited to chair and present 2 presentations at a joint session with EHRA on “Atrial flutter” at the annual Europace meeting in Lisbon in 2019. This is the 3rd successive year that CASSA has received an invitation to chair and participate in a joint session with EHRA.

CASSA Exco members are currently participating in writing and the review of 3 scientific EHRA statements and guidelines.

ONGOING EDUCATION

The quarterly ECG quiz published in the SA Heart® Journal and the 6 monthly Andrzej Okreglicki Memorial Advanced ECG and Arrhythmia Interpretation Course continues to promote the teaching of ECG interpretation by cardiologists and cardiology senior registrars.

SA HEART® 2019

CASSA will coordinate an arrhythmia educational track at the annual SA Heart®/PASCAR congress in Johannesburg, in 2019.

Associate Professor Ashley Chin
CASSA president



POPULAR CONGRESSES FOR 2019

CONGRESS	DATE	CITY	COUNTRY
CASSA SYMPOSIUM http://www.cassa.co.za/cassa	02 March 2019	Cape Town	South Africa
LIPIDOLOGY UPDATE MEETING https://www.cvent.com/events/the-lipid-educational-course-meeting/registration-3c28abbf508a4a6caf90c3a86c91934a.aspx?fqp=true	04 - 07 March 2019	Cape Town	South Africa
EHRA 2019 https://www.escardio.org/Congresses-&Events/EHRA-Congress	17 - 19 March 2019	Lisbon	Portugal
EUROGUICH 2019 wp.l.euroguch.com	05 - 06 April 2019	Zagreb	Croatia
SUNECHO https://sunecho.co.za	06 - 10 May 2019	Tygerberg	South Africa
EUROPCR https://www.pcronline.com/Courses/EuroPCR	21 - 24 May 2019	Paris	France
ASIA PACIFIC SOCIETY OF CARDIOLOGY 50TH ANNUAL CONVENTION AND SCIENTIFIC MEETING http://www.apscardio.org	22 - 26 May 2019	Pasay City	Philippines
EUROPEAN HEART FAILURE CONGRESS/WORLD CONGRESS ON ACUTE HEART FAILURE https://www.escardio.org/Congresses-&Events/Heart-Failure	25 - 28 May 2019	Athens	Greece
ESC CONGRESS 2019/WORLD CONGRESS OF CARDIOLOGY https://www.escardio.org/Congresses-&Events/ESC-Congress	31 August - 4 September 2019	Paris	France
PASCAR/20TH ANNUAL SA HEART® CONGRESS/ AFRICAPCR 2019 http://www.saheart.org/congress2019	31 October - 3 November 2019	Sandton	South Africa
EUROECHO 2019 https://www.escardio.org/Congresses-&Events/EuroEcho	04 - 07 December 2019	Vienna	Austria

Please also consult the SA Heart® website at www.saheart.org for constant updates to this list as well as local training opportunities offered by SA Heart®, SIGs and other role-players.

A TRIBUTE TO DR ELWYN A LLOYD MA BM BCH (OXON) MD (UCT) FCP(SA) FACC



Elwyn Lloyd was first educated at Hilton College in KwaZulu-Natal. In spite of this early disadvantage, he turned out extremely well! So well, in fact, that after he left Hilton he was accepted at Oxford University, to do medicine. This in itself was a remarkable achievement. Just to be accepted at Oxford, before a single exam has been written, is a great distinction.

At Oxford, he played rugby, and in his spare time did some medicine. Legend has it that his photograph appears in more team photos in the clubhouse of the Oxford Rugby Club than anyone else, and that he only just missed selection for England. He was an Oxford rugby Blue for three consecutive years – 1964, 1965, and 1966.

Then it was time to turn his attention to medicine.

At first, he thought of a career as a physician/hepatologist, and even obtained an MD degree from UCT based on a thesis on the liver.

But, after a while, the heart seemed to be a more interesting organ in which to specialise. After all, unlike the liver, it moved! You could listen to its sounds, and its murmurs, and measure its rate, and feel its rhythm. Even better, it was the seat of emotion; the organ from which love came. Best of all, it was situated behind the female breast, so it needed to be inspected, palpated, percussed and auscultated often, and carefully, and well! To the warm-hearted, hot-blooded and passionate young Dr Lloyd, the heart seemed an infinitely desirable organ on which to focus his attention.

So, he left general medicine and the liver behind, and became a cardiologist – a very distinguished one. After initial cardiology training at Groote Schuur Hospital he went to the Krannert Institute, Indianapolis, USA, to do a fellowship in electrophysiology, and then came back to Cape Town to a consultant post at Groote Schuur Hospital.

At about the same time another up-and-coming young cardiologist was returning to Cape Town, in his case from the Mayo Clinic in Rochester, Minnesota, where he had been doing some of the early work on balloon angio-

plasty – as a technique for opening acutely or chronically blocked coronary arteries. Tom Mabin and Elwyn Lloyd were soon making a name for themselves, in Cape Town and beyond. In 1983 they had the radical and daring idea that they would leave the academic world and go into private practice in Cape Town as cardiologists.

‘He left general medicine and the liver behind, and became a cardiologist.’

Until 1980, cardiology had been essentially a diagnostic discipline. Operations on the heart were done by surgeons, not physicians. However, the 1980s saw the dawn of the era of interventional cardiology, and soon it became obvious that cardiology was becoming a therapeutic as well as a diagnostic speciality. But it was still practised only in academic hospitals, largely because of the high cost of interventional equipment. Full-time private practice in cardiology in South Africa was unknown.

But Elwyn and Tom had the vision to dream that cardiology could be practised in private hospitals, and they had the courage and foresight and confidence and energy to put their dream into practice. In 1984, with the backing of



Drs Dave Milne, Saleem Dawood, Jo Tyrrell, Elwyn Lloyd and Adie Horak

a private hospital group, they left the academic world and started a full-time cardiology practice in a converted multi-story central Cape Town car park called City Park Hospital. Together with Eddie Gale and Graham Cassel, who followed a similar path in Johannesburg, they were the pioneers of private cardiology in Southern Africa.

A woman who they were interviewing for a secretarial post asked them how many patients they would be seeing. "Probably about 5 a week", said Elwyn and Tom. Very soon it was five a day, and soon after that there were not enough waking hours to look after all the in- and out-patients who flocked to City Park to see them, from all over the Cape and further afield.

In 1998 Elwyn led the creation of a new cardiac unit at Vincent Pallotti Hospital in Pinelands, which has proved to

be extremely successful. The practice moved to Vincent Pallotti at the end of 1999, when the new unit opened, and Elwyn remained there until his recent retirement, after a total of 35 years of exemplary private practice.

It is a remarkable story. With skill and knowledge, humour, dedication and generosity, Elwyn has made an enormous contribution to the health of the people of the Cape. Apart from anything else, I have him to thank for my own career. He is a fine man, a great friend, and a caring doctor, and is much loved by patients and colleagues and staff alike.

I salute him – as do we all.

Dr Jo Tyrrell

SA HEART RESEARCH GRANT RECIPIENT DR LUKE HUNTER

I am the grateful recipient of the SA Heart® Research Grant, that covered expenses incurred during the data-collection phase of my research. I am currently in my third year as a Doctoral Research Fellow in the Division of Cardiology at Tygerberg Hospital, under the supervision of Professor Anton Doubell and Dr Philip Herbst.

My thesis investigates the role of screening echocardiography in rheumatic heart disease (RHD) and proposes a simplified diagnostic algorithm for RHD identification. One of the primary aims of my research was to prospectively enroll 100 South African patients with a documented history of proven acute rheumatic fever (ARF). The task, from the outset, was ambitious – as rheumatic disease is seldomly identified in its acute phase. Coupled with this are the notable obstacles inherent to the South African healthcare system that make the logistics of case identification and tracking down prospective study participants almost impossible.

This journey started 18 months ago, and culminated with 100 successfully enrolled patients after countless hours of searching through dusty forgotten medical records, the making of innumerable phone calls (and some wrong numbers), and over 10 000km of travel in my trusty Polo Vivo.



Dr Luke Hunter

In my search, I have travelled to the far corners of the Eastern Cape and KwaZulu-Natal provinces and to almost every clinic and hospital in the Western Cape Province! I have had the privilege of meeting the most exceptional people bravely living with RHD and have experienced true humanity from each who willingly gave of their time, their hearts, and their individual story.

I look forward to sharing the findings of my study in various publications later this year.

REPORT BACK FROM THE SA HEART® CONGRESS AT SUN CITY 2018

It was a great privilege and honour to be the Chairman of the SA Heart® 2018 scientific committee. The pre-congress meeting was very well attended, especially the Echo workshop where we were left with only standing room. The Dream Team from the Mayo clinic updated the audience on how accurately to assess left and right ventricular function. The in-depth topics covered a wide range of pathologies, including what to look for post CVA, how to assess pericardial constriction and to accurately assess the mitral valve.

The paediatrics session on congenital heart disease, hosted by Dr Mitchell and Dr Joshi, was well presented and attended and proved to be a great learning experience for all those who attended.

Cardiology for the non-cardiologists was a full capacity meeting thanks to the generous sponsors from industry. This meeting is essential in terms of updating general practitioners on the latest in cardiology, and provided an invaluable learning experience.

The opening address by world-renowned futurist Dr Graeme Codrington set the pace and standard for the rest of the meeting. He wowed the audience on what to expect in the future, and even had the ESC President (Jeroen Bax) quoting from him in later talks.

The Friday opening plenary commenced with a moving tribute to Professor Bongani Mayosi by Professor Mntla and Professor Zühlke – his achievements will be forever cherished by the cardiology community. The plenary focused on what the future holds for cardiology: “What will be disruptive in cardiology” by Dr Azim Latib, “What will be disruptive in cardiothoracic surgery” by Dr Lars Svensson, “Cardiovascular risk estimation: A look into the future” by Prof Ian Graham, “Imaging in cardiovascular disease” by Dr Alfonso Pecoraro, and “Momentum 3 Heartmate - A paradigm shift for heart failure” by Prof Mandeep Mehra.

The second plenary was the TAVI live case: A first for SA Heart®. The case was beamed through from Ireland, and, amazingly, this well-run cathlab managed to implant an aortic valve in under 45 minutes. In the aftermath of the live case we had a debate between Dr Azim Latib and Prof Lars Svensson regarding the indications for TAVR. A paediatric session on the management of Tetralogy of

Fallot, as well as an allied professions session on STEMI care in South Africa ran concurrently.

Other sessions included talks on renal denervation, a paediatric session on pulmonary valve replacement and the cardiothoracic society forum, which was chaired by Dr Kleinboog and Dr Bolotin.

The Friday afternoon sessions were on adult congenital heart disease chaired by Dr Cupido and Reddy, “the future of the Fontan” was presented in the paediatrics session, and the Future of chronic total occlusions was also presented and chaired by Dr S Khan and Dr C Zambakides. There were also parallel sessions for SASCAR and CASSA.

‘ I initially needed to interpret some of the jokes. ’

Saturday morning had a busy opening with delegates having to choose between: “Mankind’s most lethal appendage”, “What does the future hold for cardiology?”, “The future of device therapy in mitral incompetence”, “The borderline EF”, “Acute cardiac care”, “SASCI complications session” (as always standing room only) and “Cardiovascular research: A glimpse into the future”. All proved to be wildly popular and successful sessions.

“The great debate: Stable angina” took centre stage on Saturday afternoon, with a discussion around the extremely topical ORBITA and FAME studies: the pro-intervention stance was taken by Dr Azim Latib and the pro-medical stance by Prof William Wijns.

The Gala evening on Saturday was an elegant affair, with comedian Riaad Moosa entertaining the audience. He had everyone in stitches. Though I initially needed to interpret some of the jokes, our ESC guests loved every minute of

his performance, and Mark Pilgrim the DJ entertained the crowd into the early hours of the morning.

Sunday morning began with an Ethics session: "Treating the complex adult cardiology case in a resource limited environment" by Prof Sarkin, and parallel to this was "Critical information to give our patients", an interesting session which covered e-cigarettes and marijuana in cardiovascular health.

The final session was entitled: "The best of the last year of publishing".

I would again like to thank all the scientific committee members who assisted in making this programme the huge success that it turned out to be.

Dr Iftikhar Osman Ebrahim
Cardiologist, Unitas Hospital

REPORT BACK FROM THOMAS ALDERSLEY

RECIPIENT OF WESTERN CAPE BRANCH SA HEART®: ABSTRACT AWARDS 2018

This was my second SA Heart® congress attendance, and once again I thoroughly enjoyed the event. I'd like to thank the Western Cape Branch of SA Heart® for sponsoring my attendance.

As a technophile, this year's theme "What does the future hold?" was particularly exciting for me. The opening lecture by futurist Dr Graeme Codrington set the scene nicely. He gave us a glimpse into the future technologies and emerging disruptive forces that may come to shape the future of medicine. The congress continued this theme of future directions, and yet the presentations always felt relevant and practical. On the whole, the standard from both the local and international speakers was excellent, and I often found myself wishing I could be in 2 places at once.



Thomas Aldersley

This was my first experience presenting at such a large congress and from a technical and logistical point of view everything was managed very efficiently and professionally. I really appreciated the opportunity to talk about the work we have been doing on the PROTEA project – The first large-scale African congenital heart disease registry and DNA biorepository. Our progress generated much excitement and the conference was the ideal opportunity to meet with potential local and international collaborators who were interested in participating in the registry.

