Calling on your participation, input – so you get the most out of 2013

I have no doubt that you will find our 14th Annual Congress held in conjunction with the 6th World Paediatric Cardiology and Cardiac Surgery Congress worthwhile. You can be assured of having the opportunity to attend many topical sessions relevant to your practice. Dr Chris Hugo-Hamman and his team did their utmost to accommodate all cardiology groups in South Africa, including the adult and interventional cardiologist in particular. Correct me if I’m wrong, but it most certainly is no sin to be in beautiful Cape Town during February.

Please diarise and attend our most important AGM from 16h00 on 20 February – your programme has details. We need your participation to grow your Society so we can negotiate added benefits on your behalf thus tangibly supporting you in private practice while also ensuring more optimal care in the public sector. We are very much involved in discussions with all role players in an effort to realise this vitally important strategic goal. It is, after all, our country and our responsibility to contribute and co-operate to make this the best country to live in.

Through our newsletters and e-bulletins we aim to keep you updated on all the opportunities during the year where you can participate and learn more in the field of cardiology and cardiac surgery. It may become increasingly difficult to obtain financial and logistic support to attend international meetings, but it will never be impossible. A valid motivation, particularly associated with participation, may do the trick.

You may have noticed an increasing number of disputes with funders. Through our Private Practice Committee (PPC) we have established communication channels with most of the important funders. I again invite, or rather urgently request, that you forward any inappropriate decisions to our PPC. Not only will this strengthen current cases on the table, but also enable the committee to prepare for planned discussions.

I also wish to reiterate that SA Heart endorses the ESC guidelines; some of which were supplemented with an official South African comment. This is an ongoing process. Should you be interested in a particular field and wish to assist us in implementing and officiating these guidelines, do contact our Guidelines Committee directly or via your special interest group (SIG). We have excellent co-operation with our SIGs to present and work as a united front when negotiating with institutions and authorities.

SA Heart will kick off its lecture series in 2013. The initial 2 topics will be on Atrial Fibrillation and Hypertension. We have already had positive feedback from industry that expressed the wishes to support. Members who volunteer to participate as speakers are invited to contact our office.

You are invited to keep us updated of activities in your region and make use of the SA Heart office. We are also keen to learn more about your particular challenges so we could either offer solutions to improve the situation or share your regional successes with the rest of the profession.

When a young sport star dies unnecessarily due to a negligent taxi driver and others from disease at a young age one learns to appreciate how unfairly privileged we are to work. To participate and contribute to make this world a better place – and to be free to do so – is another of many choices we are able to enjoy.

Adriaan Snyders
Editor SA Heart newsletter & President SA Heart
asnyders@mweb.co.za
Shared data improves practice, predicts trends and benchmarks standards

As we look back upon 2012 and progress with the SHARE project - besides celebrating the milestone of capturing 15 000 cathlab cases since inception - we are pleased to report that the projections for the number of cases captured in 2012 were accurate: Over 6 100 new cases were entered in the Adult Cathlab section, and over 500 in the combined surgical data-bases during the course of the year.

Netcare continues to sponsor SHARE, both financially and in terms of generous assistance with technology and manpower. The project’s recent success owes a great deal to Netcare’s commitment and goodwill. The SHARE committee has undertaken to seek additional alternative funding through the efforts of George Nel. In this way, we can ensure that SHARE continues to be funded independently from the main SA Heart budget, as discussed at previous AGMs.

Although the SA Heart Registry was originally conceived with several aims, such as being a tool that could provide more detailed market and other information to industry and interested parties, the focus of the project has changed over time. The emphasis now is to provide statistical data for academic research, with the aim to provide meaningful data which can be used comparatively to benchmark SA clinical practice against international standards such as those reported by the ACC and the ESC.

The 1st step has been to describe the SA cardiac population and its burden of disease as seen in several major centres in the country, both in state and private practice. Prof Karen Silwa has been instrumental in driving the publication of the first phase of research data, and details of this paper, which will be published in a leading international cardiac journal, will be released at our World Congress in February.

As the SHARE dataset is already very broad, we are able to track what the hot topics are at meetings worldwide, and can then easily extract data in similar analyses for comparison and publication. Once the first general descriptive paper on cathlab data is published, we will be publishing some analyses on topics in the international spotlight in 2012, such as the validity of conservatively treating the aged, and the diagnostic criteria for referring patients for catheterisation. In addition, SHARE would like to approach our Association’s various regional branches for a short slot at branch meetings, where SA stats compared with other registries could be shown, and then discussed. This slot could also include brief discussions on topics that may have an influence on future clinical practice.

The emphasis now is to provide statistical data for academic research.

We foresee that as the clinical value of the accumulated data becomes more widely known through the publication of the amassed research data, it will be easier to obtain additional funding. While the project has cost SA Heart a great deal of its own funds over the past years, the SHARE project has accomplished these achievements on a relatively small shoestring budget with only 1 dedicated staff member. This year’s plans will require a large injection of funds to keep the project financially stable to enable the furthering of 2012’s successes. The 2013 plans include reactivating several sites that were shut down due to budget and manpower constraints, as well as expansion to some new cathlab sites that have indicated interest. The surgical database has proven its effectiveness as a tool for the management of patient records, and for the accumulation of data for research and publication. One of the priorities for SHARE is to roll out the SHARE surgical databases to members in Gauteng and the coastal provinces in 2013.

With the continued support and participation of all our members, we promise that SHARE will continue to live up to its motto Shared experience - improved patient care!

Elizabeth Schaafsma
Project Manager
## POPULAR CONGRESSES FOR 2013

<table>
<thead>
<tr>
<th>CONGRESS</th>
<th>DATE</th>
<th>CITY</th>
<th>COUNTRY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WCPCCS WORLD CONGRESS ON PAEDIATRIC CARDIOLOGY &amp; CARDIAC SURGERY</strong></td>
<td>17 - 22 February 2013</td>
<td>Cape Town</td>
<td>South Africa</td>
</tr>
<tr>
<td><a href="http://www.pccs2013.co.za">http://www.pccs2013.co.za</a></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SA HEART 2013</strong></td>
<td>17 - 22 February 2013</td>
<td>Cape Town</td>
<td>South Africa</td>
</tr>
<tr>
<td><a href="http://www.saheart.org">http://www.saheart.org</a></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>JIM 2013</strong></td>
<td>14 - 16 February 2013</td>
<td>Rome</td>
<td>Italy</td>
</tr>
<tr>
<td><a href="http://www.jim-vascular.com">http://www.jim-vascular.com</a></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TRENDS 2013: RENAL DENERVATION DEVICE-BASED TREATMENT OF HYPERTENSION</strong></td>
<td>1 - 2 March 2013</td>
<td>Darmstadt, Frankfurt</td>
<td>Germany</td>
</tr>
<tr>
<td><a href="http://www.escardio.org">http://www.escardio.org</a></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ACC 2013</strong></td>
<td>09 - 13 March 2013</td>
<td>San Francisco</td>
<td>USA</td>
</tr>
<tr>
<td><a href="http://www.scientificsessions.cardiosource.org">http://www.scientificsessions.cardiosource.org</a></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EUROHEARTCARE</strong></td>
<td>22 - 23 March 2013</td>
<td>Glasgow</td>
<td>UK</td>
</tr>
<tr>
<td><a href="http://www.escardio.org/congresses">http://www.escardio.org/congresses</a></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>HEART RHYTHM SOCIETY 34TH ANNUAL SCIENTIFIC MEETING</strong></td>
<td>8 - 11 May 2013</td>
<td>Denver</td>
<td>USA</td>
</tr>
<tr>
<td><a href="http://www.hrsonline.org">http://www.hrsonline.org</a></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EUROPREVENT 2013</strong></td>
<td>18 - 20 April 2013</td>
<td>Rome</td>
<td>Italy</td>
</tr>
<tr>
<td><a href="http://www.escardio.org/congresses">http://www.escardio.org/congresses</a></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>11TH PASCAR CONGRESS AND 4TH ALL AFRICA CONFERENCE ON HEART DISEASE, STROKE AND DIABETES</strong></td>
<td>15 - 20 May 2013</td>
<td>Dakar</td>
<td>Senegal</td>
</tr>
<tr>
<td><a href="http://www.pascar.co.za">http://www.pascar.co.za</a></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EUROPCCR 2013</strong></td>
<td>21 - 24 May 2013</td>
<td>Paris</td>
<td>France</td>
</tr>
<tr>
<td><a href="http://www.europcr.com">http://www.europcr.com</a></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>HEART FAILURE 2013</strong></td>
<td>25 - 28 May 2013</td>
<td>Lisbon</td>
<td>Portugal</td>
</tr>
<tr>
<td><a href="http://www.escardio.org">http://www.escardio.org</a></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ESH 2013</strong></td>
<td>14 - 17 June 2013</td>
<td>Milan</td>
<td>Italy</td>
</tr>
<tr>
<td><a href="http://www.eshonline.org">http://www.eshonline.org</a></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>8TH INTERNATIONAL MEETING IN INTENSIVE CARDIAC CARE</strong></td>
<td>16 - 18 June 2013</td>
<td>Jerusalem</td>
<td>Israel</td>
</tr>
<tr>
<td><a href="http://www.isas.co.il/cardiac-care2013">http://www.isas.co.il/cardiac-care2013</a></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EHRA - EUROPACE</strong></td>
<td>23 - 26 June 2013</td>
<td>Athens</td>
<td>Greece</td>
</tr>
<tr>
<td><a href="http://www.escardio.org/congresses/ehra-europace-2013">http://www.escardio.org/congresses/ehra-europace-2013</a></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ESC 2013</strong></td>
<td>31 August - 4 September 2013</td>
<td>Amsterdam</td>
<td>Netherlands</td>
</tr>
<tr>
<td><a href="http://www.escardio.org/congresses">http://www.escardio.org/congresses</a></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PCR: VALVES, LONDON 2013</strong></td>
<td>15 - 17 September 2013</td>
<td>London</td>
<td>UK</td>
</tr>
<tr>
<td><a href="http://www.pcrondonvalves.com">http://www.pcrondonvalves.com</a></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ARRHYTHMIA, VENICE 2013</strong></td>
<td>6 - 9 October 2013</td>
<td>Venice</td>
<td>Italy</td>
</tr>
<tr>
<td><a href="http://www.venicearrhythmia.org">http://www.venicearrhythmia.org</a></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Continued on page 404*
### POPULAR CONGRESSES FOR 2013 continued

