Dear Colleague,

It gives us great pleasure to welcome you to the 50th Anniversary of the world’s first heart transplant!

On the 3rd December 2017 it will be the 50th anniversary of the world’s first human to human heart transplant performed by Christiaan Barnard and his team in our Department at Groote Schuur Hospital and the University of Cape Town.

This was an iconic world event which captured the attention of the public and world media like no other medical advance before it, and continues to be the world’s most publicised medical event of all time. The only other comparable world iconic event of that era, and which similarly caught the attention of the world, was the Apollo landing on the moon 18 months later in July 1969.

Apart from our focus on celebrating medical advances, we wish to broaden our scope to include other innovative and courageous developments, which have similarly advanced the scope and horizons of modern human endeavour. We also wish to focus on how the great advances in medicine which were pioneered, developed and commercialized by the various pharmaceutical and medical device companies, can be expanded to reach the underprivileged areas of the world where there is such a burden of cardiovascular disease. Presently the large expense of most of these recent developments preclude their widespread use (or penetration) in the developing economies of the world.

We would like to thank some of the leading Cardiovascular Device- and Pharmaceutical companies whose CEO’s or senior staff will be joining us in the debate around how modern cardiovascular interventions can be provided to the large areas of the world where there is at present such a dearth of cardiovascular healthcare.

We thank you for your presence at our celebration, to participate in the event and to debate some of the challenges healthcare faces in the future.

Enjoy your stay in Cape Town!

Kind regards

Prof. Peter Zilla; Prof Johan Brink; Dr Tim Pennel
Christiaan Barnard Department of Cardiothoracic Surgery
University of Cape Town and Groote Schuur and Allied Academic Hospitals

For on-site assistance, please visit the Londocor Information Desk or contact the Event Organisers:
Sonja Du Plessis +27 82 455 7853
Claries Roelofsz +27 74 033 1686
Christiaan Neethling Barnard (8 November 1922 – 2 September 2001) was a South African cardiac surgeon who performed the world’s first human-to-human heart transplant on 3 December 1967, and the second overall heart transplant (James Hardy did a xenotransplant in 1964). Growing up in Beaufort West, Cape Province, he studied medicine and practised for several years in his native country. As a young doctor experimenting on dogs, Barnard developed a remedy for the infant defect of intestinal atresia. His technique saved the lives of ten babies in Cape Town and was adopted by surgeons in Britain and the United States.

In 1955, he travelled to the United States and was initially assigned further gastrointestinal work by Owen Wangensteen. Vince Gott introduced him to the heart-lung machine, and Barnard was allowed to transfer to the service run by open heart surgery pioneer Walt Lillehei. Upon returning to South Africa in 1958, Barnard was appointed head of the Department of Experimental Surgery at the Groote Schuur Hospital, Cape Town.

On 3 December 1967, Barnard transplanted a heart from a person who had just died from a head injury, with full permission of the donor’s family, into the chest of a 54-year-old Louis Washkansky. Washkansky regained full consciousness and lived for eighteen days, even spending time with his wife, before he died of pneumonia, with the reduction of his immune system by the anti-rejection drugs being a major contributing factor. Barnard did state to Mr. and Mrs. Washkansky that the operation had an 80% chance of success, a claim which has been criticised as misleading.

Barnard’s second transplant patient Philip Blaiberg, with the operation performed at the beginning of 1968, lived for nineteen months and was able to go home from the hospital.

He retired as Head of the Department of Cardiothoracic Surgery in Cape Town in 1983 after developing rheumatoid arthritis in his hands which ended his surgical career. He became interested in anti-aging research, and in 1986 his reputation suffered when he promoted Glycel, an expensive “anti-aging” skin cream, whose approval was withdrawn by the United States Food and Drug Administration soon thereafter. During his remaining years, he established the Christiaan Barnard Foundation, dedicated to helping underprivileged children throughout the world. He died in 2001 at the age of 78 after an asthma attack.
Saturday 2nd December

South-North Dialogue

(Parallel Lecture Theatres 1&2, Groote Schuur Hospital)

SOUTH-NORTH DIALOGUE (Host-Societies: STS; AATS; EACTS; ASCVTS; Brazilian Soc. CTS; PASCAR; PASCaTS; ANZCTS)