Arguably one of the best things about attending a congress like this was the chance to meet and talk with local and international peers, and experts in your field and other disciplines. The organisers of the congress took this one step further by formalising the process and arranging a series of "SA Heart® Mentor Sessions" at the "Mentor Café". Here, fellows, registrars, junior cardiologists and "Emerging Leaders" were able to meet with senior members of the association and the cardiovascular community to benefit from their knowledge and experience – in informal "get-togethers". I would like to thank all the faculty and delegates who made themselves available for these sessions. Specifically, I'd like to thank Prof Ntobeko Ntusi and Dr Hopwell Ntsinjana who took time out from their busy schedules to talk with me about cardiology, cardiac imaging and to give me some very welcome career advice.

Thanks again.

Thomas Aldersley

REPORT BACK FROM THE SA HEART® CONGRESS 2018

FROM A MEDICAL STUDENT'S PERSPECTIVE

During my first year in medical school, my interest in cardiothoracic surgery was triggered when I witnessed Dr Andre Brooks surgically correct a VSD at Red Cross Children's Hospital. In my second year, I began research under his supervision, which allowed me to discover my passion for congenital heart defects.

The opportunity of being accepted for an oral presentation, at the 19th annual SA Heart® Congress, was one of the highlights of my year, and I have written a short summary of my experience there.

The CVD IMBIZO workshop, although aimed at fellows, was both insightful and practical. This was embodied by Prof Mandeep Mehra who discussed the future of cardiology, and then later gave vital information on writing a paper - through the eyes of a journal editor. I definitely felt more equipped, and have a better knowledge of structuring research questions, grant writing and other imperative career and research skills. Hearing the speakers' journeys, and their reflection on career choices, was also very inspiring.

“The theme was very applicable to my generation.”

Futurist, Graeme Codrington, began the congress on such a high note and set the scene for “What does the future hold?”. Various thought-provoking topics were addressed by the faculty. To mention a few highlights: the disruptive technologies changing patient management, xenotransplantation, the TAVI live case, and reflection on the last 40 years of cardiovascular tissue engineering. I felt strangely inspired by experts in their fields of study.

The various parallel sessions were fascinating. Dr David Barron discussed paediatric cardiothoracic surgery, Dr Charanjit Rihal intrigued us with the new paradigm of structural heart interventions, and Prof Gil Bolotin talked about medical device research.



Carmen Gaffley

This was all contrasted with hearing Prof Liesl Zühlke share the sobering statistics of the burden of rheumatic heart disease, and Prof Peter Zilla discuss the global unmet needs in cardiac surgery. At an early stage of a lifelong career, I was exposed to the future of cardiology, but also the reality of what still needs to be addressed.

Though the congress was aimed at specialists, the theme was very applicable to my generation, because we will be the successors that reap the benefits of progress, as well as the ones tackling the unsolved problems.

Presenting at the SA Heart® congress was an incredible opportunity. What really stood out, in such a personal way, was the support and encouragement by members of the local faculty, reinforcing the principle of mentorship. I smiled when a Professor mentioned, “I still remember the first time I presented at a large congress”. Having the privilege to connect and network with leading academics, I appreciated their willingness to impart their wisdom.

My attending this congress was dependent on funding, and I am grateful to the Discovery Foundation, and the SA Heart® Association for making this possible!

Carmen Gaffley
3rd year MBChB

SA HEART® TRAVEL SCHOLARSHIP RECIPIENT REPORT

I am Dr Lorrita Kabwe, a recently qualified cardiologist from Stellenbosch University/Tygerberg Hospital. I had the privilege of being awarded a travel scholarship to attend the 2018 SA Heart® Congress, held at Sun City, South Africa. The congress was a huge success. I am happy to report that the scholarship gave me the opportunity to present my research results, in the form of a poster presentation.

I was able to attend the various scientific sessions held during the congress, where my cardiology knowledge was increased substantially. I had the opportunity to network with colleagues from other institutions, both in South Africa and abroad, as well as to form important networks with various industry representatives.

Sun City is a fascinating destination. During my stay, I was privileged to attend a dinner held at the beautiful Kingdom Resort, and also went for a game drive where I saw the big five. This was indeed a rare opportunity and one of the best moments in my life!



Dr Lorrita Kabwe at her poster presentation in Sun City

I would like to sincerely thank my sponsors for this wonderful privilege. I had a lot of fun, and I learned a lot too. I look forward to attending more congresses in the future.

Dr Lorrita Kabwe

SA HEART® WESTERN CAPE BRANCH ABSTRACTS AWARD RECIPIENT REPORT

Due to generous sponsorship by SA Heart®, I had the opportunity to attend the SA Heart® Congress held in October 2018 at the beautiful and entertaining Sun City.

Perhaps my fondest experience of the congress was the opportunity to meet and establish friendships with so many influential role-players in the cardiology industry. It not only allowed for developing networks for future career endeavours, but also shed a perspective on so many aspects of the literature and landmark trails that cannot be gained from textbook reading! The environment was conducive to learning and broadening one's horizons – the constant discussions, even between sessions, attested to that. It also reminded me of the importance of mutually beneficial relationships in the industry, the importance of guidance/mentoring, and of working with colleagues to achieve personal and patient goals.

I had the opportunity to share my research at 2 different forums, something that I'm personally proud of, and that will serve as a springboard for presenting work at even bigger meetings. The scientific programme was well-structured and very applicable, with something interesting for all levels of experience and expertise.

With this report, please accept my sincere gratitude for the sponsorship – without which a week with significant personal and professional growth would not have been possible. I hope to be afforded the opportunity to attend the SA Heart® Congress again in 2019, to continue the quest of growing in understanding and insight into the beautiful field of cardiology.

Jacques Liebenberg

SA HEART® WESTERN CAPE BRANCH ABSTRACTS AWARD RECIPIENT REPORT

I would like to thank the Western Cape Branch of the SA Heart® Association for sponsoring my attendance of the SA Heart® Congress at Sun City from 4 - 7 October 2018.

The SA Heart® Congress distinguished itself as a world-class congress, offering plenaries and workshops hosted by local and international experts. I found the pre-congress echocardiography workshop to be an invaluable learning experience, and could highly recommend this refresher course to any cardiology fellow, cardiac technologist in training or experienced echocardiographer who wishes to improve their skills. I also really enjoyed the CVD Imbizo sessions that were chaired and presented by the doyens of South African cardiology – who shared great words of wisdom on how to apply for research grants, write research papers, and how to best present your data.

Following an inspiring opening function on the Thursday evening, the congress continued from the Friday morning to Sunday afternoon with lectures in cardiology, paediatric cardiology, cardiac surgery and allied health. Sessions I particularly enjoyed were “To ablate or not – the debate”, a glimpse into the future of device therapy in mitral incom-



Dr Charle Viljoen



Prof Karen Sliwa, Olivia Briton and Dr Charle Viljoen

petence, the exchange of views around the controversies of managing stable angina, the case discussions on “CVD in pregnancy”, and the update on “the best of the last year of publishing”.

As a young researcher, I had the opportunity to present two oral abstracts on the Friday – notably “Evaluating the prognostic significance of the 12-lead ECG in peripartum cardiomyopathy” and a “Prospective cohort study comparing blended learning with lecture-based training in electrocardiography”. Throughout the weekend, the SA Heart® booth organised several mentoring sessions with the ESC faculty, including Professors Jeroen Bax and Fausto Pinto, as well as SA Heart® faculty Drs David Jankelow and Blanche Cupido, who gave highly valued advice on fellowships and career planning. Those who brought their running shoes along could also join the Friday and Saturday morning breakfast runs through the grounds and surrounds of Sun City.

In conclusion, the SA Heart® Congress 2018 was a huge success. I look forward to attending 2019 's SA Heart® Congress in Johannesburg, which will be held in conjunction with Africa-PCR, the Pan African Society of Cardiology, and SA-CMR.

Dr Charle Viljoen

THE LIPID AND ATHEROSCLEROSIS SOCIETY OF SOUTHERN AFRICA (LASSA)



This Lipid and Atherosclerosis Society of Southern Africa newsletter is a report of the familial hypercholesterolaemia (FH) global summit meeting held from 1 - 3 October 2018 in California, to which I was invited as one of the authors of the World Health Organisation (WHO) special document on familial hypercholesterolaemia in 1998. It is heartening to note that, at least in some countries, much effort is being made to enhance awareness and to ensure effective treatment for this common and severe disorder.

The FH foundation was founded as a layperson's organisation in 2011 by Katherine Wilemon, after she developed premature coronary artery disease due to FH. This patient-centred nonprofit organisation is dedicated to the research, advocacy and education of all forms of FH; with a mission to raise awareness and improve the rate of early diagnosis and active treatment.

The meeting was held in Los Angeles. At least 23 countries were represented, with a particular aim of commemorating the 20th anniversary of the comprehensive WHO report on FH. Sadly, this also marks the 20th anniversary of the death of Dr Roger R Williams in Swiss Air flight 111 on September 1 of 1998. Dr Williams was passionate about the early detection of hypercholesterolaemic disorders under the broad umbrella of FH, because statins had become available in the 1980s and held much promise for changing the natural history of this common disorder. He had initiated a movement called MEDPED (make early diagnosis, prevent early death) with a worldwide following – including South Africa.

The programme for the meeting can be summarised as follows: on summit day one the meeting was opened by Profs K. Hovingh and D. Rader, together with K. Wilemon. The opening address about the history and hopes for the WHO report on FH was given by myself. The next day, Prof D. Wald discussed screening for FH and contrasted this with cascade testing. Prof G.F. Watts discussed cascade testing and Drs R. Bimbaum and M. Schapiro discussed targeted testing for FH. An update was given on modified genes by eminent investigators: Profs C. Boileau and M. Abifadel. Further discussions concerned cholesterol screening for FH (Dr S. de Ferranti), health literacy and FH (Dr B. Tomlinson) and negative perceptions about statins (Prof B. Nordestgaard). Healthcare models were also dis-

cussed, including the cost-effectiveness of screening and the implications of late healthcare. On the third day, a selected group participated in a call for action meeting that covered several topics, including:

- Identification of FH
- Genetic testing for FH
- Negative publicity about statins

‘A mission to raise awareness and improve early diagnosis.’

It was an honour as well as something of a surprise for me to be invited to open the meeting. I highlighted the hopes that we had at the time of the WHO consultation – as well as the successes and failures. From my personal perspective, it was clear that there had been inadequate recognition of FH and inadequate teaching at medical school, but remarkable progress in the science and treatment modalities. The hope in the MEDPED movement and from the WHO consultation can be summarised in 3 aspects: awareness, translation to intervention for all, and further insight through research.

In conclusion, FH is a common, severe and effectively treatable condition that should be diagnosed and treated from an early age. While the last 3 decades sought dramatic developments in the mechanism of the disease, laboratory diagnosis of the causes and powerful lipid lowering treatments – the diagnosis seems to be ignored and appropriate treatment is made available to only a small subset of patients with this disorder. Somehow, despite its high prevalence and severity, it is not in the realms of primary healthcare in which setting treatment with safe and generally affordable medication should be available.

Continued on page 68

LASSA continued

The FH Foundation is doing reparation for this problem, by taking on the responsibility that healthcare organisations and governments have failed to do. The extent of diagnosis and intervention in FH in South Africa is unknown, but hopefully will be improving despite the problems in healthcare and the economy. The introduction of the Prescribed Minimum Benefit did have the effect of forcing reasonable care from the medical scheme industry, but had flaws in ensuring best care for severe metabolic errors such as FH. The diagnosis and treatment of FH have been problematic, since the field is relatively new (40 years) and special centres were not established to promote its cause; lipid clinics at teaching hospitals are poorly supported and are difficult to sustain and rekindle. The intention of improving healthcare in South Africa with a National Health Insurance is noble, but in reality it is very difficult to introduce on a large scale owing to the large numbers of patients who would need to be catered for. In contrast,

lipid disorders like FH, could be considered for the NHI, because this is an unmet need, involves relatively small numbers of patients with severe disorders, and also small numbers of professional staff. Ideally, this should be accompanied with at least one laboratory for proving the diagnosis. The ideal situation would be in a teaching hospital or university environment. This could enhance healthcare tremendously – and especially so in the domain of FH.

LASSA hopes to contribute to the education, therapeutic intervention and research in FH, but would welcome a similar lay person's organisation to promote the cause of FH in South Africa. Hopefully, South Africa can also be the springboard for a network promoting FH in sub-Saharan Africa.

D Marais

06 – 10
MAY 2019

SUNecho

10 YEAR ANNIVERSARY

6 MAY 2019

Hands-on 3D Echo Workshop
Only 20 seats available!