<table>
<thead>
<tr>
<th>CONGRESS</th>
<th>DATE</th>
<th>CITY</th>
<th>COUNTRY</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACUTE CARDIAC CARE 2013</td>
<td>12 - 14 October 2013</td>
<td>Madrid</td>
<td>Spain</td>
</tr>
<tr>
<td><a href="http://www.escardio.org">http://www.escardio.org</a></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEST</td>
<td>26 - 31 October 2013</td>
<td>Chicago</td>
<td>USA</td>
</tr>
<tr>
<td><a href="http://www.accmeeting.org/chest.2013">http://www.accmeeting.org/chest.2013</a></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TCT 2013</td>
<td>29 October - 1 November 2013</td>
<td>San Francisco</td>
<td>USA</td>
</tr>
<tr>
<td><a href="http://www.tctconference.com">http://www.tctconference.com</a></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AHA 2013</td>
<td>16 - 20 November 2013</td>
<td>Dallas (Texas)</td>
<td>USA</td>
</tr>
<tr>
<td><a href="http://www.scientifica">http://www.scientifica</a> sessions.org</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5TH INTERNATIONAL CONFERENCE ON FIXED COMBINATIONS IN THE TREATMENT OF OF HYPERTENSION, DYSLIPIDEMIA AND DIABETES MELLITUS</td>
<td>21 - 24 November 2013</td>
<td>Bangkok</td>
<td>Thailand</td>
</tr>
<tr>
<td><a href="http://www.fixedcombinations.com">http://www.fixedcombinations.com</a></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EUROECHO 2013</td>
<td>11 - 14 December 2013</td>
<td>Istanbul</td>
<td>Turkey</td>
</tr>
<tr>
<td><a href="http://www.escardio.org">http://www.escardio.org</a></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### ESCeLEARNING

SA Heart accepted an invitation to participate in the newly launched ESCeLearning platform version 1, which is a collaborative tool, dedicated to delivering training in 6 sub-specialties of cardiology. The platform tracks training in up to 3 areas: knowledge, skills and professional development.

This opportunity provides a training platform to trainees. They will benefit from the wealth of ESC educational content – EAPCI courses are based on the PCR-EAPCI textbook and the relevant ESC Guidelines. Together with EAPCI, the ESC is launching the first learning programme to deliver training in interventional cardiology.

Our National Coordinator, Dr Sajidah Khan, member of SA Heart Education Committee and Head Cardiology at the University of KwaZulu-Natal, as well as Vice President of SASCI, will have the responsibility to liaise with the ESC platform administration team; validate new trainees and trainers and to verify and validate the list of national training institutions in interventional cardiology, where trainees will be training in South Africa.

Trainees have to be or become members of the EAPCI association. EAPCI membership is free of charge – but to start the learning programme, there is a fee of EUR 120 per calendar year per trainee with no cost to the Affiliated Cardiac Societies. The duration of EAPCI Learning Programme is 2 years.

Dr Khan will liaise with the appropriate SIG and Tertiary institutions when the next modules become available. We will keep you updated on our progress.

Adriaan Snyders
Stimulating workshops, congress to inspire research in 2013
We would like to wish you all a happy New Year and hope this would be a productive one for cardiovascular research in South Africa. The Exco has planned a number of interesting workshops open for attendance by all our members.

Workshops & events
At the upcoming SA Heart Association Congress 2013 in Cape Town from 17 - 22 February 2013, SASCAR will host an exciting breakfast symposium entitled, New approaches in cardiovascular research. The session will be held in Room 2.4, Cape Town International Convention Centre on 20 February from 07h00 - 08h45. For further details, please contact Dr Neil Davies at neil.davies@uct.ac.za.

<table>
<thead>
<tr>
<th>TIME</th>
<th>TITLE</th>
<th>SPEAKER</th>
</tr>
</thead>
<tbody>
<tr>
<td>07h00</td>
<td>Exploring the cardiac endothelial proteome</td>
<td>Prof Hans Strijdom</td>
</tr>
<tr>
<td>07h25</td>
<td>Biomaterial therapy for myocardial induced heart failure</td>
<td>Dr Neil Davies</td>
</tr>
<tr>
<td>07h50</td>
<td>Conditioning the heart for cardioprotection</td>
<td>Prof Sandrine Lecour</td>
</tr>
<tr>
<td>08h15</td>
<td>Ischaemia and ischaemic preconditioning in the hypertrophic and failing right heart</td>
<td>Dr Asger Andersen</td>
</tr>
<tr>
<td>08h25</td>
<td>Changes in caspase 3, Bcl2, vascular endothelial growth factor gene expressions after human umbilical cord blood-derived mesenchymal stem cell transfusion in pulmonary hypertension rat models</td>
<td>Dr Kwan Kim</td>
</tr>
<tr>
<td>08h35</td>
<td>Hydrogen sulfide ameliorates volume overload-induced ventricular remodelling by matrix metalloproteinases (MMP-8, MMP-13) and their tissue inhibitor (TIMP-1) in rats</td>
<td>Dr Chaoying Zhang</td>
</tr>
</tbody>
</table>

Please note: Our SASCAR 2013 AGM will not be held at the SA Heart Congress in Cape Town, but later in the year. Details will be provided in due course.

A workshop: How to assess oxidative stress in animal models or patients will be held at the University of Cape Town at 14h00 on Wednesday, 6 March 2013. For further details, please contact Dr Dee Blackhurst at dee.blackhurst@uct.ac.za.

Two workshops: Microscopy in Cardiovascular Research, and Proteomics in Cardiovascular Research workshops are being planned for later this year.

For more details on future workshops, our members and the latest information on the Society's activities, please see future newsletters or visit our website at www.sascar.org.za.

Dr Roisin Kelly
The economic landscape is changing healthcare throughout the world. Money cannot keep up with demands being placed on the way healthcare currently is funded, organised and delivered. The general feeling throughout the world is that change needs to be made. To what extent this is acted on varies by country and region. Vested business interests and politics play a large role. There is no one region or country that has all the answers, nor the same combination of demographics, history, funding availability (public and private), cultures and disease burden.

At the core, the most basic fundamental in healthcare is the doctor-patient relationship. Everything else – insurance/government funding, hospitals, the pharmaceutical industry – though serving vital needs, including enabling in many instances the doctor-patient relationship, are nevertheless secondary to and dependant on it. Whatever the structure and delivery design, the doctor-patient relationship needs to be at the centre.

What is clear is that the traditional model of government and/or a financial institution placed between the doctor and patient is well passed its use by date. This is the model that experience throughout the world shows is not meeting population health needs.

The US undoubtedly leads the world in terms of change. Like it or not, the Patient Protection and Affordable Care Act (Obamacare) has been the catalyst. Nothing compares in terms of variety and scale with the change taking place in the US, from accountable care organisations, patient-centred medical homes, health insurance exchanges (focused on the uninsured), hospital systems moving directly into health insurance and concierge medicine (doctors dealing with patients directly – leaving out health insurers).

At the opposite extreme is South Africa where, instead of progressive structural change and integration in health care, there is regression, as the establishment (business and government) clings on to a deeply flawed system. The recent appointment of a senior officer of the largest medical scheme (health plan) as president of the South African Medical Association is no better evidence of such regression. Impossible to believe, but nevertheless true!

Public sector healthcare in South Africa could not be in worse shape, and the cost of private care is becoming increasingly unsustainable. While there is recognition of the problems, this exists in form only, on an intellectual level. The public system is riddled with corruption, and incompetence both at managerial and clinical level is rife. Vested economic interests in the private system prevent any change of substance. Those who dare criticise or challenge the private system are branded as outcasts by the establishment and bad-mouthed.