EACTS Jose Pomar (Past-President / Barcelona)
AATS R. Morton Bolman, III (Burlington/ UVMMC)
AATS James Kirklin (AATS Ambassador/ Birmingham Alabama)
STS Robert S.D.Higgins (President-Elect / Baltimore)
STS Joseph Bavaria (Past-President/Philadelphia)
Asian Society Shinichi Takamoto (President / Tokyo)
PASCAR Bongani Mayosi (Past-President/ Cape Town)
PASCaTS Charles Yankah (President / Accra -Berlin)
ANZCTS Kumud Dhital, (Sydney)

World Heart Federation David Wood (President/London)

08:00 -10:45

Session MC Johan Brink / Dan Corder (Cape Town)

Procedural Introduction on to the day Peter Zilla (Cape Town)
Welcome (7min) Max Price (President/Rector University of Cape Town)
The Forgotten Millions (7min) Liesl Zühlke (Cape Town)
The Ethic Question (20min) Solly Benatar (Toronto/Cape Town)

Cardiac Surgical Needs of the Many
Moderator: Francis Smit
(Bloemfontein, South Africa)

(5 min Intro and 5 min ‘Blitzes’ followed by Roundtable)

Mozambique Ana Olga Mocumbi (Maputo)
Brazil Juan Meija (Fortaleza)
China Wen Wang (Beijing)
India Devagourou Velayodamun (Delhi)
Equator: Contrast and Diversity Theodoros Kofidis (Singapore)
The Magreb Countries Abdelmalek Bouzid (Constantine Algeria)
Iran Saeid Hosseini (Tehran)
Russia Gennadiy Khabulava (St.Petersburg)
Namibia Richard Kamwi (Ex-Minister Health Namibia/USA)
South Africa Darshan Reddy (Durban)

Humanitarian missions / NGOs:
Moderator: R. Morton Bolman, III
(Burlington/ UVMMC)

Critical Appraisal
(5min Intro and 4min ‘Blitzes’ followed by 20min Roundtable)

Kalangos Foundation Afksendiyos Kalangos (Athens)
Chain of Hope Sir Magdi Yacoub (London / Aswan)
Alain Carpentier Foundation Alain Carpentier (Paris)
La Chaine de l’Espero Sylvain Chauvaud (Paris)
Namibian ex-Minister of Health Richard Kamwi (Windhoek/Namibia)
Le Petit Coeur Nicole Sekarski (Geneva-Lausanne)

10:45 -11:10

Coffee Break
### 11:10 - 12:45

#### The potential role of CTS Societies

*(10 min Intros plus 40min Roundtable)*

<table>
<thead>
<tr>
<th>Event</th>
<th>Time</th>
<th>Organizer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brief on “World Federation for Medical Education”: An Example</td>
<td>11:10</td>
<td>Moderator: Joseph Bavaria <em>(Philadelphia)</em> <em>(7min Introduction)</em></td>
</tr>
<tr>
<td>World Heart Federation</td>
<td>11:10</td>
<td>J.P. van Niekerk <em>(3min)</em> <em>(Ex Dean of Medicine, Prev Editor in Chief SAMJ)</em></td>
</tr>
<tr>
<td>EACTS</td>
<td>11:10</td>
<td>Jose Pomar <em>(ex-President / Barcelona)</em></td>
</tr>
<tr>
<td>AATS</td>
<td>11:10</td>
<td>R. Morton Bolman, Ill <em>(Burlington/ UVMMC)</em></td>
</tr>
<tr>
<td>AATS</td>
<td>11:10</td>
<td>James Kirklin <em>(AATS Ambassador/ Birmingham Alabama)</em></td>
</tr>
<tr>
<td>STS</td>
<td>11:10</td>
<td>Robert S.D.Higgins <em>(President-Elect / Baltimore)</em></td>
</tr>
<tr>
<td>Asian Society</td>
<td>11:10</td>
<td>Shinichi Takamoto <em>(President / Tokyo)</em></td>
</tr>
<tr>
<td>PASCAR</td>
<td>11:10</td>
<td>Bongani Mayosi <em>(Ex-President / Cape Town)</em></td>
</tr>
<tr>
<td>PASCaTS</td>
<td>11:10</td>
<td>Charles Yankah <em>(President / Accra – Berlin)</em></td>
</tr>
</tbody>
</table>