Venue: Division of Cardiology, Tygerberg Hospital

7 – 10 MAY 2019

SUNecho Course

Venue: Protea Hotel, Techno Park, Stellenbosch

FACULTY

Dr Philip Herbst – Stellenbosch University | Dr Alfonso Pecoraro – Stellenbosch University
Prof Anton Doubell – Stellenbosch University | Dr Navroz Masani – United Kingdom

For more information please visit the website at
www.sunecho.co.za



SUNECHO
CRITICAL THINKING IN ECHOCARDIOGRAPHY

SOUTH AFRICAN SOCIETY FOR CARDIOVASCULAR RESEARCH

SASCAR looks forward to an exciting 2019 – most particularly due to a significant cardiovascular research workshop involving academics and students from South Africa and Europe scheduled for early April (see below). Furthermore, we aim to continue to focus on delivering topical and necessary training workshops to cardiovascular research students. Below is a brief report on the last such workshop, which was given in October 2018.

VENTRICULAR PRESSURE WORKSHOP FOR POSTGRADUATE STUDENTS

Direct pressure measurements in the left ventricle of small animals using microcatheterisation is a powerful technique that allows for the acquisition of cardiac pressure loops. This technique is both an important research tool and also deeply educational for students wishing to gain greater understanding of the physiology of the heart. SASCAR was able to, with the support of LASEC, the local distributor, organise a workshop that was presented by Mr Mark de Reus who is the head of support from Adinstruments – the leading manufacturer of these highly specialised instruments. The workshop which had both theoretical components and a live demonstration, was given in the Chris Barnard Building in the University of Cape Town's Health Faculty. The live demonstration was

performed by Dr John Chipangura from the Research Animal Facility, and all necessary ethical approval was obtained. The workshop was oversubscribed, with students attending from all Western Cape universities, indicating the level of interest in this data-rich technique among cardiovascular scholars. Feedback from the attendees was very positive and SASCAR looks forward to hosting similarly themed workshops in the future.

4TH EUROPE-SA CARDIOVASCULAR RESEARCH WORKSHOP

Following on the success of our previous joint Europe-South Africa meetings held in London (2010) and Cape Town (2012, 2016), SASCAR is pleased to announce that the 4th Europe-SA Cardiovascular Research Workshop will take place in STIAS, Stellenbosch, South Africa, from 1 - 5 April 2019 – in conjunction with the international 6th Frontiers in Cardiovascular Research Meeting.

The aim of this meeting is to promote interaction and research training between European and South African students and researchers. Six European students (PhD students), as well as several South African students, will be invited to attend this workshop. They will spend 3 days having themed workshops and visiting the different cardio-



Students observing the live demonstration.

Continued on page 70

SASCAR continued

vascular research facilities in Stellenbosch/Cape Town. In addition, both the European and South African students will be given the opportunity to present their research findings during a 2½ day intensive meeting (1 - 3 April), which will be attended by over 100 postgraduate students and established researchers from various South African institutions within the country at STIAS, Stellenbosch. For junior and established researchers, this meeting will be an excellent opportunity to network with international and national researchers from various universities. Twenty three prestigious international speakers in the field of cardiovascular research have already accepted to contribute to the meeting – presenting their research in various areas of cardiovascular research:

Loanna Andreadou	Greece
Eveline Baumgart-Vogt	Germany
Robert Bell	United Kingdom
Juergen Bernhagen	Germany
William Boisvert	Hawaii
Hector Cabrera-Fuentes	Singapore
John Cunningham	United Kingdom
Sean Davidson	United Kingdom
Fabio di Lisa	Italy
Felix Engel	Germany
Fulvia Ferrazzi	Germany
Derek Hausenloy	Singapore
Thomas Krieg	United Kingdom

Rosalinda Madonna	Italy
Karlheinz Peter	Australia
Klaus Preissner	Germany
Daniel Sedding	Germany
Manvendra Singh	Singapore
Carl Vogel	Hawaii
Malcolm Walker	United Kingdom
Derek Yellon	United Kingdom
Paul Yen	Singapore
Coert Zuurbier	Netherlands

The scientific content of this workshop has been endorsed by the European Society of Cardiology, the Medical Research Council, the National Research Foundation, the South African Society for Cardiovascular Research and the University of Cape Town.

For additional information, please see our website (www.sascar.org.za) or contact dvvuuren@sun.ac.za or Sandrine.lecour@uct.ac.za

EXECUTIVE COMMITTEE

Prof Neil Davies (Chair), Dr Derick van Vuuren (Secretary), Dr Bali Sishi, Prof Sandrine Lecour, Dr Wayne Smith, Prof Karen Sliwa and Prof Faadiel Essop.

WEBSITE LINKS

SA HEART	www.saheart.org
CASSA	www.cassa.co.za
HEFSSA	www.hefssa.org
PASCAR	www.pascar.org
PCSSA	www.saheart.org/pcssa
SASCAR (RESEARCH)	www.sascar.org.za
SASCI	www.sasci.co.za
ACC	www.acc.org
ESC	www.escardio.org
WORLD HEART	www.world-heart-federation.org



SHARE REGISTRY UPDATE



COMMITTEE MEMBERS

Mpiko Ntsekhe (Chairperson), Erika Dau, Elizabeth Schaafsma, Karen Sliwa, Francis Smit, Jacques Scherman, Hellmuth Weich, Ashley Chin, Martin Mpe and Eric Klug.

The SHARE registry, which was envisioned by SA Heart® to serve the need for local outcomes data in our South African cardiovascular community, has been running successfully as a collection of focused device and disease registries over the last few years.

At the 2018 SA Heart® Congress in Sun City we announced that the first of our SHARE-TAVI patients had data entered for the 4-year post-TAVI follow-up – a milestone that we are quite excited about and which shows the ongoing commitment to data entry by all the participating TAVI sites. The extension of this project beyond the original target of 3 years has been made possible by generous funding from Edwards Life Sciences and Medtronic, keeping the SHARE registry project independently funded as intended by the registry project committee. The number of SHARE-TAVI abstracts presented at local and international meetings is growing, and the abstracts presented in 2018 at AfricaPCR, EuroPCR and our own SA Heart® Congress, were all well received. The next step is the publication of the first SHARE-TAVI manuscript, which should be completed later this year.

Another exciting SHARE development is the imminent launch of the new SHARE-SAFFR Atrial Fibrillation registry in February this year, at the CASSA symposiums in Johannesburg and Cape Town. This registry will run at 15 sites and will collect national data on the demographics,

clinical presentation, and treatment prescribed for patients at both state and private facilities across several provinces. SHARE-SAFFR will include outcomes as measured at a 1-year follow-up visit, and information from the registry will be shared at local and international meetings as has been done with the TAVI registry. The investigators are very grateful to Pfizer for substantial funding, which has allowed the development and launch of this project. There are still a few spaces for sites to join in this vital registry. Please contact Elizabeth Schaafsma or the investigators directly, Dr Martin Mpe or Prof Ashley Chin, if you would be interested in participation.

On a different front, a manuscript describing the first 100 SHARE Cardiac Disease in Maternity (CDM) registry patients is being prepared by Dr Feriel Azibani and the team under the helm of the Principal Investigator, Prof Karen Sliwa – and we look forward to seeing it being submitted for publication later this year.

We are very grateful to individual members of SA Heart®, the SA Heart® Exco, industry partners, funders and hospital groups for their continued support for SHARE, and of course most importantly to the participants at all our sites. Generating local data and enhancing patient care through the use of these local registries remains at the core of what SHARE aims to achieve. We look forward to an exciting 2019, with all our members and sites, as we work together towards this goal.

**Elizabeth Schaafsma and Prof Mpiko Ntsekhe,
Chairperson, SHARE Committee**

PASCAR, SA Heart® & AfricaPCR
Join forces for the 2019 Congress
31 October - 3 November 2019
Sandton Convention Centre
Johannesburg, South Africa

Cardiovascular Care – Meeting the Needs of Africa

www.saheart.org/congress2019

Logos for ESC, SA Heart, Africa PCR, and CMR are visible.

INTERVENTIONAL SOCIETY FOR CATH LAB ALLIED PROFESSIONALS

WE ARE VERY EXCITED ABOUT THE ISCAP WORKSHOPS PLANNED FOR 2019!

In 2018 we had the privilege of offering two full roadshows, with the addition of a Radiographers' Series.

The ISCAP 5 Lecture Series was sponsored by Disa Life Sciences, Medtronic, Paragmed and Siemens – with ISCAP sponsoring the additional Ethics topic for the Series. The workshops were presented in Bloemfontein (with allied sponsored from Kimberley to attend), Cape Town, Durban, Midrand and Port Elizabeth.

This Workshop Series focused on educating allied professionals on the following topics:

- Advances in the treatment of coronary artery disease in diabetic patients
- Paediatric cardiology: Ballooning and stenting – How, where and why?
- Catheter selection: Start with the end in mind
- Cardio Echo 101
- Do we really understand patient confidentiality and privacy?

This workshop series was CPD Accredited through the University of Pretoria, and offered the allied the opportunity of 4 Standard CPD and 1 Ethics CPD point.

The Terumo Vertice Lecture Series was a tremendous success and offered the allied professionals the opportunity to broaden their knowledge on:

- From Access to Close: Femoral
- From Access to Close: Radial
- OCT image interpretation and interesting case study discussions
- FFR and resting indices and updates

The Bloemfontein addition for this series is planned for 9 February 2019. This workshop series was CPD Accredited through the University of Pretoria, and offered the allied the opportunity of 3 Standard points.

The ISCAP Radiographers Workshop Series was offered in Cape Town and Durban in 2018 and offered the allied

an opportunity to listen to brilliant speakers, including the likes of Dr Bradley Griffiths (Cape Town) and Dr Sanjy Maharaj (Durban).

The Gauteng addition for this Series is planned for 23 February 2019.

The topics for this Radiographers Series are:

- Technological advancements & applications we can use to minimise radiation
- Basic Echo and TEE
- The Radiographers Scope of Practice
- Malpractice and indemnity in the cath lab environment.

This workshop series was CPD accredited through the University of Pretoria and offered the allied the opportunity of 3 Standard points

LOOKING FORWARD TO 2019

We would like to thank Merit Medical, who have been confirmed as sole sponsor for the ISCAP Merit Medical Lecture Series, with the following dates for each region:

26 January	Cape Town
16 February	Durban
9 March	Gauteng
11 May	Port Elizabeth
3 August	Bloemfontein

This CPD Accredited ISCAP Workshop Series will offer allied professionals the following topics:

- Distal radial access
- Uterine fibroid embolisation
- Prostatic artery embolisation

For more information on the above topics and workshops, please contact the ISCAP Office (joh-ann.nice@medsoc.co.za).

We would also like to thank Terumo and Vertice, who have confirmed their sponsorship for an



ISCAP Lecture Series. Kindly see the planned dates below:

4 May	Durban
18 May	Gauteng
1 June	Cape Town
14 September	Bloemfontein
Port Elizabeth	date to be confirmed shortly.

If you wish to receive more communication regarding the ISCAP Workshops offered in your region or other CPD events and sponsorships, feel free to contact Joh-Ann Nice (joh-ann.nice@medsoc.co.za) or your regional chairperson.

On behalf of ISCAP, I would like to thank all those who assisted in driving Allied Professional Development.

Waheeda Howell
ISCAP Chairperson

SASCI PRIVATE PRACTICE COMMITTEE 2019

The SASCI Private Practice Committee (PPC) will expand to formally include representatives from all Special Interest Groups (SIG) – thereby removing duplication of a “separate” SA Heart® PPC. For this new structure, 2019 will be a test year and the outcome will be determined by representatives engaging and actively contributing.

The committee will continue to operate with the incumbent members, JP Theron (Chairman), David Jankelow, George Nel, Gavin Angel, Jean Vorster, Graham Cassel, Andrew Thornton, as well as Ruan Louw (CASSA) – along with the following new members:

Himal Dama	Paediatric cardiologist from Durban
Wayne Lubbe	Adult cardiologist from East London
Don Zachariah	Adult cardiologist from Klerksdorp (heart failure)

Members’ coding queries should be submitted to the respective committee representatives and cc’ed to sasci@sasci.co.za for dissemination and consideration by all the representatives.

The main objective of the PPC in 2019, is to create a Current Procedural Terminology* (CPT) cross-walk, to determine what the coding will look like with CPT aligned with SAMA coding. Through CPT, the aim is to remove ambiguity from the process and to closer align what practitioners actually do, as part of their professional scope of practice, with codes that accurately reflect such professional acts and their relation or relativity to one another. It is also envisaged that, through a third party and

in line with the constraints of competition law, a real-world funder-based cost analysis of the possible impact of implementing CPT be undertaken.

SASCI has contracted a CPT cross-walk expert (Karen van der Westhuizen), who has many years of experience in coding with SAMA and funders. As an independent consultant, she is well-placed to direct our efforts and to bring relevant stakeholders to the table.

All this is in preparation to develop a full-time business unit with permanent experts to take care of our members’ queries and to engage with funders when issues arise over the next 2 - 3 years – while staying within what competition law allows.

Elsabe Klinck will continue with SASCI as our contracted legal and health policy consultant: She will ensure that we stay abreast of and comment on all relevant rules and regulations. Although frustrating, we have no choice but to participate – with NHI looming.

All members need to support us when calls are made for examples and/or contributions that are needed to make relevant and impactful submissions. Without your continued support, the committee reach will remain limited and the impact debatable.

*Current Procedural Terminology (CPT) is a medical code set that is used to report medical, surgical, and diagnostic procedures and services to entities such as physicians, health insurance companies, and accreditation organisations.