The establishment in South Africa has unusually strong control over change that takes place in business. This is understandable in a country in which most of the commercial power is concentrated among relatively few organisations. The only change to this “club” from pre-apartheid years has been in colour, not being as white as it was. However, the belief in institutional control and entitlement is as high as it has always been, and this is no more evident than in healthcare business. The absence of commercial accountability on the funding side of the system is startling, and statistics that show, that mainly as a result thereof, the cost of delivery to medical schemes has moved far out of alignment with premium affordability are shrugged off and treated with complete indifference by the establishment, as is the continued erosion of health plan benefits.
What change there has been is permitted only within a very narrow framework. Anything that threatens the status quo is rejected and the entire establishment pulls together on this, the beneficiaries being third party administrators (TPAs) and the private hospitals. To preserve the status quo TPAs and private hospitals are highly protected segments. Both, each made up of 3 major industry participants, keep their distance from one another so as not to cause confrontation and upset the status quo. Not only are hundreds of billions of Rand at stake but reputations as well, which go beyond the healthcare industry to those in charge of major employers, who have at the very least passively, if not actively, allowed this situation to develop and grow.

Although the Minister of Health has been increasingly vocal over the past few years in attacking the high cost of private cover and hospital services, this has not been followed by any action. The absence of action, combined with recent collaboration by the Minister with some of the firms mainly responsible for the high cost spiral, in pursuance of a system of national health insurance (NHI), is making it increasingly apparent there is a hidden agenda at play on the part of government. These firms stand to gain substantially in participating in the NHI programme.

The 3 major TPAs effectively control the funding side of the industry, without any risk or responsibility for it. Being in control over the funds on which the system relies, this segment enjoys the highest level of protection from the establishment. This high level of protection removes the need for TPAs to put pressure on the hospital segment, (the largest recipient of health plan funding) leaving both protected. Left completely exposed are the doctors, the trustees of medical schemes and the consumer, not to mention the country’s private healthcare system as a whole. Consistent with their protection from risk, TPAs are not regulated as to their conduct and are free to do just about anything they like. The most prominent TPA, Discovery Limited, has recently begun incentivising members of the Discovery Health Medical Scheme (which it does not own) to get doctors to use its iPad based Electronic Medical Record application, as its own attempts have probably failed at getting enough buy in.

The consequences of the high level of protection for TPAs and their non-regulation are deep and wide spread. An extremely important and dangerous consequence, which is already prevalent, is that their implementation of medical scheme medication formularies often lack adherence to up-to-date scientific evidence-based medicine guidelines as outlined by highly recognised, respected and reputable international and local South African specialist societal organisations. Reimbursement is often relegated to the lowest generic cost or chronic drug allowance irrespective of efficacy, correct therapeutic dosage or the potential side effect of the prescribed medication, precipitating sub-therapeutic medication rather than intended medical protection. This is part of the reason for poorer patient therapeutic outcome achievement in South Africa. In many instances it also escalates the need for hospitalisation which would otherwise have been avoided if the correct treatment would have been adhered to in the first instance.

Commercial gain has become more important than patient protection. Healthcare reform is urgently needed allied to performance risk reimbursement for all role players. Medico-legal scenarios are on the horizon. It is becoming increasingly onerous for doctors to adhere to standards and meet their moral, ethical and legal obligations to patients.

“Public sector healthcare in South Africa could not be in worse shape.”
New accreditation course, workshops:  
2013 ISCAP highlights
The Interventional Society of Cathlab Allied Professionals’ (ISCAP) Exco has been working continuously under leadership of chairperson Dianne Kerrigan since November 2011 to further cement the foundation of this industry newcomer. The next step is to get all ISCAP’s structures in place in order to reach its goals, which amongst other things, includes enhancing the standards and training of its members, to improve the quality of life of the South African population by reducing the impact of cardiac and peripheral vascular disease.

Dianne is supported by Exco members: Gill Longano, Marilyn de Meyer and Romi Dickson. The industry representatives are Amy Wolf, Tracey du Preez, Graig Goodburn and Craigh Smith. ISCAP has also established regional branches in the following areas under the leadership of:

- Liezel la Grange, Cape Town
- Marina Meyer, Eastern Cape
- Elizabeth Muller and Bella Steenkamp, Pretoria
- Maxine Shanglee, Durban
- Marisa Fourie and Mandie Ferreira, Bloemfontein

You are welcome to contact our office if you need the contact details of any of the above mentioned members or if you want to get involved or contribute in your area.

ISCAP diary 2013
New ISCAP accredited training course
The Interventional Endovascular/Cardiovascular Allied Assistance Course which ISCAP is creating is the ideal mentoring programme to get new recruits adequately trained for the cathlab and also make the cathlab an attractive career choice for nurses.

Netcare and ISCAP are further looking into a programme for Netcare education (post-basic department at Gauteng Southwest campus) for registered cathlab nurses (RNs) and a separate course for enrolled nurses. Netcare Education will certify successful candidates at the annual diploma ceremony. The course will be a Netcare/ISCAP model, with Netcare covering the theoretical and ISCAP the practical aspects of the training.

The course will be open nationally to all hospital groups including public hospitals. Once experienced cathlab RNs have successfully completed the assessor’s course (by Netcare) they will work as ISCAP assessors in the field. The role of ISCAP will be discussed and clarified at a meeting in January when all parties involved will be present. The aim is to set up meetings in 2013 with other hospital groups to discuss the course and their possible involvement.

Regional structure
ISCAP aims to continue motivating the regions to set up workshops, form committees, expand the number of regional branches and assist regional chapters to either start or continue with regional workshops. The Society furthermore plans to align regions to do the course training of assessors.

Cardiac manual
2012 was the year in which ISCAP started compiling its 1st ISCAP cardiac manual with input from all members across the country. In 2013 ISCAP wants to finalise the manual’s 1st edition and start distribution by the 2nd quarter of this year. This cathlab manual will also form part of the accreditation course material and will be accredited by the Netcare Training Academy as well as other hospital groups.

ISCAP’s member’s passports
The ISCAP passport is a member’s personal identity, proof of attendance and sponsorship opportunity document. It can also be used as a performance evaluation record. The passport is a tool towards enhancing a member’s professional standing. All paid-up ISCAP members will be receiving personalised ISCAP passports at workshops that they attend in 2013.

Workshops
The 1st Gauteng workshop will be held at the Isisango conference centre on 9 March 2013, and is sponsored by Sanofi. Our Exco will promote the organising of workshops in all mentioned areas. ISCAP is also having discussions to include endovascular procedures in our workshops and training opportunities. We are also involved in training staff at hybrid labs. Your nearest branch chairpersons will have information on upcoming workshops in your area.
ISCAP NEWS continued

Contributions
Without the contributions of our corporate supporters, we cannot grow and achieve any of our goals. Thank you to Amayeya Abantu, AstraZeneca, Aspen Pharmacare, Axim, Baroque Medical, Boehhringer Ingelheim, Boston Scientific, B Braun, Cipla Medpro, Cordis, Edwards, Medtronic, Paragmed, Surgical Innovations, Torque Medical, Viking and Volcano.

Please contact Sanette Zietsman (ISCAP Office) at 083 253 5212 or via email at szietsman@telkomsa.net if you want to learn more about these events or wish to participate in any of the programmes.

Dianne Kerrigan
Chairperson, ISCAP

SASCI NEWS FEEDBACK - SHARING EXPERTISE IN CARDIOLOGY (SEIC) MEETING, GLASGOW

Shared expertise in cardiology made Glasgow a highlight
The 2012 SEiC (Sharing Expertise in Cardiology) meeting took place at Golden Jubilee Hospital in Clydebank, Glasgow from 4 - 5 December. Delegates from various European countries were hosted under the scientific directorship of Prof Keith Oldroyd and his team of local interventional cardiologists. The meeting proved to be a great success despite the chilly weather, a characteristic for that time of year.

Academic sessions commenced with a detailed structural and functional analysis of the exemplary primary PCI service available in Glasgow. After a brief epidemiological overview of the region, it became clear that Scotland has one of the highest rates of coronary disease in the world.

Dr Hany Eteiba discussed the local approach to optimal reperfusion in STEMI in the context of an efficient primary and secondary level care network. Detailed assessments of landmark scientific papers provided the framework for the presentation. Transradial interventions at Golden Jubilee are performed in over 90% of cases. Dr Stuart Watkins provided further insights into radial interventional practice. Dr Mark Petrie delivered an informative update on pharmacotherapy relating to ACS. The role of FFR in current practice also featured prominently during the academic presentations.

Scientific sessions were interrupted for live emergency cases transmitted via the local catheterisation lab. The impressive door-to-balloon times achieved were a product of impeccable multi-disciplinary teamwork. Delegates were also taken on a tour of the hospital to observe some of the latest technologies, including cardiac CT, MRI and intracoronary imaging facilities (OCT, IVUS, virtual histology) available in the catheterisation lab. Dr Margaret McEntegart and Prof Colin Berry outlined the local expertise with respect to intravascular imaging and cardiac MRI (cMRI) for interventionists.

I presented an interesting case involving a complicated percutaneous intervention. The audience provided constructive management insights and alternatives.

Our sincerest thanks go to Aspen Pharmacare for providing the sponsorship and to SASCI for administering and supporting me and Ismail Soosiwala.

Dr M.C. Hendrickse
Cardiology Senior Registrar, Groote Schuur Hospital
SOUTH AFRICAN SOCIETY OF CARDIOVASCULAR INTERVENTION

SASCi’s 2013 activities set to pack a mean punch

SASCi’s role as a representative body of cardiologists, both fulltime and private in South Africa has been extended over the last few years and our reach continues to grow under the influence of my hard working executive:

Farrel Hellig  President: Africa PCR, Funders, International Relations and Congresses
Sajidah Khan  Vice-President: Africa PCR, International Congresses, Education and Guidelines
Cobus Badenhorst  Treasurer: SHARE, SA Heart Congress 2012 and HS-troponin guidelines
Adie Horak  Secretary: SASCI @ World Paed Cardio Congress 2013
Graham Cassel  Ex-officio President: Africa PCR and non-invasive coronary imaging
Mpiko Ntsekhe  Academic: Visiting Professors Programme and HS-troponin guidelines
Chris Zambakides  Johannesburg and Academic: TAVI funding and CTO working group
Len Steingo  SA Heart PPC: Coding and Funders
Mark Abelson  SA Heart PPC: Coding and Funders
Dave Kettles  Eastern Cape: Fellows Workshop 2012
Jean Vorster  Pretoria: Funders
Gill Longano  ISCAP
Liezl le Grange  ISCAP
Craig Goodburn  Industry representative
Hans Buyl  Industry representative
Tracey du Preez  Industry representative

It’s been a crazy, wonderful, hectic, fulfilling year for all of us at SASCI. 2012 was a year of many new developments and I am pleased to report on our planning for 2013.

Feedback from SASCI Private Practice Committee

- CT angio project and reimbursement for interventional procedures: The topic is currently being discussed by Discovery Health with input from SASCI. Our Exco decided that the appropriate action would be to advise Discovery Health to remove the current barriers (patient co-payment and motivations) to CTCA and assess utilisation. David Jankelow, Mark Abelson, Len Steingo, Graham Cassel and Farrel Hellig will meet with the funder early in 2013 for further discussion. It is envisaged that new reimbursement models will be developed to better reflect the changing face of intervention so that lesion subsets such as bifurcation and CTO will have specific codes to reflect the complexity, training and time required for such procedures.

- Len Steingo and Mark Abelson continue to work with our Private Practice Committee. SASCI envisages a workshop in the near future to consider (and advise members) on appropriate claim code usage and which codes to use when existing codes do not cater for more recent procedures. Submission for new codes needs to be made before April 2013 for consideration and possible inclusion in 2014 code book. Please contact George Nel if you have coding issues that need to be brought to SASCI’s attention for inclusion.

- Reimbursement for FFR/IVUS: Mark Abelson has written a summary and motivation to medical aids for blanket reimbursement for FFR/IVUS. Our Exco has reviewed the data on the appropriate use of Intra-Vascular Ultrasound (IVUS) and Fractional Flow Reserve (FFR) and strongly recommends that the cost pertaining to the use of these devices should be routinely covered by the medical aids.

- Aneugraft pericardial covered stent: Our Exco has reviewed the data regarding this stent and strongly supports the application for this product to be made available to local practitioners. A letter to Discovery Health was drafted by Dave Kettles on behalf of SASCI Exco and sent recently. The Exco is awaiting feedback from Discovery.
**Appeal on TAVI funding:** SASCI currently has one of Tom Mabin’s cases on appeal after the Council for Medical Schemes initially ruled “in favour” of the medical aid not funding TAVI as a prescribed minimum benefit. Elsabe Klinck is supporting SASCI from a legal perspective and highlighted various areas of concern with the CMS ruling(s). This ruling is currently under appeal and as this is an ongoing process. Members will be updated on developments as they unfold.

**Activities of AfricaPCR**

- **2nd Africa PCR:** The 2nd AfricaPCR programme will be offered during the World Congress in Cape Town.

- **The establishment of AfricaPCR** was officially announced by Prof Jean Marco during his opening address at our 2012 Congress. The announcement was met with excitement and interest from South African and African delegates. The AfricaPCR Board (appointed until 2015) is Course Directors Farrel Hellig (SA) and William Wijns (Belgium); and Co-Directors Bernard Gersh (USA), Sajidah Khan (SA), Tom Mabin (SA), Ganesh Manoharan (Ireland), Christoph Naber (Germany), Mpiko Ntsekhe (SA) and Harun Otieno (Kenya).

- **Interactive case showcase:** The AfricaPCR Interactive Case Corner will be held on Wednesday 20 February from 10h30 and was well subscribed with 28 cases accepted for presentation and discussion. Submissions were made from all over the world (Africa including South Africa, Asia, Europe, the Middle East and South America) and a broad range of interventional material will be discussed. The main AfricaPCR programme scheduled for 22 February will include a *How should I treat* programme on Pericardial Disease and 2 “Learning the technique” sessions on Balloon Mitral Valvuloplasty and TAVI. The objectives for the 2013 AfricaPCR are to understand and explore:

  - The geographical differences in diagnosis and patient management;
  - The difficulties in diagnosis and patient management; and
  - Tips and hints for a successful interventional approach to complex clinical problems.

**SASCI breakfast symposia**

Two SASCI Breakfast Symposia will be held on 21 and 22 February to bolster adult coronary content during the World Congress. Adie Horak is programme convener with able assistance from Dave Kettles and Mark Abelson. The programme has a *How should I treat* format based on specific cases. On the 21st the topic is: *Case-based discussions: Interventions in coronary lesion subsets*. On the 22nd *Case-based discussions: Complications of coronary intervention*, will be discussed. Both are bound to be extremely interesting and informative. Most AfricaPCR faculty (including international) will participate in these symposia and SASCI believes that this, and congress as a whole, will offer world class teaching over a broad spectrum for SASCI members and recommends that you attend.

**“SASCI’s role as a representative body of cardiologists has been extended over the last few years.”**

**Visiting professor programme**

Unfortunately Prof Jean Marco informed us that he will not be able to travel to South Africa as visiting professor in 2013. Prof Tony Gershlick from the UK was approached and he is only available early in 2014. He is practically oriented and very active in the cathlab. SASCI is currently talking to Prof David Holmes...
who could also be coming to South Africa in 2014. We would like to thank Medtronic for its continued unconditional support of this important educational initiative.

**R.C. Fraser International Fellowship**
Dr Aine Mugabi, the 2012 recipient of the R.C. Fraser International Fellowship in Cardiovascular Intervention Award will travel to Dr Martyn Thomas (Consultant Cardiologist & Clinical Director for Cardiovascular Services unit) at Guy’s & St Thomas’ Hospital, London for a period of 1 month where he will have the opportunity to expand his knowledge and further his abilities this year. The 2013 recipient will be announced at the next Fellows workshop. This award is annually sponsored by Boston Scientific.

**Las Vegas SCAI Fellows**
South African Fellows once again had the opportunity to attend the annual Society for Cardiac Angiography and Intervention (SCAI) Fellows Programme in Las Vegas (December 2012). The report on this programme can be found elsewhere in this issue. SASCI expect to, once again, offer this opportunity to Fellows at the end of 2013!

**Local annual Fellows get-together**
This year’s 8th Annual SASCI Fellows Programme will be held in Somerset West (Mediclinic Vergelegen) on the weekend of 26 - 28 April 2013 with Dr Mark Abelson as programme director. The SASCI office requests that all fellows/registrar and recently qualified cardiologists, who would like to attend this year’s workshop, should contact our office soonest. Members are also encouraged to approach Mark Abelson or George Nel if you would like to be considered as faculty.

**Interventional Society of Cathlab Allied Professionals (ISCAP)**
Noteworthy is that a number of regional educational meetings have already taken place for allied professionals and that a basic cathlab training manual will be available early in 2013. The ISCAP Exco also met with Netcare who wants to engage ISCAP in training 20 cathlab nurses in the next 2 years. ISCAP is in the process of creating the ideal mentoring programme to get new recruits adequately trained in the cathlab and to make this environment an attractive career choice for nurses (full report elsewhere in this issue). Well done to ISCAP’s steering committee!

**SASCI 2013 AGM**
Our AGM will take place at the World Congress and we urge all SASCI members to attend. Members will be notified on the meeting together with all the details regarding date, time and venue. Since we are electing new Exco members and office bearers, your attendance is crucial.

To our SASCI executive and our industry partners, a great big round of thanks for your support, your passion and your hard work throughout the year. The following corporate supporters have demonstrated their commitment to our Society and to education in South Africa: Amayenza Abantu, Angio Quip, Aspen, AstraZeneca, Baroque, B Braun, Boehringer-Ingelheim, Boston Scientific, Cipla Medpro, Cordis, Disa Vascular, Edwards, Medtronic, Paragmed, Pharma Dynamics, Surgical Innovations, Torque Medical, Viking, Volcano and Winthrop. We are looking forward to working closely with you in 2013.

Please contact your Executive Officer, George Nel at 083 458 5954 or via email at sasci@sasci.co.za if you need any assistance or wish to formally communicate with the executive.

Farrel Hellig
President, SASCI
The HeFSSA Exco consists of a number of cardiologists in both the public and private sector with a special interest in Heart Failure. This dedicated group is led by Eric Klug (President), Martin Mpe (Vice-President), Darryl Smith (Treasurer) and Jens Hitzeroth (Secretary) with support Karen Sliwa, Pro Obel, Christina Radulescu, Sandrine Lecour, Tony Lachman and Juan Vorster. They remain the driving force behind all HeFSSA’s activities.