UPDATE ON HEALTH SECTOR LAW & POLICY DEVELOPMENTS

INTRODUCTION

The second half of 2018 was eventful, with not only legislation and policy, but also the strike and closure of the National Department of Health's building, which also affected the relatively new SA Health Products Regulatory Authority (SAHPRA). 2019 seems ready to be as exciting!

HEALTH MARKET INQUIRY IN LAST STRETCH

The HMI released the comments from some 70 stakeholders to its draft final report released early in July 2018. These commentaries give a good idea of where stakeholders position themselves against the findings of the HMI. Three important workshops are envisaged for ironing out some of the toughest issues – namely Facility and Funder concentration, and one on supplier-induced demand on 19, 20 and 22 February 2019.

All submissions, reports and engagements that took place over the HMI's lifespan of more than 3 years, are available on the HMI pages of the Competition Commission: <http://www.compcom.co.za/healthcare-inquiry/>.

Price discrimination draft regulations were also published under the Competition Act for comment. This will affect practitioners who may charge differential rates, as well as suppliers. It is highly recommended that stakeholders comment on these drafts.

MEDICAL SCHEMES DEVELOPMENTS

A draft amendment to the Medical Schemes Act was proposed in June, which proposed to change the funding of the current Prescribed Minimum Benefits, make changes to the way in which premiums are to be calculated, create powers that position the CMS to become part of the NHI structures in the long run, and begin to fulfil NHI functions in the shorter term. Generally supported amendments were those on scheme governance, and the CMS complaints' processes.

The amendments have now been placed on hold, in anticipation of the recommendations and findings to be made by the HMI.

The CMS Annual Report 2017/8, showed the usual trends in healthcare expenditure by medical schemes. What is new in this report, is the assessment of some quality indicators by the CMS on some of the Chronic Disease List

(CDL) conditions. Their analysis shows that, for example, only 34% of hypertensive patients received cholesterol tests and only 27% of diabetic patients received 2 or more HbA1C tests. The CMS hopes to expand this assessment in this year's report, and members of SA Heart® may find it useful to assist the CMS in crafting the indicators that could be measured using existing medical scheme data.

The PMB Review also accelerated in the latter part of 2018, and it continued with costing engagements in 2019. More details are now available on the new revised PMB package. It is proposed that the primary healthcare package (which will be exactly the same as the NHI package), will lead to the removal of the CDL from the PMBs. It is not clear how the specialist care of CDL conditions such as cardiac failure and cardiomyopathy will be covered by medical schemes. Changes implied through this move to primary care include possible changes in treatment options available, and the level of care.

NATIONAL HEALTH INSURANCE (NHI)

A hefty NHI Draft Bill was also published for comment in 2018. The Bill was widely criticised, even by supporters of the NHI. Politics have also been at play, and the media reported on the side-lining of the DG of Health, and the involvement of persons appointed by the Presidency in the project. A new version of the Bill was leaked late in 2018. Although a policy priority, it seems unlikely that the Bill would be introduced into Parliament.

Some of the key provisions included the establishment of a large structure responsible for healthcare, professional accreditation and a link to the Certificate of Need, the undertaking of health-technology assessment, price-setting, and price negotiations. The Bill did not address the principles according to which the benefit package would be determined. It also proposed limiting rights to access healthcare by certain categories of non-South African citizens.

MEDICINES AND MEDICAL DEVICES

Although the amendments to the Medicines and Related Substances Act, 1965, came into effect on 1 June 2017, SAHPRA's first board meeting only took place early in 2018. Some of their achievements include the licensing of hundreds of device companies (importers, manufacturers, distributors and wholesalers) and the setting up of a new website. Unfortunately, lists of licensed entities are not

published, leaving it difficult for hospitals, providers and patients to assess whether a supplier is supplying lawfully or not. This has also affected government tenders and quotations.

The section 18A and 18B exemption for medical devices came to an end on 30 December 2018. Two documents were released to give the industry the assurance that the exemption will continue in 2019 - 2021. The first resolution was made by the wrong entity (the Pricing Committee instead of the SAHPRA Board), and the second, signed by the Minister on 18 December 2018, is yet to be published in the Government Gazette, as is required by law. Without such legal formality being complied with, the exemption is not yet in place.

This is also indicative that the regulations previously proposed to govern commercial deals associated with medical devices and medicines are likely to take longer than usual to finalise and implement. The basic prohibitions on bonusing, rebates, incentive schemes and sampling (including donations) – still exist for medicines (except schedule 0s that are exempted).

At present, although SAHPRA has moved out of the National Department of Health's building, its communication systems are not working and it is not clear when this body will be up and running again. Section 21 (clinical trial and unmet medical need applications) can however be done electronically: via this portal:

https://docs.google.com/forms/d/e/1FAIpQLSdEsZ-DTXsG9xEF7aykM8n9WtzRIE42krGoQ_nzI8szCSFfmQ/viewform

POPI REGULATIONS

The long-awaited regulations for the Protection of Personal Information Act, 2013, were published in December 2018. Certain forms are prescribed by the regulations.

There are now no barriers to the full implementation of the POPI Act, and it is highly recommended that all businesses and practices align all policies, forms and programmes with the Act and regulations.

EMPLOYMENT EQUITY ACT (EEA)

Amendments to this Act were also proposed in the latter part of 2018. Although all practices and businesses must

adhere to the non-discrimination parts of the Act, the affirmative action provisions are only applicable to businesses with staff of more than 50 or turnovers above (depending on the sector) R15 million for personal and social services (where most practices would fall), and R30 million for manufacturers.

The main draft amendment is that, unless an entity has a compliance certificate with the EEA, it would not be allowed to contract with the state (e.g. do sessions as a healthcare professional, or as a supplier providing medicines or devices to the public sector).

‘This has also affected government tenders and quotations.’

FORENSIC INQUIRIES BY MEDICAL SCHEMES

An increase in forensic inquiries in the fields of internal medicine, and cardiology, were experienced in 2018, and seem to be continuing into 2019. Practitioners are advised to seek help from their societies on coding and to not engage with schemes without seeking help. Practitioners should also not sign any acknowledgement of wrong-doing or payback arrangement, without being in possession of all the information and allegations against them, and knowing the exact extent of and basis for a so-called “claw-back” or removal from direct payment.

Medical schemes can offset amounts proven to have been wrongly paid, or can do so in cases of fraud, misconduct or theft, in terms of section 59(3) of the Medical Schemes Act. However, the principles of administrative justice, namely inter alia to know exactly what the allegations are, and how amounts have been calculated, and to be afforded a fair

Continued on page 76

UPDATE continued

opportunity to scrutinise and respond to allegations, and to be provided with reasons relating to any final decision taken – also apply to these matters.

We have also, in 2018, seen claw-backs against medical device companies and smaller hospitals, the last-mentioned in some cases in conjunction with an investigation against an admitting doctor.

CONCLUSION

It is expected to be an eventful year, with increased pressure from medical schemes and the increased implementation of co-payments and alternative reimbursement strategies. The HMI recommendations will in all likelihood lead to investigations of some stakeholders in health, and will also affect hospital licensing criteria and reforms in HPCSA rules. For all of these, legislative and policy changes would be required. Together with the implementation of laws such as the POPI Act, it will definitely not be a “business as usual” year.

We wish all of the members of SASCI and SA Heart® a good 2019. The EKA team remains available to assist with any health law or policy-related matter:

Elsabe Klinck Director
elsabe@elsabeklinckassociates.co.za

Patricia Matseke Director
pat@elsabeklinckassociates.co.za

Yvonne Naidoo Consultant
yvonne@elsabeklinckassociates.co.za

Marieta Meyer Associate, Free State
eka_consultant2@elsabeklinckassociates.co.za

Pieter Theron Associate, Western Cape
eka_consultant3@elsabeklinckassociates.co.za

Eugenia Lunga Office, appointments, invoicing
eugenia@elsabeklinckassociates.co.za

Where expertise becomes a community

Become an ESC Professional Member
www.escardio.org/membership

 **ESC**
European Society
of Cardiology

SCAI FALL FELLOWS PROGRAMME 2018

SASCI, in partnership with the Society for Cardiovascular Angiography and Interventions (SCAI) and Boston Scientific, once again was privileged to support four South African Fellows to attend the annual SCAI Fall Fellows Course in Las Vegas, USA from 7 - 11 December 2018.

Dr Aveen Mahabal, a cardiology fellow at Inkosi Albert Luthuli Hospital, shared his experience of this five day course.

Thank you to SASCI and Boston for the wonderful opportunity to attend the SCAI Fall Fellows Course in December 2018.

The course was targeted at the cardiology interventional fellows in the USA, with about 300 delegates attending. It was an intensely busy five days as we started at 7 am and concluded at 7 pm daily. There were many topics to cover, with many experts giving good interactive lectures with a few good hands-on practical sessions.

The course started on the afternoon of Friday 7 December, by dealing with large bore IV access, followed by a hands-on on practical usage of percutaneous closure devices and doppler guidance puncture. It was a well-organised session with interventional cardiologists giving hands-on advice. The programme dealt with major topics – including radial access, PCI techniques, a hands-on practical on rotablation, imaging and physiological perfusion assessment. The later days dealt with multi-vessel PCI, left mainstem approaches, structural heart disease and peripheral vascular intervention.

A session I found particularly useful was the dissection of a pig's heart, with a detailed discussion of the anatomy as each delegate proceeded with their own specimen.

The course was well-structured – with experts in their field giving us their perspectives. The days were long with working breakfasts, lunches, and dinners, as we received talks during mealtimes. However, we extracted maximum benefit from them all. The SCAI Fall Fellows course was worth attending, and I wish all South African Fellows could attend as it was good to meet our peers who are at the same stage of their careers as us. It is a small world, and we have that commonality and kinship.

The structure of the programme was similar to our SASCI Fellows Workshop – with similar topics of discussion.

Thank you again to SASCI, the staff and the sponsors. This



Dr Aveen Mahabal with Prof Morton J Kern, author of *The Cardiac Catheterisation Handbook*

was a wonderful opportunity that you afforded me, and I hope to impart the knowledge and experience gained to my colleagues.

Dr Absalom Nkosi from Sefako Makgatho Health Sciences University, also attended the course.

My overall impression of the course was that it was well organised, informative and worthwhile for the enhancement of my clinical practice. I would strongly urge every final year cardiology Fellow to attend it before embarking into private practice.

The long sessions coupled with fatigue and jetlag stretched our minds in terms of staying focused. However, the presentations were kept short and interesting, and thus I was motivated to keep up.

Most topics covered were beneficial to partake in, although some topics did not apply to the South African clinical context. A few of the topics that I found interesting and beneficial in terms of modifying my practice, were:

- **Gearing up:** Tools, strategies and drugs for optimal interventions
- **When the going gets tough:** Step-by-step approach to the challenges of vascular access

Continued on page 78

SCAI FALL FELLOWS PROGRAMME continued



A case presentation at the SCAI Fall Fellows Course 2018.

- **What would you do?** Case review with the experts
- **Cath lab disasters:** What to do when cases go bad
- **Unique lesions and unique skills:** How to treat left main, multi-vessel disease, bifurcations and CTO' s
- **The Rock of Gibraltar:** Techniques to deal with calcifications, non-dilatable lesions, and tortuosity
- **STEMI, shock, and haemodynamic support:** Better do something fast
- **Interventional jeopardy**
- **Structural heart disease and interventions**

Although my training in South Africa provides adequate exposure to most of the topics covered, it was certainly stimulating to see different approaches from other colleagues.

Personally, the topics that were not relevant to my practice included:

- **You have graduated from fellowship – What now?**
- **Early career advice and transition in practice**
- **Complex peripheral vascular interventions**

This is mainly because we do not get exposure to peripheral vascular interventions in our training – and the career advice was specific to American and Canadian Fellows.

Overall, it was a pleasure to be part of the course, and I would like to extend my gratitude to SASCI, SCAI and the sponsors for offering me the opportunity to participate.

Feedback from another attendee, Dr Chishala Chishala, from Groote Schuur Hospital.

I had the privilege and honour of attending the SCAI Fall Fellows Course 2018 (adult interventional cardiology) at the Cosmopolitan, Las Vegas, 7 - 10 December 2018.

It was a stimulating and engaging environment that allowed interaction among Fellows and faculty from different countries and continents.

On day 1 there was a session on large bore access, with a hands-on session on ultrasound-guided arterial access as well as arterial closure using closure devices. While I know the concepts theoretically, it was an interesting practical



The SCAI Fall Fellows Course focuses a lot on the practical experience of the Fellows: A picture of a heart used in the Anatomy and Dissection session.

learning experience – given the very limited exposure I have had to these techniques at my institution, and I hope to build on this after my formal cardiology training.