To further expand on our vision of educating general practitioners and physicians, we want to continue to provide value to the SA Heart Association, our colleagues, the industry and most importantly, our patients. We plan to activate this vision through the following programmes in 2013:

General practitioner programme

The initial pilot programme was extremely well received by general practitioners (GPs) in 2010 and confirmed the perceived need for education by GPs on Heart Failure. The programme was expanded in 2011 to also include smaller metropolitan areas as well as Windhoek and Swakopmund in Namibia (19 and 14 meetings respectively). The relevancy of the material, academic substance and discussions with case studies were described as excellent. Comments such as “thank you”, “very good” and “exceptional speakers” were frequently uttered.


In 2013 HeFSSA will again offer this exciting CPD accredited course for GPs and Physicians. The course will consist of case-based discussions with ample opportunities for the delegates to participate in an interactive discussion with the speaker and colleagues. Twenty meetings will, according to current planning, be held across South Africa from August - November 2013.

The following material will be distributed by our corporate supporters in the field:

- **Chronic Heart Failure: Diagnosis and Treatment Algorithm 2013** (adopted from the ESC Heart Failure guidelines for 2012).

- **HeFSSA business cards with our contact details with the aim of directing members, GPs and Physicians to our website where they could find appropriate educational material and Heart Failure news.**

A major focus during 2013 is the introduction and dissemination of the updated Heart Failure review in the form of a HeFSSA Statement based on the ESC 2012 guidelines, titled Acute and chronic heart failure guidelines. The aim of this document is to provide evidence-based guidelines for the diagnosis and treatment of heart failure, to highlight changes in the 2008 ESC guidelines and emphasise areas particularly relevant to South Africa.
**HeFSSA continued**

**CPD-accredited questionnaires on the HeFSSA website**
HeFSSA has developed a web-based questionnaire with the aim of driving medical practitioners to our website. The incentive behind online completion of questionnaire(s) is that participants can obtain CPD points. The tool has a professional look and feel and the practitioner would know immediately if he/she qualified for the CPD points (automatically marked and result made available). Multiple tries are also allowed. The ethics questionnaire (for quarter 1/2013) and case reviews are planned for later in 2013.

**Physicians and GP update (Cardio Congress)**
The HeFSSA programme, *Cardio update for non-cardiologists* has been very successful at previous SA Heart congresses. HeFSSA plans another cardio update for GPs (and physicians) in the last quarter of 2013 as a stand-alone programme. It will be a full day event with topics covering Heart Failure and a wider range of related cardiovascular topics.

**HeFSSA Heart Failure Travel Scholarship**
We are currently not training enough cardiologists in South-Africa and, in addition, need to expose fellows/registrar to the Heart Failure specialty field and get them involved with HeFSSA. This award is available to either public or private practitioners. The Exco extended an invitation to the Head of Medical Schools and hopes to receive nominations early in 2013. HeFSSA currently funds R50 000 per annum in educational award(s) in heart failure. Please contact our office if you are interested.

HeFSSA would also like to expand our focus to include other caregivers (in addition to GPs also nurses and caregivers at home i.e. the patient support system) to empower all concerned. These programmes are still in the planning phase and could include collaboration with funders such as Discovery Health.

Our educational programmes are made possible by the continued support and dedication of our corporate supporters, AstraZeneca, Boston Scientific, Medtronic, Merck, Pharma Dynamics, Servier and Winthrop, to help further Heart Failure diagnoses and treatment.

Please contact our office if you want to learn more about these events or want to participate in any of these programmes.

**Contact details**
George Nel: info@hefssa.org or 083 458 5954
Sanette Zietsman: zietsmans@telkomsa.net or 083 253 5212

Dr Eric Klug
President, HeFSSA

---

**TRIBUTE TO DR ANDRE RYNIER VAN DER WATT 22 MAY 1950 - 26 NOVEMBER 2012**

It is with deep regret that we record the passing of Andre Rynier van der Watt. One of a handful of pioneering specialist physicians on the East Rand, Andre faithfully served the Benoni community as a cardiac physician for 30 years, where he had a reputation for integrity and intellect and indeed was an outstanding physician. He did this despite personal hardships which included divorce, the untimely death of his elder son, and subsequently failing personal health. He is survived by his daughter Jakoba and son Stefanus, who will testify to his steadfast parenthood. He will be sorely missed by colleagues and patients.

Dr R.M. Jardine
HEFSSA TRAVEL AWARD
“ENHANCE HEART FAILURE MANAGEMENT IN SOUTH AFRICA”

Introduction
The Executive Committee of HeFSSA has established the Enhance Heart Failure Management Award. HeFSSA considers this initiative as part of our contribution towards optimising patient health care and promoting local heart failure expertise. We hope that the information gained during this event and the possibility to share your experience and open a dialogue with other specialists will broaden all our knowledge with regard to new therapies in heart failure. We also hope that this experience will help you to develop educational programmes at your medical institution and/or to share the acquired knowledge with your patients and colleagues.

Value
The grant is valued at R50 000 (fifty thousand Rand) per annum and must be utilised towards airfare (economy class), congress registration and accommodation expenses.

The successful recipient is liable for all payments towards general expenses and airfares him/herself in advance, and can then claim these back from HeFSSA after submitting the necessary proof of payment and appropriate receipts. A recipient will be refunded immediately on receipt of these expenses.

Eligibility
Cardiologists or Physicians in either the public or private sector can be potential candidates and they are required to be a citizen or permanent resident of South Africa. The applicant’s annual SA Heart Association and HeFSSA membership fees must be fully paid up. The congress/programme/course must be internationally or locally accredited, and be predominantly focussed on Congestive Heart Failure.

Application procedure
Application forms are available on www.hefssa.org and must be completed and returned to HeFSSA, fax number: 086 603 9885.

Please take note of the following:
- The application form must be accompanied by the official programme. Applications should be sent by email (as an attachment) in a single pdf file;
- The title of the email should read: “HeFSSA Award towards Enhance Heart Failure Management in South Africa”; and
- HeFSSA will acknowledge receipt of all applications by return email.

Terms and conditions
It is hereby placed on record that no guarantees can be given to any applicant that his/her application will be successful.

The decision in granting an award to a successful applicant will be final. No appeal process will be considered.

Applicants will be notified of the outcome within 4 weeks of application.

The successful recipient of the grant needs to take note of the following:
- An attendance certificate must be provided to HeFSSA on the applicant’s return;
- You are bound to provide HeFSSA with a written evaluation/review of the course/conference no later than 3 months after returning;
- Depending on the type of course/conference that the successful candidate attends, HeFSSA reserves its right to request the candidate to prepare and deliver a presentation at an appropriate forum; and
- The successful recipient is liable for all payments towards general expenses and airfares him/herself in advance, and can then claim these back from HeFSSA after submitting the necessary proof of payment and appropriate receipts. A recipient will be refunded immediately on receipt of these expenses.
FEEDBACK FROM SASCI DELEGATES TO THE “SCAI FALL FELLOWS COURSE”

Insightful, interactive course had tips and tricks from world class experts
This year’s SCAI Fall Fellows Course (Structural heart disease) was held, as usual, in Las Vegas, Nevada (5 - 8 December 2012). Course directors, Ted Feldman and Zoltan Turi, ensured world class faculty provided an up-to-date curriculum punctuated by tips and tricks that only extremely experienced interventionalists could provide.

The meeting was of a high calibre which allowed the attendees to interact with interventional cardiology Fellows from across the United States of America and to share the knowledge of experts in various fields of intervention. The meeting was well organised with a concise programme which focused on the most recent topics in interventional cardiology. In addition to an evidence-based approach to case management and critical appraisal of current guidelines, the presenters concluded each topic with personal cases highlighting both their successes and errors. Audience and panel interaction, criticisms and questions were encouraged. The presenters offered sound advice with a simple approach to complex intervention emphasising the need to acknowledge one’s limitations and to be a doctor first and not just a technician. The conference was a good blend between informative, interesting and “plain old entertaining”.

The companies sponsoring the meeting showcased their products in an exhibition room and afforded Fellows the opportunity to participate in various computer simulated vascular interventions. The attendees found the proctored (one-on-one) radial approach simulation useful and confidence building. They were impressed with the attention given to vascular access, vascular closure and radial access and intervention. Fellows-in-training often forget to pay meticulous attention to vascular access and closure. It was suggested that Fellows would benefit from more training in radial access and intervention. The symposium on radial access and intervention presented by Dr Adhir Shroff from the University of Illinois and the radial access simulation provided by the SCAI faculty, were very enjoyable.

A very relevant topic was transcatheter aortic valve replacement (TAVR). During the session the importance of patient selection and peri-operative evaluation was emphasised. The future prospects of TAVR were discussed and included broader indications, different approaches, newer devices and valve-in-valve use of these devices.

Mitral valve stenosis is one of the 1st structural heart diseases to have been treated successfully by percutaneous methods. Mitral regurgitation (MR) is however a much more complicated problem as the mitral valve is a complex structure. Various attempts have been made to treat this disease percutaneously, including coronary sinus annuloplasty, direct annuloplasty and the MiraClip device. The MiraClip is the most successful therapy at present. A new trial, the COAPT trial, is underway evaluating this device in functional MR.

Paravalvular leaks are a common problem with serious clinical consequences. Percutaneous closure is however not a simple solution as there is a 15% mortality rate and 52% clinical failure rate associated with this procedure. Patient selection is thus very important. The percutaneous closure of atrial septal defects (ASD) is one of the highest volume structural interventions done. Complications do occur although infrequent. This is an effective therapy with good outcomes and a mortality rate much lower than open surgery.

Persistent foramen ovale (PFO) closure is a very controversial topic. Expert opinion at the SCAI congress is that PFO should be closed but there is no randomised trial to prove this, only trends when altering trial data. Technology as well as the field of interventional cardiology is advancing at a rapid pace. In the future there will be an increase in structural heart procedures and it is important that Fellows remain updated on this topic.

The sessions on Left Ventricular Assist devices were particularly useful, mainly as, in current training up till now, some of the delegates had very little exposure to any device other than the IABP. Useful comparisons were drawn; the literature reviewed and cases using each of the devices shown.
Feedback from Sasci continued

Other “less academic” but useful sessions included a few breakfast and lunch symposia dealing with the practical and legal issues facing a young cardiologist setting up practice as well as case presentations, often hair-raising, but mostly with a good procedural outcome.

“The presenters concluded each topic with personal cases.”

The extra-curricular activities were also top-notch... after all, it was Las Vegas...

To top it all, the meeting was hosted in the spectacular Cosmopolitan Hotel located on the Las Vegas strip with 5-star accommodation and easy access to the entertainment which the strip is well-known for.

The delegates found this meeting a valuable experience, especially at the end of their training, to consolidate what they have learnt in the last 3 years of fellowship and to share in the experiences of experts in their respective fields. They encourage all Fellows in South Africa to attend as it both a valuable educational experience and an opportunity to visit exciting Las Vegas.

The 4 attendees are extremely grateful to Boston Scientific for their sponsorship of the flights, Sasci for their invitation and organisation, and to Scai for their sponsorship of the course and accommodation. Shiraz Gafoor, Keir McCutcheon, Blanche Cupido and Gideon Visagie.

Paediatric Cardiac Society of South Africa

We’re heading into an exceptionally exciting 2013!

The main objectives of the Paediatric Cardiac Society of South Africa (PCSSA) are to improve the quality of care for children with congenital and acquired heart disease by promoting research and supporting education and training of heart specialists. The PCSSA is also the primary advocacy group for children with heart disease in South Africa. Membership is open and we actively encourage participation from colleagues in Africa as well as interaction with special interest groups.

Our new executive was elected at the recent SA Heart meeting and they will serve a new term until 2014. The executive consists of:

- Liesl Zühlke, President
- Paul Adams, Vice-president and public service
- Jeff Harrisberg, Private practice
- Stephen Brown, Treasurer
- Lindy Mitchell, Secretary
- Andre Brooks, Education
- Ebrahim Hoosen, Ex-officio and ethics
- Christopher, CEO of the 2013 congress company
- Hugo-Hamman

The new executive is excited to be at the helm of the Society over the next 24 months, which promises to be extremely productive indeed.

6th World Congress of Paediatric Cardiology and Cardiac Surgery, Cape Town 17 - 22 February 2013

We, the executive of the PCCSSA, and co-hosts with the SA Heart are thrilled to welcome faculty, delegates and exhibitors from all over the world to the largest cardiovascular event on the continent of Africa! This is truly a remarkable opportunity to showcase the progress made in...
congenital heart disease over the past decades, meet the absolute experts in the field and welcome international faculty and returning friends to our country. However, it is also an opportunity for adult cardiology colleagues to enjoy relevant scientific sessions common to all those caring for people affected by cardiovascular disease. It demonstrates as we have read in the guest editorial of this issue, by the CEO of the World Congress Committee, Dr Chris Hugo-Hamman that the care of children and adults with congenital heart disease is becoming multi-dimensional and integrated care is the new paradigm.

New on our website!
An extremely exciting development in our Society has been the fact that we have secured access to Pedheart Resource - the most comprehensive congenital heart disease educational website. It has detailed defect and treatment descriptions, in-depth tutorials, a searchable image library, collections of patients’ hand-outs and over 1 200 PowerPoint slides in several different languages. Go to http://www.heartpassport.com for a peak. PCSSA now also has a site providing information on congenital heart disease for parents. The site www.africa.congenital.org provides information on congenital heart disease to medical practitioners. Links to both these sites can be found on our home page at www.saheart.org/pcssa. Access to the parent information site is available to everyone, while access to the medical practitioner site is limited to paid-up PCSSA members.

We encourage all our regular members to be active in our Society; we look forward to receiving your suggestions and new ideas. This is going to be a remarkable year for our Society and SA Heart as we host the World Congress together. As the new executive we look forward to seeing you at upcoming events and wish you all the best for the rest of the year.

PCSSA membership
We would like to increase our membership of cardiologists, surgeons and any practitioner interested in cardiovascular disease, congenital and acquired, in children. We urge you to contact us if you need any information. Access our website for membership details at http://www.saheart.org/pcssa.

Contact details
President: Liesl Zühlke liesl.zuhlke@uct.ac.za
Secretary: Belinda Mitchell lindy.mitchell@up.ac.za

See you at the World Congress!
Liesl Zühlke
The crescendo of frequency of guidelines on atrial fibrillation (AF) management continues, reflecting intense interest in AF worldwide, and it highlights evolving new therapies including novel anti-coagulants, catheter ablation and anti-arrhythmic drugs.

- The original 2001 guideline was the product of the ESC and the 2 American societies which was jointly updated in 2006. The next update was published by the ESC on its own in 2010 and the latest (2012) as well. It is “focused”, i.e. dealing only with certain aspects, and should be read in conjunction with the 2010 guideline.

- In terms of the diagnosis of AF “opportunistic screening” appears for the 1st time where patients and healthcare professionals are encouraged to feel the pulse and on the detection of any irregularity have an ECG performed - irrespective of any symptoms.

- For pharmacological cardioversion, vernakalant is highlighted in the update, having recently been approved by the EMA. It is a multi-channel blocker which is largely atrial-selective, administered by intravenous injection and moderately successful (48-62%) in the rapid conversion of recent-onset AF within about 10 minutes. Its use is supported by a number of trials (CRAFT, ACT I-IV and AVRO) but it is ineffective against atrial flutter (SCENE II). The QT-prolonging effect is minimal and Torsades de Pointes has not been seen. Vernakalant now features as the algorithm of choice of cardioversion, where there is no haemodynamic instability and no or only moderate structural heart disease. It sounds promising, but the drug is not yet available in South Africa.

- For maintenance of sinus rhythm, there are 3 significant new recommendations. Sotalol has been recognised as the drug of choice (over and above dronedarone and amiodarone) in patients with coronary heart disease. Dronedarone has been completed dropped as a possibility in heart failure as a result of the PALLAS trial. Short-term anti-arrhythmic drug therapy i.e. for 4 weeks after cardioversion is an acceptable approach, aimed at the high rate of sub-acute recurrence i.e. in the 1st 3 weeks after cardioversion.

- In stroke prevention, the emphasis has switched to the definition of a low-risk group vs. age <65 years and lone AF, including females, who require no anti-thrombotic therapy. Aspirin has been completely dropped as a recommendation because of its weak efficacy, and a bleeding risk not very different from that of warfarin. All other patients should be scored by CHA2DS2VASc and patients scoring 0 should also receive no anti-thrombotic therapy. Patients scoring 2> must receive oral anti-coagulation, patients scoring 1 should be considered for oral anti-coagulation.

- Importantly, the novel anti-coagulants are now preferred over warfarin because of either superior efficacy (in the case of dabigatran 150mg) or lower risk (in the case of dabigatran 110mg, rivaroxaban and apixaban) (RE-LY, ROCKET-AF and ARISTOTLE trials).

- Left atrial appendage occluder devices are not recommended because there is limited published experience with them, there has been no comparison to novel oral anti-coagulants, and because of the risk of bleeding which attends long term aspirin recommended after implantation of these devices.

- In catheter ablation, “patient preference” is included in the flow chart for the 1st time. There is also the option to use ablation as a 1st-line treatment for rhythm control based on, amongst others, the MANTRA-PAF trial showing a trend to greater efficacy with ablation on repeated 7-day Holters. There are 3 new technical recommendations i.e. that the procedure: (1) must target isolation of the pulmonary veins; (2) oral anti-coagulation should be continued through the procedure, rather than interruption and bridging; and (3) if AF recurs within the 1st 6 weeks after ablation a “wait and see” approach should be adopted.

Endorsed by the SA Heart Association and the Cardiac Arrhythmia Society of Southern Africa, these recommendations (with the exception of vernakalant) are immediately applicable to clinical practice in South Africa.

Dr R.M. Jardine

On behalf of the Ethics and Guideline Committee
The Cardiac Arrhythmia Society of Southern Africa (CASSA) is an active society, currently with 74 members, that concentrates on advancing Electrophysiology in South Africa and Africa.

Educational programmes planned for 2013

Atrial Fibrillation training for General Practitioners
CASSA will be hosting GP workshops on the diagnosis and treatment of Atrial Fibrillation. Diagnostic instrumentation will be provided to the GPs involved and the data gathered will be published at the end of the programme.

ECG Quiz in SA Heart Journal and Modern Medicine
The quarterly ECG quiz will appear in the SA Heart Journal and a similar questionnaire aimed at GPs will also be in Modern Medicine magazine.