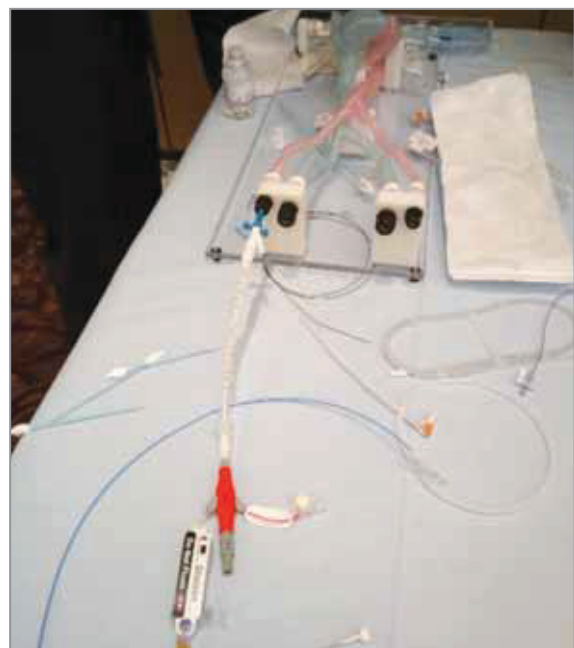
I particularly enjoyed the breakfast session on day 2 about modernised PCI with OCT. It had a practical approach that enhanced my understanding of the utility of OCT and how I can use it in my institution. This was complemented by Dr Arnold Seto's talk (day 3) on OCT and IVUS. This provided me with a practical approach to making decisions about purposefully dealing with calcified lesions with atherectomy prior to stenting. I learned of the difference between rotational atherectomy and orbital atherectomy – which I did not know about, while the hands-on session further demystified these procedures for me. These certainly are skills I hope to use in my lab post-qualification.

I was struck by how different cath-lab practices are between South Africa and the United States of America (USA). Virtually every coronary intervention case presented by the USA Fellows had an adjunctive right heart study – which we rarely do for our intervention cases. Additionally, every case with even a remote potential of haemodynamic compromise, had Impella support – which is not available in South Africa.

Even though we do not get practical TAVI training as Fellows in South Africa, it was an interesting learning experience to be part of the TAVI sessions. I was able to understand the pre-TAVI workup and the information that I would need to provide to a heart team when presenting a patient to be considered for possible TAVI. Watching Dr James McCabe present the Basilica technique of dealing with reduced coronary height during TAVI, was fascinating, as I had never heard of or seen the technique.

Dr Emmanouil Brilakis spoke passionately about CTO PCI, guidewires and management of complications. While I am not at the stage where I can do CTO PCI, the information on classification of guidewires helped me understand the wires in my lab, and what they can be used for. His session on complications gave me insights into how I can go about dealing with a complication - or at the very least “buy time” before definitive help arrives.

The anatomy session with Dr John Lasala was helpful in reminding us of important anatomical concepts that need to be remembered for invasive procedures, and I quite like his way of conducting the heart dissection.



Impella insertion Model as part of the practical sessions at the SCAI Fall Fellows Course 2018.

Continued on page 80

SCAI FALL FELLOWS PROGRAMME continued

Perhaps the only criticism I have is that little to no effort was made to make international fellows feel included in the programme. The physiology and haemodynamics sessions singled out USA Fellows and directed all the proceedings of the session toward them.

Dr Rob Leibbrandt from Charlotte Maxeke Johannesburg Academic Hospital, provided the following feedback.

SCAI 2019 was my first trip to the USA. I was looking forward to the event for months, and it did not disappoint! The travel arrangements were well put together, and despite a few palpitations, we arrived in Las Vegas safely and with minimal stress.

The venue was phenomenal – the Cosmopolitan Hotel was beautifully furnished and had every amenity one could ask for. From swimming pools to ice-rinks to restaurants – and of course the obligatory casino (when in Vegas). The rooms were large and comfortable and the staff very helpful. The conference facilities were excellent with wi-fi connectivity and excellent audiovisual support. The meals were very tasty, and the satellite industry-sponsored sessions were a great opportunity to interact with col-leagues, while sitting down to breakfast or dinner.

As for the course content, the depth and breadth of topics covered was vast. The sessions were divided broadly into structural heart interventions and coronary interventions. This divide also separated the Fellows from the USA, who came from either coronary or structural heart fellowships.

For me, the coronary sessions were most useful. The topics covered included plaque modification, strategies to handle cardiogenic shock, and complex PCI. All these topics were brilliantly addressed by the knowledgeable faculty staff.

It was interesting to see the differences in approach between our practice in South Africa and the USA – for similar conditions. For example, the use of the Impella is widespread in the USA, with every Fellow having experience in their usage.

The hands-on workshops were my favourite part of the programme. We had the opportunity to practice closure devices, insert Impellas and dissect hearts – to remind ourselves of the important anatomical considerations we use every day.



Eiffel Tower in front of the Venetian Hotel.

The advanced structural topics, such as TAVR and ASD/PFO closure, were a first introduction for me to topics I had no exposure to in training.

Overall, this was an outstanding course and a wonderful opportunity for us to experience a different approach to interventional cardiology and to be exposed to the possibilities of what can be done in our field. It left me feeling inspired and grateful to be at the start of a career in this exciting field. I cannot recommend SCAI Fall Fellows Course enough to any Fellow in training.

My thanks go to SA Heart®, SASCI and the sponsors for this opportunity – that no doubt will stay with me for many years to come.

SASCI is happy to offer this great opportunity to South African Cardiology Fellows – as seen from the feedback above. For their longstanding support and commitment to the training of our Cardiology Fellows, we would like to thank SCAI and Boston Scientific.



SASCI
South African
Society of
Cardiovascular
Intervention

HEFSSA TRAVEL SCHOLARSHIP

“ENHANCING HEART FAILURE MANAGEMENT IN SOUTH AFRICA”

INTRODUCTION

The Executive Committee of HeFSSA has established the HeFSSA Travel Scholarship. As part of its contribution toward optimising patient healthcare and to enhance and promote local heart failure expertise, HeFSSA supports such an award in South Africa. We hope that the information gained during this event and the possibility of sharing your experience and opening a dialogue with other specialists, will broaden your knowledge regarding new products and therapies in your field of expertise. We also hope that this experience will help you to develop educational programmes at your medical institution, and to actively share the acquired knowledge with your colleagues.

VALUE

Each grant is valued at R35 000, which may be used toward an economy airfare, and registration and accommodation costs (two awards are available per calendar year). The recipient will first pay and then claim from HeFSSA, with appropriate proof documentation. Should the recipient not attend the conference, HeFSSA reserves the right to request repayment of any monies paid. Twenty per cent of the grant will be retained by HeFSSA (maximum of R6 000), and will be paid to the recipient as soon as all the terms are met.

ELIGIBILITY

Candidates may be a specialist in either the public or private sector (i.e. a cardiologist or physician). Applicants must be paid-up members of the SA Heart Association and HeFSSA. The Programme/Course/Conference needs to be internationally or locally accredited and focussed on promoting your knowledge of heart failure.

APPLICATION

Application forms (obtainable from www.hefssa.org) need to be completed and returned to the HeFSSA office, at info@hefssa.org. The application form must be accompanied by a programme of the Conference (or URL). Applications should be sent by email as PDF attachments – with “HeFSSA Travel Award” in the subject line. The HeFSSA office will confirm receipt by return email. Application for this award does not guarantee the applicant will receive the award. No correspondence will be entertained after a decision is made. The applicant will be notified of the outcome of the applications within 4 weeks of receipt.

TERMS

On returning from the conference, the recipient must submit a substantially written evaluation/review of the course content, within one month. Key lectures and late-breaking trials, as well as other sessions attended that will impact on the practice going forward, including some photos, should be reflected. The purpose of this report is to share knowledge gained that could also impact on the practices of colleagues.

HeFSSA strongly recommends that the recipient gives a lecture at an appropriate educational forum (please confirm when this takes place).

SCIENTIFIC SESSIONS OF THE AMERICAN HEART ASSOCIATION CHICAGO, 10 - 12 NOVEMBER 2018

Joint session American Heart Association and World Heart Federation

KEY ISSUES IN GLOBAL ADVOCACY FOR RHEUMATIC HEART DISEASE 2018 WHO RESOLUTION POLICY IMPLICATIONS AND NEXT STEPS

Thank you for the assistance provided through the SA Heart® Travel Scholarship which enabled me to accept the invitation to speak at the 2018 Scientific Sessions of the American Heart Association in the joint session (American Heart Association/World Heart Federation). My presentation was entitled: "Key Issues in Global Advocacy for Rheumatic Heart Disease". My presentation "2018 WHO Resolution Policy Implications and Next Steps" was an opportunity to recommend how to advance the objectives of the resolution.

This was my perspective. First and foremost I have been a physician caring for children for 30 years and for the last 12 years adults - all with rheumatic heart disease. I am a clinical scientist and a REMEDY principal investigator. I contributed, through the Namibian delegation, to the drafting of the WHO resolution. I brought an African perspective to the drafting group and carried that through to these institutions, and indeed into my presentation.

I reflected on the journey to Resolution 71.14 of the World Health Organisation (WHO), as it is a good story with important lessons for all of us engaged with advocacy. I highlighted those aspects of the "package" I regarded as crucial for implementation, as they provide the mandate for the important work that needs doing. I asked strategic questions concerning who will be responsible for implementation and for what?

THE GOOD STORY – EVIDENCE AND ADVOCACY

Without detracting from the important work done by the Australian group under Jonathan Carapetis, the New Zealanders with Nigel Wilson, and Anita Saxena in India, RHD was a forgotten or neglected disease until the first "All Africa workshop on Rheumatic Fever and Rheumatic Heart Disease" (RF/RHD). Initiated by Bongani Mayosi and convened by the Pan African Society of Cardiology (PASCAR), it was held in the Drakensberg in October 2005. The outcome was a plan for the control of RF/RHD in Africa, known as the Awareness, Surveillance, Advocacy

and Prevention (ASAP) Programme. ASAP was the catalyst which was required at the time. The publication of the landmark paper on the "Prevalence of RHD detected by echocardiographic screening" in 2007, had stunned the RHD community. It was apparent that the paucity of robust data from Africa would be a limiting factor in the pursuit of the biggest prize - changes to public policy. The Global Registry for RHD (the REMEDY study) was conceived and enrolled the first patients in January 2010. A total of 3 343 patients were enrolled from 12 African countries, Yemen, and India. In an extraordinary example of capacity building through research, a group of engaged African health scientists were unwittingly to become global advocates for people living with RHD.

Simultaneously, interest had been generated elsewhere. Following a meeting of experts in the Philippines in 2011, there was publication of the World Heart Federation (WHF) criteria for echocardiographic diagnosis of Rheumatic Heart Disease. A momentum was building, and, in retrospect, things moved quickly from hereon. The African consortium engaged in REMEDY was already preparing to take robust data into public policy. A meeting held in Zambia produced the "Mosio-Tunya call to action" (published in the Lancet) imploring ministries of health in Africa to take action to address this preventable disease of poverty. The baseline data from the REMEDY study were ready for publication in the European Heart Journal in November 2014. Coordinated by PASCAR there was energetic in-country lobbying among the Health Ministers of countries engaged in REMEDY, such that by the time the REMEDY follow-up data reported in Circulation a year later, the African Union had already adopted the "Addis Ababa communique on the eradication of rheumatic heart disease in Africa". REMEDY was a shock. Patients were young, mostly female and of child bearing age, mortality was high, and those who die, do so young.

Interest at WHF had grown exponentially, and in 2014 RHD Action emerged from a partnership with RHEACH and Medtronic Philanthropy.

RHD Action became the global movement to reduce the burden of rheumatic heart disease (RHD). Much good work was produced by an energetic and energised group with useful health worker leaflets, instructive guidelines and the Global Status Report on RHD. However, advocacy was the golden arrow and the agenda was pursued from WHO

in Geneva through Asia and Africa to the United Nations in New York. The top prize would be a resolution at the World Health Assembly. A drafting team, under the leadership of New Zealand, met in Geneva in 2016 to formulate an approach to the Executive Board of WHO. The truth is that without RHD Action we would never have reached the historic moment on 26 May 2018 when the World Health Assembly of Resolution 71.14 on Rheumatic Fever and Rheumatic Heart Disease, was adopted.

WHAT IS IN THE PACKAGE?

It is important to understand what had happened. The World Health Assembly is constituted by Ministers of Health from member states of the United Nations. They provide the legitimacy for and direction to the executive branch of the United Nations, known as the World Health Organisation (WHO). In other words, WHO exists to serve the member states. It is important we remind ourselves of that truth, which explains why in Article 3.5 of the Resolution, the World Health Assembly requests the Director General to report on the implementation of this resolution to the “74th World Health Assembly”, in 2021.

Resolution 71.14 is consistent with objective 3 of the Sustainable Development Goals (SDGs) under “health and well-being” and the United Nations “Declaration on Non-Communicable Diseases” of 2011. With recommendations and action points for WHO, stakeholders and member states, I highlighted those that I believe provide us with direction and focus for the next steps.

Member states are urged to:

- Improve surveillance so as to empower policy
- Improve knowledge of prevention and control in the at-risk populations so raising awareness among vulnerable groups
- Ensure access to medicines and technologies for the prevention of rheumatic fever and treatment of those living with the disease.

International stakeholders like the WHF, AHA, Clinton Health Initiative or Gates Foundation, are invited to:

- Put people living with RHD at the centre of the prevention and control agenda
- Facilitate access to medicines and technologies (including surgery) for prevention and control.

For WHO, the Director General is requested to:

- Support member states with their surveillance efforts
- Use international partnerships to ensure reliable access to medicines and technologies, prevention, diagnosis and treatment.

‘RHD Action became the global movement to reduce the burden of RHD.’