ECG course for cardiology registrars
An advanced ECG course for cardiology candidates will be held in Cape Town from 25 - 26 January 2013.

An advanced course on Electrophysiology, aimed at cardiologists and trainees, which focuses on pacemakers and ICDs will be held in June 2013.

CASSA specialist symposium:
The national CASSA specialist symposium has become a popular event on the South African cardiology agenda. This year CASSA will host a national road show on Arrhythmias in heart failure: An endless perpetuating circle. The symposium will consist of 3 meetings in Johannesburg, Durban and Cape Town respectively and is to be held in the 3rd quarter of 2013.

Electrophysiology weekend workshop
A case-based EP weekend workshop will be held, where electrophysiologists, cardiologists and registrars will get together with an international expert to present and discuss difficult cases.

Other programmes and initiatives

Andrzej Okreglicki Travelling Fellowship
CASSA, in collaboration with its Corporate Member partners, is proud to announce that we have instituted the A. Okreglicki Travelling Fellowship, dedicated to the memory of a cherished and valued leader in the South African electrophysiology community. AO met an untimely end while in the early part of a brilliant career in electrophysiology. He was travelling at the time.

The purpose of the Fellowship is to help further the educational ambitions and careers of young people on the threshold of a career in clinical electrophysiology.

The Fellowship will comprise of the following:

- Attendance at a major international electrophysiological meeting.
- A further 2 weeks at one or maximum 2 sites in an overseas environment in order to materially and clearly further that person’s clinical development in clinical electrophysiology.

The choice of congress and 2-week extended study sites would be that of the successful applicant.

Criteria for choosing an applicant will include:

- Preferably, a person early in their career.
- A person committed to the practice of clinical electrophysiology.
- Proof of the degree of commitment.
- A stated intention to remain in South Africa.
- Curriculum vitae, including research publications and interests.
- Details of how the 2 weeks apart from the congress week would be spent.
The successful candidate will have to provide a written report on completion of the Fellowship.

**Electrophysiology Fellowship at GSH**
Dr Neil Hendricks has just completed the 1st EP Fellowship at Groote Schuur Hospital. Details on application for the next Fellowship will be communicated shortly.

**Important information on CASSA’s ICD Practitioner Certification Process**
The Education Committee of South African Heart Association recently issued a position statement on the subject of implantation of internal cardioverter defibrillators (ICDs) for the prevention of sudden cardiac death (SCD) in patients with existing heart disease and left ventricular dysfunction (primary implantation). Major points made were:

- Agreement on the need for proper education in EP and related disciplines in South Africa and current shortcomings in providing this.
- Practitioners should preferably seek training with industry - and with non-specified proctorship.
- It was emphasised that SA Heart and its special interest groups (SIGs) are not a statutory or licensing body; such actions are only undertaken by the HPCSA.
- SA Heart, its committees and SIGs must not limit the scope of practice of cardiologists in this country.

There is no disagreement from CASSA on any of these points. We would like to emphasise that CASSA is concerned with what has become a critical situation.

Turning to the subject of ICD implantation in South Africa (in this case, primary implantation) there is a number of undeniable facts:

ICDs are extremely expensive albeit efficient devices which function well when correctly implanted, programmed and followed up in appropriate cases. This document does not apply to secondary prevention i.e. when implantation and subsequent care is for a demonstrated case of cardiac arrest or hypotensive ventricular tachyarrhythmia. In the latter it is universally recognised and recommended that the attending doctor should be a recognised and trained electrophysiologist. These are the views and policies of the American Heart Association, American College of Cardiology, Heart Rhythm Society, European Heart Rhythm Society and European Society of Cardiology (references can be supplied).

“We have instituted the A. Okreglicki Travelling Fellowship, dedicated to the memory of a cherished and valued leader.”

It has been clearly established that primary ICD implantation if not done correctly, programmed correctly and not followed-up correctly often lose their medical value to the point that they are not only ineffective but may constitute a real risk to life or be a major disadvantage to the patient.

Continued on page 422
It is not CASSA’s wish to be, nor will it act as a watchman. Our stance is to educate and help ensure this therapy is of value.

Many funders refuse to supply ICDs on the grounds that they do not fall within the ambit of a Prescribed Minimum Benefit (PMB) (a situation which CASSA is currently actively involved in). They increasingly find that doubtful or inadequate training of the would-be implanter is a good reason to deny ICD implantation. They can and do claim that training and “certification” by a device company is not sufficient, not supervised and are inherently flawed because the “licensing authority” has a direct financial interest in the implantation. The latter applies, of course, even when the trainer(s) are recognised “experts” in the field - usually from outside of South Africa and always receiving a fee from the device company.

The consequences of this situation are clearly unacceptable to colleagues and, above all, to the patient requiring this life-saving device.

CASSA is addressing this situation as follows:

The Society co-operates with device companies and has reviewed courses offered by them. Further reviews and updates continually follow. We do offer to help with the validation and effectiveness of the training by: (1) Offering individual reviews to aspirant implanters; (2) Testing the effectiveness of their training proctoring the implanting skills; (3) Reviewing device programming in follow-up; and (4) Offering them CASSA certification once this process has been completed.

It has to be clearly understood that CASSA does not act as a licensing body. It is not our aim or wish to be one. We offer practitioners membership of CASSA and the tools with which they can face medical aid societies that often search for any way with which to avoid provision of these expensive devices.

Certification with CASSA (not licensing) offers practitioners the means to practice but not limit the scope of practice.

CASSA currently has a list of doctors accredited as electrophysiologists. This is done by detailed examination of records or proof of training at a recognised centre or with some recognised certificate of competence in electrophysiology. It is voluntary and effectively defines and supports one small group. The outline of the detailed process is available.

All registered cardiologists have the right to membership in CASSA. Other forms of membership exist but are not relevant to this discussion.

CASSA performs mainly educational activities. For reasons outlined below we believe that these relate to current “medical” and patient needs in South Africa. The purpose of educational programmes is to promote practice and research at as high a level as possible within the field of clinical electrophysiology and related areas in South Africa.

We wish to educate and help with education at all levels by organising symposia and giving courses in keeping with the aims of a professional society. We would welcome any other methods of education. We aim simply to act within the objectives and scope of a professional society.

These services are offered free to relevant practitioners and CASSA has no financial gain. It is not remotely our intent to “corner the market” for ICD implantation.

CASSA is currently in discussion with the European Heart Rhythm Association to offer practitioners in South Africa an internationally recognised certification in ICD implantation. More details will follow as the partnership evolves.

For further information on any of the above, please visit our website at www.cassa.co.za or contact Franciska at franciska@cassa.co.za or 082 806 1599.
# TRAVEL SCHOLARSHIPS OF THE SOUTH AFRICAN HEART ASSOCIATION

The travel scholarship is available to all members and associate members living in South Africa and primarily aims to assist junior colleagues. In doing so, continued future participation in local or international scientific meetings/workshops is encouraged.

## REQUIREMENTS

- Applicants must be fully paid-up members/associate members in good standing for at least one year.
- Applications need to include:
  - Full details of the meeting/workshop;
  - The applicant's abbreviated CV; and
  - A breakdown of the anticipated expenses.
- Applications must reach the Association a minimum of 3 months before the event.

## RECOMMENDATIONS

- Acceptance of an abstract submitted by the applicant at the scientific meeting/workshop. (Should acceptance be pending, the application need still be submitted 3 months prior with a note stating expected time of approval. In such a case the scholarship might be granted conditionally: that proof of the abstract being accepted is submitted afterwards);
- An invitation to participate as an invited speaker at the meeting;
- Publications in a peer-reviewed journal/s in the preceding year;
- An applicant from a member of a previously disadvantaged community; and
- An application from a member younger than 35 years of age.

## ADDRESS APPLICATIONS TO:

The President  
South African Heart Association  
PO Box 19062  
Tygerberg  
7505

A maximum of 4 scholarships will be awarded annually. Grants for international meetings will be a maximum of R20 000 and local meetings a maximum of R7 500.
HEART AND STROKE FOUNDATION SOUTH AFRICA

Breaking ground for healthier hearts in SA – and full steam ahead in 2013

Who we are
The Heart and Stroke Foundation South Africa (HSF) plays a leading role in the fight against preventable heart disease and stroke. Our mission is to encourage prevention at all levels, empowering South Africans to adopt healthy lifestyles and make healthy choices easier.

Our top 3 achievements in 2012
2012 was an exciting year for the HSF.

Teaching children about healthy lifestyles
We created a pilot episode of a proposed TV show, featuring our much-loved mascot, Hearty. Over 200 000 free copies of the DVD were distributed in Bona and Your Family magazines.

A 1st in South Africa
We launched a brand new recipe book Cooking from the heart, which has been made freely available to the public. This groundbreaking project - backed by research from the Medical Research Council and the Chronic Diseases Initiative in Africa, and funded by Pharma Dynamics - was the result of recognising the need for a recipe book offering healthier versions of family favourites, using affordable ingredients commonly found in SA kitchens and, above all, tasting good. The nation’s favourite recipes from around SA were adapted and tested, to make sure that they remain delicious and easy to make healthy options. To our knowledge, there is no equivalent resource in the country.