WHO IS RESPONSIBLE AND FOR WHAT?

What are we to do to tackle the global burden of RHD and to ensure WHA 71.14 is not consigned to the pages of history? The first responders are surely WHO, the international stakeholders in WHF, PASCAR, AHA, Ministries of Health and others, who drove the advocacy agenda through to the resolution.

The World Health Organisation

WHO has embedded responsibility for the WHA 71.14 within the “Global strategy for women’s, children and adolescent health”. Given that the disease has its origin in childhood, effects two women for every man, and that those women are predominantly of child-bearing age, this was a prudent and insightful decision. Going forward, WHO needs to use the United Nations Children’s Fund (UNICEF) to maximum effect to maximise the global impact of the resolution among young people. There are 3 things WHO needs to do:

1. Strengthen capacity in its executive office at its headquarters in Geneva to meet the expectations and requirements of member states.

Continued on page 84

SCIENTIFIC SESSIONS continued

2. Provide technical assistance to member states with 4 “out of house” or “in the field” RHD prevention and control experts, with two designated to Africa and 2 for South East Asia
3. Using its substantial institutional capacity in the Deputy Directorate for Programmes in the Division “Access to Medicines, Vaccines and Pharmaceuticals”, provide a solution for the global penicillin problem.

WHO should borrow from the robust agenda, methodology, examples and messaging set forward by UNAIDS. “Leave no families behind, leave no one behind” and “When women lead change happens”, are tremendous slogans more than matched by the impact and tangible outcomes of their programmes. To do this, WHO needs to innovate, rapidly expand capacity, and we need to hold it to account.

The American Heart Association

REMEDY produced invaluable data, but sadly did not leave behind its “Global registry” to be used by all nations for surveillance purposes. The AHA has through its agents supported the development of databases, registries and registers for RHD, for example in Uganda. AHA has the capacity to develop this tool for open access by member states with instruction by the technical assistants established by WHO, or, its own agency. Digitally driven and web-based, it will be a massive help for clinicians in developing countries, will enable them to gather and process data, boost knowledge about RHD within their Ministries of Health, and will facilitate the monitoring and evaluation of people living with RHD, and, for those who can use it, “big data” for the world.

The World Heart Federation

WHF has focused its future on 3 task forces:

- Policy and advocacy
- Prevention, management and control
- Access to cardiac surgery

TASK FORCE 1: POLICY AND ADVOCACY

“TIPS”, the manuscript for the prevention and control of RHD developed by RHD Action and RHEACH, now in its second edition, is the number 1 resource for WHO technical assistants and member states. No dollar should be wasted anywhere through replication. WHO should be invited to adopt it, in return for which they can have their logo on the face. To be a genuinely useful tool, it should not rest on copyright, but be open access on the web in

Word and in Pages so that extracts can be cut and pasted for whatever purposes and by whomever. That is what being in the public space is about, and people living with RHD should not have to suffer any unhealthy constraints or barriers to knowledge sharing. This taskforce should dedicate its time to achieving this, and, to the development of the second edition of “Quick tips”.

TASK FORCE 2: PREVENTION, MANAGEMENT AND CONTROL

Through the Global Status report, RHDAction taught us a great deal about penicillin. What it has not resolved are the questions around manufacturing, procurement and distribution. The supply-chain issues that see people living with RHD traveling great distances and at great cost only to arrive at their clinic to be told “there is a stock out” is unacceptable. Borrowing from the methodology used by the previous WHO RHD programme that ended 2005, with institutional powers at its disposal and with the same tenacity and resolve it used to address Ebola in Africa, WHO has to take the lead. It is time for WHO to identify the product, use the enormous economies of scale to procure, and, through the ministries of health in member states, distribute, but not for free. Member states should pay WHO for penicillin, but source from WHO. This task force should dedicate its work to supporting the process, but refuse to take ownership of the problem. Ownership rests with WHO.

TASK FORCE 3: ACCESS TO CARDIAC SURGERY

The “Cape Town Declaration on access to cardiac surgery in the developing world” is the appropriate agenda for Task Force 3. It should commit itself to the advocacy and engagement necessary to identify surgical centres, which, with international assistance and empowerment, can rise to meet the challenge. I strongly support this endorsement process that will see the existing satellites grow and develop. Prima facie this is for those living with RHD and one should remember that a child with a scar down the chest is the best ambassador for prevention.

Implementation – Small Grants to put people living with RHD at the centre ...

As the task forces move forward, I recommend that now is not the time for WHF to use its resources to enable or support competitive national research agendas. Now is the time to support a strategic range of focused implementation tools, for which there is already a very imaginative precedent.

In 1971, WHF through RHD Action and PASCAR launched an implementation campaign assisted by a small number of small grants. These were a remarkable success in 8 countries. One should not under-estimate the value of \$2 500 in countries with limited resources who just do not have the money for “soft expenditure” such as information materials, workshops with community health workers or support and awareness sessions for those living with the disease. The WHF PASCAR grants were used to support knowledge transfer within the Ministry of Health. The RHD Action grants to projects support people living with RHD. They both did a great job.

It is encouraging, therefore, to see WHF continue to employ this strategy in 2018, with 8 small grants already approved and the work under way. Using these bottom-up interventions is the best way to harness local home-grown capacity and the area of maximum value add for WHF. I propose a generous programme of 80 small grants of \$2 500 over the following 2 years, which will put people living with RHD at the centre of the prevention and control agenda.

RHDACTION

RHDACTION was a stroke of genius, with an extraordinary collective impact. The alliance has provided an extraordinary platform of support for colleagues leading the global fight

for RHD prevention and control. The partners need and benefit from the considerable traction the WHF enjoys with WHO. Right now, RHDACTION is threatened by the fact that Medtronic Philanthropy will exit the alliance. It is imperative that this alliance is sustained by and for the WHF. Another philanthropist must be found to replace Medtronic. The other prosthetic valve companies, Abbott and Edwards, seem to be immediately appropriate.

With direct reference to WHF, we have witnessed a reduction in capacity for RHD work within WHF, and it will need to harness the considerable and collective energy available in RHEACH, through RHD Action.

CONCLUSION

These are the strategic actions I perceive being most useful for WHO, WHF and AHA going forward. We will continue, without invitation, the job of finding, treating, operating, rehabilitating, caring, comforting and preventing, and always putting people living with RHD at the centre of the agenda for prevention and control.

Report provided to the South African Heart® Association.

Christopher Hugo-Hamman

12 January 2019

SNIPPETS

The SA Heart® Board is meeting regularly and is currently working on aligning strategy to the SA Heart® vision:

Advancing cardiovascular care for all South Africans.

WATCH THIS SPACE!



SA Heart® Board.

HeFFSA TRAVEL AWARD ESC CONGRESS 2018 FEEDBACK

I would like to extend my gratitude to the HeFFSA executive committee for providing me with the opportunity to attend the ESC Congress 2018, by awarding me a HeFFSA travel award. Not only did it allow me to attend the meeting, but it also made it possible for me to present an abstract on my pericardial research in poster format at the congress.⁽¹⁾

Last year's congress was held in Munich at the Messe München exhibition centre from 25 - 29 August. Over 32 000 healthcare professionals attended the conference – where 92 late breaking science studies, 17 late breaking clinical trials, 5 clinical practice guideline updates and 4 500 abstracts were presented. As always, the congress venue was well suited to manage the large number of delegates, and the meeting offered a wide variety of varying sessions covering all of the major cardiology topics and disciplines. On day one, arriving early in the morning, I thought I would manage to secure a seat in the first morning session that provided an update on the management of stable coronary artery disease (SCAD) in 2018. With the release of ORBITA, and other exciting data on SCAD in 2018, and having written an editorial evaluating the recent evidence on SCAD for the SA Heart® Journal earlier in 2018,⁽²⁾ I targeted this session as an important one to attend. To my surprise, the tiny room it was being held in was already packed, with the doors closed before the session could start, and with a long queue of hopeful delegates waiting outside for potential space to open up. This very clearly set the scene for the demand that would be placed on available seating by the over 32 000 delegates competing to attend the more popular sessions.

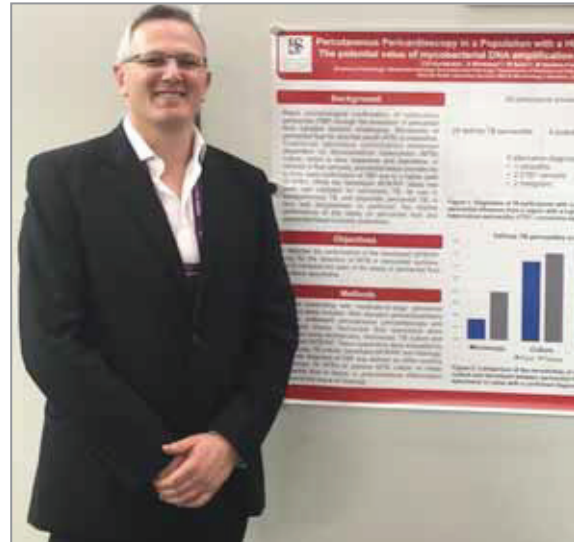
During the inaugural opening session, the president of the ESC, Jeroen Bax, provided an interesting insight into what the future – and in particular the rapid and unstoppable force of technological advancement – holds for cardiology. Prof Eugene Braunwald delivered the keynote address entitled “Academic and Industry relations”, in which he outlined the relationship between academia and industry, and the individuals involved, in the discovery, evaluation and marketing of the first of the statin class of drugs. This was followed by the airing of a recorded interview featuring Barbara Streisand, who is both an advocate for and

philanthropic investor in, furthering the advancement of research into cardiovascular (CV) disease in women. Through the establishment of the Cedars-Sinai Barbara Streisand Women's Heart Centre and the Barbara Streisand Women's Cardiovascular Research Centre and Education Programme, Streisand has forged a way forward for more research to be undertaken in CV disease and its impact on the female sector of the population – a previously under-represented sector of the population in CV research. ESC gold medal awards were bestowed on: Dr Marc Alan Pfeffer (Harvard Medical School, USA) whose main research interest has been the attenuation of adverse ventricular remodelling by ACEIs following myocardial infarction; Professor Evgeny Shlyakhto (Alamzov Centre, Russia); and Professor Ottavio Alfieri (S. Raffaele University Hospital, Italy) whose main area of interest is mitral valve repair – in particular having developed the initial surgical technique of edge-to-edge repair of the MV, the Alfieri stitch. The session was closed off by a typical Bavarian “oompah” band leading delegates to the ESC Professional members lounge, for a networking cocktail party.

On day one I chose to attend the Late Breaking Science in Interventional Cardiology-I session. Presented during this session, the FUTURE trial, TMVR registry and CULPRIT-SHOCK 1 year data, were of particular relevance. The FUTURE trial (FUunctional Testing Underlying Revascularisation), performed in 31 French academic centres, and presented by Gilles Riouful – set out to test the following hypothesis: In multivessel coronary artery disease, does FFR help to guide treatment strategy (PCI, CABG or medical therapy) and thereby improve clinical prognosis compared to traditional management? Patients were randomised to either an angiography-guided management strategy, or alternatively to an FFR-guided treatment strategy. This is the first trial to assess whether FFR-guided treatment decision-making, compared to angiography-guided, has a positive influence on hard clinical endpoints. It was designed to be powered for the superiority of FFR-guided vs. angiography-guided management, for a composite primary outcome of all-cause mortality, MI, repeat revascularisation, and stroke at 1-year. Once randomised, treatment decisions, which could either be PCI, CABG or medical therapy, were taken by the interventional operators/

managing clinician. For the group as a whole, the referral rate for CABG was unexpectedly low at 12% for both the FFR- and angio-guided groups. To the surprise of the investigators, the study had to be terminated early after a data safety and monitoring board review, due to an increased risk of all-cause death in the group assigned to an FFR-guided approach. This was an unexpected finding and most of the deaths in the FFR-guided group were found to be CV in nature and not procedure-related. An exploratory analysis of those who had died found that the FFR-guided group had far higher SYNTAX scores and more severe multi-vessel disease, than the angio-guided group. Despite this, they were also far more commonly treated with PCI - suggesting incorrect treatment assignment in the FFR-guided group. Furthermore, there was no difference in the primary composite endpoint between the 2 groups at 1 year. Further studies assessing an FFR-guided approach are underway.

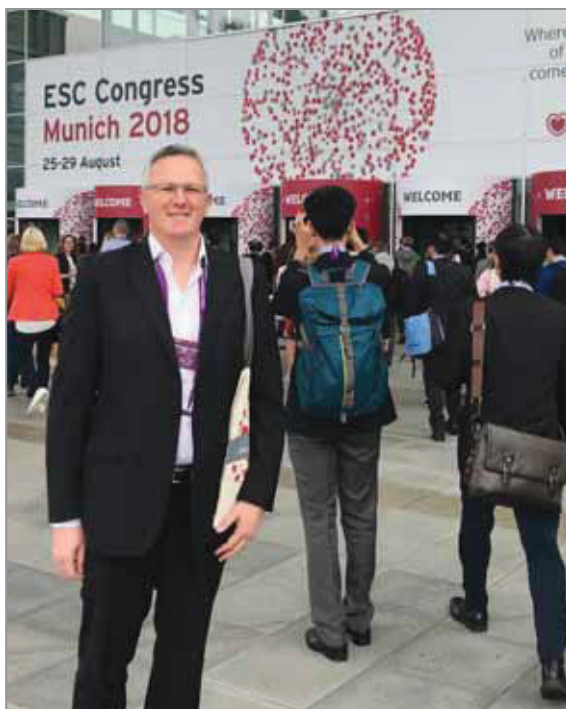
The TMVR registry, a multi-centre registry of patients undergoing transcatheter mitral valve replacement for



Dr Charles Kyriakakis in front of his poster at ESC.

degenerated bioprosthesis (valve-in-valve – ViV), failed annuloplasty rings (valve-in-rings ViR) and severe mitral annular calcification (valve-in-MAC - ViMAC) – was presented by S.H. Loon. Overall, this represents a high-risk group of patients who are deemed to not be suitable for repeat surgical intervention, with a 1-year all-cause mortality rate of 20% for the overall treated cohort of 521. The mortality rate, despite TMVR, was highest in the ViMAC (62.8%), followed by ViR (30.6%) and then the ViV group (14.0%). Similarly, procedural success rates were lowest in the ViMAC group, followed by the ViR group that had a considerable degree of post-procedural mitral regurgitation, an independent predictor of adverse outcome. Furthermore, valve thrombosis, although uncommon, occurred more often in those who did not receive post-procedural oral anticoagulation. These data clearly demonstrate that TMVR is not an option for those suffering from MAC.

The 1-year follow up data of the CULPRIT-SHOCK study, presented by Holger Thiele, assessed whether or not culprit lesion only PCI was superior to multivessel PCI in those presenting with STEMI and cardiogenic shock.⁽³⁾ The 1-year data essentially confirmed the 30-day outcomes that were published in the NEJM in December last year.⁽⁴⁾ Thirty-day all-cause mortality is higher in those who



Dr Charles Kyriakakis at the ESC Munich Conference centre.

HeFSSA TRAVEL AWARD continued

undergo multi-vessel PCI, as is the requirement for renal replacement therapy, compared to those who undergo PCI of the culprit vessel alone. At 1 year, the primary outcome of all-cause mortality or renal replacement therapy occurred more commonly in the multivessel PCI group (RR 0.87; 95% CI 0.76 - 0.99, $P=0.048$), while all-cause mortality on its own was high in both groups as expected, at 56.9% for multi-vessel PCI vs. 50.0% for culprit only ($P=0.07$), but there was no statistically significant difference between the 2 groups at 1 year. As secondary outcomes, both 1-year rehospitalisation rates for heart failure (5.2% vs. 1.2%, $P=0.003$), and repeat revascularisation (32.3% vs. 9.4%, $P<0.001$), occurred more commonly in the culprit only PCI group. The recommendation for routine multivessel PCI in STEMI patients with multivessel disease (MVD) and cardiogenic shock, has appropriately been updated to a class III, B recommendation in the updated 2018 revascularisation guideline released during the 2018 congress.⁽⁵⁾

Another important update in this guideline document is that in diabetics with SCAD and MVD, surgical revascularisation is recommended over PCI – even in those with a SYNTAX score <23 , being a reflection of data released earlier in 2018.^(5,6)

Of the late breaking science trials, the highlight of the annual ESC congress presented at ESC 2018, the following hold the potential to significantly impact our clinical practice: ARRIVE, ASCEND, ASCEND – OMG3, ART, ATTR-ACT, POET and AIMS. Most of the studies presented during the 5 Hot Line trial sessions have already been published and are available for review. In terms of heart failure, the ATTR-ACT study that assessed the safety and efficacy of Tafamidis in Transthyretin Amyloid cardiomyopathy, was undoubtedly the main draw card.⁽⁷⁾ Presented by Dr Claudio Rapezzi, to a packed-to-capacity main arena with only standing room available for a large number of delegates, this was undoubtedly considered to be a “main event” at the congress. Why all the fuss over cardiac amyloidosis, which is considered to have a dismal prognosis? First, wild-type Transthyretin amyloidosis (ATTRwt), previously known as senile amyloidosis, predominantly affects males, and is a common cause of

restrictive cardiomyopathy and HF-PEF during the seventh decade of life. It remains underdiagnosed, being the cause of HF-PEF in 13% of the elderly, and, interestingly, recent data have revealed that it is a common cause of low-gradient aortic stenosis, affecting 16% of elderly patients undergoing TAVI. Bone scintigraphy (^{99m}Tc -DPD) of the heart, is the current non-invasive diagnostic method of choice for ATTRwt in individuals presenting with HF-PEF and a ventricular wall thickness on transthoracic echocardiography (TTE) $\geq 12\text{mm}$.⁽⁸⁾ The ATTR-ACT trial is the first phase 3 study to evaluate the safety and efficacy of an orphan drug in Transthyretin amyloid cardiomyopathy. Males in their seventh decade accounted for 90% of the study population; the female gender provides a protective role against myocardial involvement, with a restrictive cardiomyopathy phenotype at TTE and median NT-proBNP of 3 000pg/ml. 75% had ATTRwt, and 25% the mutant, hereditary form (ATTRm). Tafamidis binds to and stabilises the native TTR tetramer, preventing its dissociation into monomers – the rate-limiting step in the formation of TTR amyloid protein. In comparison to placebo at 30 months, Tafamidis led to a significant 30% reduction in all-cause mortality and a 32% reduction in the rate of CV-related hospitalisations. This trial is a significant advance in the management of a condition with a previously dismal median survival of 3 years, when left untreated.

On the cardiothoracic surgery front, David Taggart presented the 10-year mortality data of the ART (arterial revascularisation) trial – a follow-up on the 1-year outcomes reported in 2010.⁽¹³⁾ The study randomised 3 102 patients to either bilateral or single internal thoracic coronary artery (ITA) bypass grafts during CABG. Disappointingly, for both the cardiology and cardiothoracic surgery communities, there was no difference in mortality between the 2 groups at 10-years. Due to a high crossover rate, 36% of participants did not receive their assigned therapy. An “as treated analysis” was therefore undertaken, which revealed a clear benefit in the group that received bilateral ITAs. Dr Taggart went to great lengths to explain how surgeon experience was vital in determining patient outcomes, with the highest volume surgeon who recruited 400 patients, and who had a crossover rate from bilateral to single ITA of only 1.2% – having the lowest mortality rate. The number

needed to harm for the overall cohort was 78, for the development of sternal wound sepsis. This was found to be a concern in overweight diabetic patients, and not in those with a normal BMI. An interesting point raised at the end of the discussion was whether CABG surgery should become a sub-speciality similar to mitral valve repair, to provide for better outcomes with arterial revascularisation. The ROMA trial, which is currently recruiting, will offer better quality control, in that participating surgeons first have to prove their capability in performing bilateral ITA surgery before being included as investigators. This will hopefully provide further insight into the potential value of bilateral vs. single ITA.

In what was the most provocative study presented at ESC 2018, POET (Partial oral treatment of left-sided infective endocarditis) – the largest RCT undertaken in infective endocarditis (IE) to date – challenged the accepted dogma of 6-weeks of intravenous antibiotic therapy for IE.⁽¹⁴⁾ The current therapeutic recommendations in IE are based on consensus opinion and observational data. POET asked the question of whether partial oral antibiotic therapy is non-inferior to continued intravenous therapy. Importantly, the study had very strict inclusion criteria. Patients had to be medically stabilised after receiving ≥ 10 days of IV antibiotics, or alternatively ≥ 7 days after undergoing valve surgery. Stabilised IE included: T $< 38^{\circ}\text{C}$, CRP $< 20\text{mg/L}$ or $\leq 25\%$ of peak value, WCC $< 15 \times 10^9 /\text{L}$ and a TOE was performed in all participants ≤ 48 hours pre-randomisation to exclude an abscess requiring surgery. Patients in whom the gastrointestinal absorption of oral antibiotics was viewed to be a potential problem, were excluded. Of the 400 participants randomised to either partial oral or IV antibiotics, 107 had prosthetic valve IE. Fifty per cent had Streptococcal IE, 28% Staphylococcus aureus and the remainder Enterococcus faecalis. Antibiotic therapy included 2 antibiotics from different drug classes for all participants and their plasma and minimum inhibitory concentrations (MIC) were measured to allow for accurate dose adjustments. At 6-months, partial oral therapy was found to be non-inferior to continued IV therapy for the combined composite primary endpoint of all-cause mortality, unplanned cardiac surgery, embolic events, and relapse of bacteraemia. No difference was found for the individual para-

meters of this endpoint, except for a numerical difference in mortality with more deaths occurring in those treated with the conventional IV course. Furthermore, no between-group differences were found during a sub-group analysis that included age, bacterial aetiology, native valve vs. prosthetic valve IE, and whether or not surgical treatment was required. As expected, the duration of in-hospital therapy was significantly different with a median of 3 days post randomisation in the partially orally treated group vs. a median of 17 days in those treated intravenously. In conclusion, the presenter, Dr Henning Bundgaard from Denmark, explained that $>50\%$ of all patients with IE may be candidates for partial oral antibiotic therapy. A repeat poll of the audience after the results had been presented, revealed a remarkable shift from 19% - 66% of those in attendance, who would consider switching their patients to oral therapy following the presentation of the POET trial results!

‘The POET trial investigated partial oral antibiotic therapy for left sided endocarditis.’

Delaying the progression of aortic root dilatation in patients with Marfan syndrome was addressed in the Aortic Irbesartan Marfan Study (AIMS).⁽¹⁵⁾ B-blockers are still considered to be the accepted treatment strategy for this indication, with equivocal or negative evidence for Angiotensin II receptor blockers (ARBs) for reducing aortic dilatation and aneurysm formation by modulating abnormal

HeFSSA TRAVEL AWARD continued

TGF- β activity. To date, all studies evaluating the effectiveness of ARBs for this indication in Marfan syndrome, have used Losartan. In AIMS, the investigators chose to use Irbesartan due to its longer half-life and superior bioavailability compared to Losartan. Individuals aged 6 - 40 years were offered inclusion, provided their aortic root diameter was <4.5 cm. Concurrent B-blocker therapy was not mandated, and after a run-in period of one month of 75mg od of Irbesartan, followed by 150mg od for a further month, a target daily dose of 300mg od was continued for a 5-year period. Individuals in both the intervention and placebo arms were followed up annually with TTE to assess for aortic root dimensions, assessed as systolic 2-D inner-edge-to-inner-edge at a core laboratory blinded to assigned

study assessing the potential value of ARBs in Marfan syndrome, particularly with Irbesartan, is still required.

No less than 5 clinical practice guideline updates were also released at this year's congress, including: The management of arterial hypertension, guidelines on myocardial revascularisation, cardiovascular diseases during pregnancy, the diagnosis and management of syncope, and the fourth universal definition of myocardial infarction. Lastly, during a stimulating session on myocarditis and cardiomyopathies, 2 excellent talks were delivered on restrictive and dilated (DCM) cardiomyopathy respectively. Of particular interest to me was the emerging evidence on how genetic testing can be of prognostic value in the DCM group, with causal

‘Of particular interest to me was the emerging evidence on how genetic testing can be of prognostic value in the DCM group.’

treatment. The primary outcome was an absolute change in aortic root diameter, with secondary outcomes assessing changes in aortic Z-score and the requirement for surgical intervention. To allow for adequate statistical power, the trial planned to enrol 490 participants, but, disappointingly, only managed to include 192 – 88 of whom received placebo with 104 on Irbesartan. Only 57% were on B-blocker therapy, stressing just how poorly these drugs are tolerated by Marfan patients. Although underpowered, there was a significant reduction in the rate of progression in aortic root dilatation in the treatment arm. However, as pointed out by the discussant, Dr A Evangelista Masip, 23% of participants stopped taking Irbesartan during the trial period and aortic root measurements were assessed at end-systole and not end-diastole, as is the current conventionally accepted method. An adequately powered

mutations now being identified in up to 40% of cases. Lamin A/C mutations often initially present with non-dilated left ventricles, AV-block and atrial arrhythmia. Sudden cardiac death often precedes overt heart failure by up to 10 years in this group. They also tend to be poor responders to standard anti-heart failure therapy, and male patients who have a truncated mutation do particularly badly and are considered to be candidates for ICD implantation. TITIN mutations, on the other hand, tend to be more responsive to standard anti-heart failure medical therapy, with stop or truncating mutations of TITIN being the most frequent mutations found in DCM (25 - 30%). RBM-20, a splicing regulator of RNA binding proteins that affects the splicing of TITIN, produces a more lethal form of CMO with sustained ventricular tachycardia. Preliminary work has demonstrated it to be a nice model of diastolic

myocyte calcium overload that interestingly responds to Verapamil.⁽¹⁶⁾ There will undoubtedly be a continued heavy investment of research into the genetics of CMO and how various mutations influence the phenotypic expression of the disease in the near future.

Once again, I would like to thank the executive committee of HeFFSA for providing me with the opportunity to attend, what was an exceptional ESC congress.