Heart Awareness Month health screening challenge
To celebrate Heart Awareness Month this year, the HSF conducted a “health screen off” challenge between 2 popular 5FM disc jockey teams, Gareth Cliff and Fresh. DJ Fresh’s team came in as our heart-health champions, and only just pipped Gareth Cliff’s team to the heart health post. Congratulations to our own ambassador, Gareth, whose heart age is spot on. Thousands of South Africans also know their numbers after taking our free screenings around the country. As their health practitioners, do you know yours?
What we can offer you and your patients
The HSF has a number of resources that may be helpful in assisting and guiding your patients towards a healthier lifestyle. For more information, please contact us at 021 447 6268 or email heart@heartfoundation.co.za.

Health Line
Starting this year, and thanks to funding from the National Lottery, we will now be offering advice and behaviour modification counselling to the public in 2 languages besides English and Afrikaans: isiZulu and isiXhosa. Our advisers are trained in behaviour change counselling. To reach an adviser, call 0860 1 HEART (0860 1 43278).

Free recipe books
This research-based tool is freely available to the public, the only resource backed by the Chronic Disease Initiative in Africa and the Medical Research Council. It contains 71 easy-to-follow recipes, plus simple advice on a healthy diet, and includes a foreword by our very own Archbishop Desmond Tutu.

Free Hearty DVD for children
Featuring our mascot, Hearty, this DVD is designed to teach children about healthy eating and exercise in a fun and informative way. It is aimed at children between the age 4 and 7, and features SA soccer legend Matthew Booth.

Support groups
Our Mended Hearts groups meet monthly in Cape Town, Durban and Port Elizabeth, where patients and their families receive advice on lifestyle changes and how to live with CVD. We have a variety of speakers covering various topics. You are welcome to refer your patients to us.

Free brochures and patient information
We offer brochures explaining cardiovascular disease in simple terms for patients and the public, and providing information on risk factors and lifestyle modification advice. Contact the HSF for your supply of free copies.

Minister of Health signs new WHO treaty against tobacco smuggling
South Africa has become the 1st country in the world to sign a new international treaty, the Protocol to eliminate illicit trade in tobacco products. We applaud Dr Aaron Motsoaledi for taking this step, along with 11 other countries, against tobacco smugglers, and we hope that more countries will sign up to the treaty. Tobacco smuggling remains big business for tobacco manufacturers and criminal organisations, impacting on the health of individuals by undermining taxation on tobacco which might otherwise encourage individuals to quit.

Important dates for 2013
Contact the HSF if you wish to participate in or refer patients to participate in our planned events.

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 - 17 March</td>
<td>World Salt Awareness Week</td>
</tr>
<tr>
<td>4 - 10 August</td>
<td>Rheumatic Heart Disease Week</td>
</tr>
<tr>
<td>September</td>
<td>Heart Awareness Month</td>
</tr>
<tr>
<td>29 September</td>
<td>World Heart Day</td>
</tr>
<tr>
<td>28 October - 3 November</td>
<td>National Stroke Week</td>
</tr>
<tr>
<td>29 October</td>
<td>World Stroke Day</td>
</tr>
</tbody>
</table>

Dr Vash Mungal-Singh
Chief Executive Officer
Heart and Stroke Foundation SA (HSF)
Medical profession needs to reclaim “birthright” to improve healthcare and save money

Most of us have taken to complaining in self-righteous indignation of a world so obsessed with commercialism and conspicuous consumption that even “decent” and “educated” people are caught committing criminal acts in order to enrich themselves. But we have become so immune to this phenomenon that we have forgotten that similarly so-called “small” breaches of ethics are illegal - even if one is not caught. This article therefore begins with the reminder that the Ethical Rules of the Health Professions Council are the Health Professions Act’s regulations and is de facto law that doctors have to obey in the execution of their duties.

The reason why medical schemes have taken over the provision of healthcare in South Africa to such an extent that they are telling doctors how to practice their profession is because we sold our birthright. Economic theory dictates that they who pull the purse strings control everything. This notion is borne out by current practical experience in healthcare, for, by abdicating their right to bill patients directly for the perceived administrative convenience of “direct payment”, doctors have given medical schemes the power to control their profession. As a result, schemes now have the combined buying and bargaining power of their entire membership which they use against a doctor who is compelled by the competition commission ruling of 2003 to face them on their own.

Today every so-called “expert” is blaming specialists for driving up healthcare costs to guilt them into signing contracts at lower rates. The graph below tracks the progression of medical scheme risk pool expenditure from 2007 - 2011 (data sourced from CMS annual reports) and proves otherwise. The 1st obvious contradiction is that specialists have always utilised around 20% of medical schemes’ risk pool expenditure meaning that their market share has remained stagnant. If one next removes anaesthesiology, radiology and pathology costs from specialist expenditure then the true picture materialises since specialists only utilised 10.9% from the risk pool in 2011! This is 1.4% less than the administrative expenditure of schemes, despite the fact that they do nothing to help the patient, do not get their hands dirty and therefore do not take any clinical risk.
The reality is that the biggest drivers of healthcare inflation are hospital costs and schemes' administrative expenses, not specialists.

Unfortunately the problem began when doctors decided to give schemes a discount in return for the convenience of receiving direct payment. Direct payment per se does not imply that a contractual relationship exists between the doctor and the scheme, because at this stage it is only the patient who has signed a contract with their chosen medical scheme. The scheme can still decide to pay the doctor or the patient and the doctor is still free to charge the patient any reasonable tariff. It is the patient's obligation to pay and claim from the scheme.

Only once a doctor signs a Designated Service Provider (DSP), Preferred Provider or network contract, does he or she have a contractual obligation to a medical scheme. What is never revealed upfront though is that many of these contracts contain tacit inducements that force doctors to break Ethical Rule 7(3) of the Health Professions Act 1974, (Act No. 56 of 1974).

Ethical rule 7

Fees & commission: (3) A practitioner shall not offer or accept any payment, benefit or material consideration (monetary or otherwise) which is calculated to induce him or her to act or not to act in a particular way not scientifically, professionally or medically indicated or to under-service, over-service or over-charge patients.

When this rule is analysed it clearly states that any contract that forces a doctor to save money by not acting in the best interests of their patients is breaking the law. Any doctor who faces the threat of not being paid directly by the medical scheme can be tacitly forced to change their prescribing or treatment habits in order to comply with the stipulations of their contract. These new, altered habits amount to such a doctor breaking the law.

The schemes will retort that their contracts allow for deviation if a doctor motivates for special permission. The fact is that this action represents an administrative burden that forces doctors to conduct an administrative function for which they are not reimbursed. This therefore becomes an administrative hurdle that compels evasion and preventative action by virtue of its existence. If this administrative hurdle forces doctors to change their minds for the sake of expediency and not in the best interests of their patients, then they are breaking the law.

The most effective way therefore to interpret and adjudicate the legality of any DSP, provider or network contract is to ask one simple question: “Can this contract influence the way that I treat my patients?” If the answer is yes, then do not sign it. Doctors are not only obliged to treat their patients to the best of their ability, they are also allowed to charge appropriately for their services.

In every other profession, senior members of the profession are paid significantly more than juniors. Medical specialists are professionals with years’ training and expertise under the belt yet medical schemes have decided to pay all specialists exactly the same for a specific procedure as though experience is irrelevant.

Regulation 8 of the Medical Schemes Act allows for payment in full at a doctor's tariff, yet many specialists sign contracts for much lower, scheme rates for the dubious honour of being “contracted” to the scheme. A medical scheme is a business and any businesses will do everything in its power to protect its bottom line. When a medical scheme decides on a tariff, it is based on what the scheme can afford, not what a doctor deserves. Unfortunately doctors have to take the blame for allowing this status quo to emerge because they signed the contracts and chose to acquiesce to the schemes and reduce their own value.

The only path to solving this problem is:

- The profession must unite.
- Every doctor must act ethically at all times and do only what is best for his/her patients.
- Doctors have to decide their own worth based on their training, experience and expertise and charge accordingly.
- Medical schemes must stop interfering in the doctor-patient relationship and thereby save massive amounts of money on their administration expenses.

The end result is that patients will be treated optimally by their doctors, thereby improving their health outcomes which, combined with a saving in administration costs, will contribute toward bringing down the total cost of healthcare and improving the quality thereof.
THE SOUTH AFRICAN HEART ASSOCIATION
RESEARCH SCHOLARSHIP

The research scholarship is available to all full and associate members of 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 1 year.
- Applications must include
  - The applicant’s abbreviated CV;
  - A breakdown of the anticipated expenses; and
  - Full details of the research.

RECOMMENDATIONS

- Publications of related work in a peer-reviewed journal in the preceding year;
- Applicants from a previously disadvantaged community; and
- Applicants younger than 35 years of age.

ADDRESS APPLICATIONS TO:

Education Standing Committee
South African Heart Association
PO Box 19062
Tygerberg
7505

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

One scholarship to a maximum amount of R50 000 will be awarded annually.

APPLICATIONS WILL BE ASSESSED ACCORDING TO THE ACCOMPANYING RESEARCH PROTOCOL WHICH SHOULD INCLUDE:

- An abstract (maximum 200 words);
- A brief review of the literature (maximum 200 words);
- A brief description of the hypothesis to be investigated (maximum 100 words);
- A detailed methodology (maximum 500 words); and
- References.