REFERENCES

1. Kyriakakis CG, Whitelaw A, Bates W, et al. Percutaneous pericardioscopy in a population with a high prevalence of tuberculous pericarditis: The potential value of mycobacterial DNA amplification in establishing an early definite diagnosis. *Eur Heart Jnl* 2018;39, Issue suppl_1, 1 August, ehy564.P692, <https://doi.org/10.1093/eurheart/ehy564.P692>.
2. Kyriakakis CG. Editorial: Chronic coronary syndromes – time to reassess the evidence? *SA Heart® Jnl* 2018;15(2):98-101.
3. Thiele H, Akin I, Sandri M, et al. One-year outcomes after PCI strategies in cardiogenic shock. *N Engl Jnl Med* 2018;Aug 25. doi: 10.1056/NEJMoa1808788 [Epub ahead of print].
4. Thiele H, Akin M, Sandri G. PCI strategies in patients with acute myocardial infarction and cardiogenic shock. *N Engl Jnl Med* 2017;377:25:2419-32.
5. Neuman F-J, Sousa-Uva M, Ahlsson A, et al. 2018 ESC/EACTS guidelines on myocardial revascularisation. *Eur Heart Jnl* 2018;25 August. <https://doi.org/10.1093/eurheart/ehy394>.
6. Head SJ, Milojevic M, Daeman J, et al. Mortality after coronary artery bypass grafting versus percutaneous coronary intervention with stenting for coronary artery disease: A pooled analysis of individual patient data. *Lancet* 2018;391:939-48.
7. Maurer MS, Schwartz JH, Gundapaneni B, et al. Tafamidis treatment for patients with Transthyretin Amyloid Cardiomyopathy. *N Engl J Med* 2018;13;379(11):1007-16.
8. González-López E, Gallego-Delgado M, Guzzo-Merello G, et al. Wild-type transthyretin amyloidosis as a cause of heart failure with preserved ejection fraction. *Eur Heart Jnl* 2015;36:2585-94.
9. Gaziano JM, Brotons C, Coppolecchia R, et al. Use of aspirin to reduce risk of initial vascular events in patients at moderate risk of cardiovascular disease (ARRIVE): A randomised, double-blind, placebo-controlled trial. *Lancet* 2018;22;392(10152):1036-46.
10. Bowman L, Mafham M, Wallendszus K, et al. Effects of aspirin for primary prevention in persons with diabetes mellitus. *N Eng Jnl Med* 2018;26 August. doi: 10.1056/NEJMMoa1804988 (Epub ahead of print).
11. McNeil JJ, Wolfe R, Woods RL, et al. Effect of aspirin on cardiovascular events and bleeding in the healthy elderly. *N Eng Jnl Med* 2018;18 October. doi: 10.1056/NEJMMoa1805819.
12. Bowman L, Mafham M, Wallendszus K, et al. Effects of n-3 fatty acid supplements in diabetes mellitus. *N Eng Jnl Med* 2018;26 August. doi: 10.1056/NEJMoal1804989. [Epub ahead of print].
13. Taggart DP, Altman DG, Gray AM, et al. Randomized trial to compare bilateral vs. single internal mammary coronary artery bypass grafting: 1-year results of the Arterial Revascularisation Trial (ART). *Eur Heart Jnl* 2010;31(20):2470-81.
14. Iversen K, Ihlemann N, Gill SU, et al. Partial oral vs. intravenous antibiotic treatment of endocarditis. *N Engl J Med*. 2018;28 August. doi: 10.1056/NEJMoa1808312. [Epub ahead of print].
15. Mullen M, Jin X, Child A, et al. Aortic Irbesartan Marfan Study (AIMS). Presented during Hotline Session 5, ESC Congress, 28 August 2018.
16. Pinto Y. State-of-the-art management of dilated cardiomyopathy (4969). Session on cardiomyopathy and myocardial disease: review, update and state of the art in 2018. ESC Congress, 28 August 2018.

Dr Charles Kyriakakis

TRAVEL SCHOLARSHIPS OF THE SOUTH AFRICAN HEART ASSOCIATION

Applications for the SA Heart® Travel Scholarship for the first term in 2019 are invited to reach the SA Heart® Office by 31 March 2019.

The scholarship is for the value of up to R25 000.00 for international meetings and R10 000.00 for local meetings.

This scholarship is available to all members and associate members residing in South Africa. It is primarily intended to assist junior colleagues to ensure continued participation in local or international scientific meetings or workshops.

REQUIREMENTS

- Applicants must be fully paid-up members/associate members for at least 1 year.

RECOMMENDATIONS

- Early and mid-career applicants (<5 years post-qualification as specialist and/or <5 years post-PhD qualification).
- Acceptance of an abstract/poster presentation at the scientific meeting to be attended.

CONDITIONS

- Awards will not be made for conferences or workshops retrospective to the application submission deadline. If the conference is taking place within six (6) weeks following the submission deadline, please indicate this in the appropriate place on the application form.
- It is not a requirement for the abstract to be accepted by the conference travel application closing date. Should the acceptance of the paper, including proof of registration not be available at the time of submission of the application, then a provisional award may be made pending receipt of the acceptance of the paper.
- Please ensure that applications are made as well in advance as possible (**preferably at least 6 months prior to the conference date**).
- Applicants may only submit 1 application every second year. The scholarship is for the value of up to R25 000.00 for international meetings and R10 000.00 for local meetings.
- Awards are only made in the event that a paper or a poster is being presented or in the event of a workshop attendance, if the reviewers deem the workshop attendance to be of high impact and consequently of benefit to the SA Heart® community.
- The applicant must ensure that the application is fully completed including the requirements as detailed in the checklist section. Applicants are asked to be concise and to only include applicable and relevant information.
- Awards are granted for 1 specific conference. Should that specific conference be cancelled or the full amount allocated not utilised for any reason, then the funds must revert to SA Heart®; and
- A written report on the relevant congress attended will need to be submitted by the successful applicant within 6 weeks of attending the congress. The congress report will be published in the South African Heart Association Newsletter.

SUBMISSION REQUIREMENTS

- Completed applications may be emailed to erika@saheart.org on or before the deadline date.
- Please request a fillable MS Word version of the application form from erika@saheart.org

INTERNATIONAL TRAVEL GRANT RECIPIENT

Recipient of the SA Heart® International Travel Grant 2018 was Prof Leoné Malan from the Hypertension in Africa Research Team (HART), North-West University.

Report on attendance of the 18th ARTERY Society Congress 2018, de Guimarões, Portugal. Many thanks to SA Heart® for receiving an international travel award in a time when many financial difficulties are experienced at South African tertiary institutions.

The 18th ARTERY meeting (18 - 20 October 2018) was a lively international event where about 250 experts interacted, discussed and reviewed all aspects of arterial structure and function. The meeting took place in the beautiful setting of the UNESCO medieval town, de Guimarões, in Portugal.

The ARTERY Society generally promotes the collaboration of 8 different societies and working groups in the field, to develop a common agenda to increase understanding of how arterial function interacts with (high) blood pressure. My colleagues, Profs Wayne Smith, Johannes van Rooyen and Hugo Huisman also attended the meeting, and presented posters on vascular function and hypertension risk. Their work aligned well with other aspects of arterial structure and function, and was well received – resulting in an invitation to collaborate with Prof Alberto Avolio. Many other presentations focused on imaging, bioengineering, haemodynamics, epidemiology, pharmacology, treatments, preventive measures and other topics – including biochemical mediators, lipids and inflammation.

At the 2018 meeting, however, the focus was on the communication between arteries and the brain – or “neurovascular coupling”. Our oral presentation was therefore ideally aligned, as we presented novel findings on stress-induced sympathetic activity and the retinal vasculature. I used the sympathetic activity and ambulatory blood pressure in Africans (SABPA) prospective cohort study, as a data source. Participants with similar socio-economic status were included. Findings were based on a novel approach where associations were determined between 2 major stress hormones (i.e. saliva norepinephrine and cortisol) and the retinal vasculature. Our main findings showed upregulation of norepinephrine and hypo-activity of the hypothalamic-pituitary-adrenal (HPA) axis over a period of 3 years. These changes reflected uncontrollable



Oral session (Topic Brain) presenter:
Prof Leoné Malan (Hypertension in Africa
Research Team):
<http://www.arterysociety.org/artery-18-presentations>

chronic stress and were associated with impaired myogenic tone and wider veins (a stroke risk marker). Disturbed neurovascular coupling facilitated susceptibility for both ischaemic stroke and depression. A manuscript was submitted to *Frontiers Journal of Neuroscience*, in January 2019).

Interestingly, stress and associated cerebrovascular disease in humans was not addressed by other presenters. Our talk was followed by lively discussion, particularly with neuroscience experts doing similar work in rodents – Profs Josef Priller (Germany) and Pablo Blinder (Israel). We concluded that our biggest challenge would be to understand downstream glial cell signalling and outcomes in the human brain to target potential treatment programmes.

The dinner event and awards were held in the Pousada Mosteiro Guimarões, which is an ancient 12th-Century Augustinian Monastery built by the 1st Queen of Portugal, Dona Mafalda. This building is a classified monument of public interest and is located on the Penha slope, with a 9 hectare garden and breath-taking views of the city.

We strengthened existing collaborative ties with diabetes expert Prof Peter Nilsson from Sweden, as well as vascular function expert, emeritus Prof Luc van Bortel from Belgium. We are looking forward to Prof Nilsson's working visit in 2019! The next ARTERY meeting will be held in Budapest, Hungary (10 - 12 October 2019), and this is something to look forward to.

LOUIS VOGELPOEL TRAVELLING SCHOLARSHIP

Applications are invited for the annual Louis Vogelpoel Travelling Scholarship for 2020. An amount of up to R20 000 towards the travel and accommodation costs of a local or international congress will be offered annually by the Western Cape branch of the South African Heart Association in memory of one of South Africa's outstanding cardiologists, Dr Louis Vogelpoel.

Louis Vogelpoel was a pioneer of cardiology in South Africa who died in April 2005. He was one of the founding members of the Cardiac Clinic at Groote Schuur Hospital and the University of Cape Town. He had an exceptional career of more than 5 decades as a distinguished general physician, cardiologist and horticultural scientist. Dr Vogelpoel's commitment to patient-care, teaching and personal education is remembered by his many students, colleagues and patients. Medical students, house officers, registrars and consultants benefited from exposure to his unique blend of clinical expertise, extensive knowledge, enthusiasm and gracious style.

A gifted and enthusiastic teacher, he was instrumental in the training of generations of undergraduates by regular bedside tutorials. He served as an outstanding role model for postgraduates and many who have achieved prominence nationally and internationally acknowledged his contribution to the development of their careers.

All applications for the scholarship will be reviewed by the executive committee of the Western Cape branch of the South African Heart Association. Preference will be given to practitioners or researchers in the field of cardiovascular medicine who are members of the South African Heart Association and are resident in the Western Cape.

Applications should include: (1) A brief synopsis of the work the applicant wishes to present at the congress; and (2) A brief letter of what the applicant hopes to gain by attending the relevant congress. The applicant should submit an abstract for presentation at the relevant national or international meeting. Should such an abstract not be

accepted by the relevant congress organising committee, the applicant will forfeit his or her sponsorship towards the congress. (Application can however be made well in advance of the relevant congress but will only be awarded on acceptance of the abstract.) A written report on the relevant congress attended will need to be submitted by the successful applicant within 6 weeks of attending the congress. The congress report will be published in the South African Heart Association Newsletter.

‘A gifted and enthusiastic teacher, he was instrumental in the training of generations of undergraduates.’

Applications should be sent to Prof Johan Brink, President of the Western Cape branch of the South African Heart Association, Chris Barnard Division of Cardiothoracic Surgery, Cape Heart Centre, Faculty of Health Sciences, University of Cape Town, Anzio Road, Observatory 7925 or alternatively email: johan.brink@uct.ac.za.

Previous recipients of this prestigious award include Sandrine Lecour, Roisin Kelle, Liesl Zühlke and Prof Hans Strijdom.

Applications close on 31 January 2020.

THE SOUTH AFRICAN HEART ASSOCIATION RESEARCH SCHOLARSHIP

This scholarship is available to full and associate members of the SA Heart® Association living in South Africa. It is primarily intended to assist colleagues involved in much-needed research to enhance their research programmes.

REQUIREMENTS

- Applicants need to be fully paid up members/associate members in good standing for at least one year.
- Applications must include:
 - The applicant's abbreviated CV
 - A breakdown of the anticipated expenses
 - Ethics approval
 - Full details of the research
 - The completed application form - please request a fillable MS Word document from erika@saheart.org
 - Contact details of Head of Department or supervisor/mentor

RECOMMENDATIONS

- Preference will be given to early and mid-career applicants (<5 years post-qualification as specialist and/or <5 years post-PhD qualification).

CONDITIONS

- Applicants may only submit 1 application every second year. Preference is given to those who have not had previous scholarships awarded.
- Awards are granted for one specific research project. Should that specific project be cancelled or the full amount allocated not be utilised for any reason, then the funds must revert to SA Heart®.

APPLICATIONS MUST BE EMAILED TO:

erika@saheart.org

THE SELECTION PANEL WILL REVIEW APPLICATIONS ANNUALLY AND THE CLOSING DATE IS 30 SEPTEMBER 2019.

One scholarship to a maximum amount of R65 000 will be awarded annually.

SA Heart® commits to inclusive excellence by advancing equity and diversity.

We particularly encourage applications from members of historically under represented racial/ethnic groups, women and individuals with disabilities.