#### The Publication Hurdle

*(8min Intro plus 20min Roundtable)*

<table>
<thead>
<tr>
<th>Event</th>
<th>Time</th>
<th>Organizer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dan Ncayiyana</td>
<td>11:45</td>
<td>South African Medical Journal <em>(Cape Town)</em></td>
</tr>
<tr>
<td>Friedhelm Beyersdorf</td>
<td>11:45</td>
<td>Eur J Cardiothoracic Surg <em>(Freiburg)</em></td>
</tr>
<tr>
<td>JP van Niekerk</td>
<td>11:45</td>
<td>South African Medical Journal <em>(Cape Town)</em></td>
</tr>
<tr>
<td>Alec Patterson</td>
<td>11:45</td>
<td>Ann Thorac Surg <em>(St.Louis)</em></td>
</tr>
<tr>
<td>Sampath Kumar</td>
<td>11:45</td>
<td>Asian Cardiovasc Thorac Annals <em>(Delhi)</em></td>
</tr>
<tr>
<td>David F Williams</td>
<td>11:45</td>
<td>Biomaterials <em>(Winston Salem)</em></td>
</tr>
<tr>
<td>Marika Sboros</td>
<td>11:45</td>
<td>Journalist, Writer, Editor <em>(London/Johannesburg)</em></td>
</tr>
</tbody>
</table>

### 12:45 - 13:30

#### Finger Fork Lunch

### 13:30 - 14:40

#### MC Afternoon Sessions: Peter Zilla / Dan Corder *(Cape Town)*

#### Overcoming the Divide through Innovation

*(8min Intro and 5min ‘Blitzes’ followed by 20min Roundtable)*

<table>
<thead>
<tr>
<th>Event</th>
<th>Time</th>
<th>Organizer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health-economic frameworks for Innovation</td>
<td>13:30</td>
<td>Iraj Abedian <em>(Johannesburg, South Africa)</em></td>
</tr>
<tr>
<td>Affordable Heart Surgery</td>
<td>13:30</td>
<td>Devi Prasad Shetty <em>(Bangalore/ India)</em></td>
</tr>
<tr>
<td>Innovative health-economic models</td>
<td>13:30</td>
<td>Lee Chuen Neng <em>(Singapore)</em></td>
</tr>
<tr>
<td>Affordable Medication</td>
<td>13:30</td>
<td>Lenias Hwenda <em>(Zimbabwe and Switzerland)</em></td>
</tr>
<tr>
<td>Overcoming diagnostic hurdles</td>
<td>13:30</td>
<td>Sidhant Jena <em>(CEO Jana Care Boston / USA)</em></td>
</tr>
<tr>
<td>Digital Health Eco-Systems for Africa</td>
<td>13:30</td>
<td>Jacques Kpodonu <em>(Ghana and USA)</em></td>
</tr>
<tr>
<td>Social Innovation</td>
<td>13:30</td>
<td>Solly Benatar <em>(Toronto, Canada and Cape Town South Africa)</em></td>
</tr>
<tr>
<td>Comments</td>
<td>13:30</td>
<td>Raenette Taljaard <em>(Cape Town, South Africa)</em></td>
</tr>
</tbody>
</table>

### 14:40 - 16:20

#### MEETING CARDIOVASCULAR MEDICAL NEEDS OF DEVELOPING NATIONS

**WHO Focus Rheumatic Heart Disease: The Plea of the Millions**

**Host Society: World Heart Federation**

<table>
<thead>
<tr>
<th>Event</th>
<th>Time</th>
<th>Organizer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bernard Gersh <em>(Mayo Clinic)</em></td>
<td>14:40</td>
<td>The epidemic of CVD in the Developing World: Global Implications <em>(7min)</em></td>
</tr>
<tr>
<td>Karen Siliva <em>(President-Elect World Heart Federation)</em></td>
<td>14:40</td>
<td>New WHO focus RHD <em>(5min)</em></td>
</tr>
<tr>
<td>Francois Bonnici <em>(Director: Bertha Centre for Social Innovation and Entrepreneurship)</em></td>
<td>14:40</td>
<td>The Hurdles <em>(7min)</em></td>
</tr>
</tbody>
</table>

### Preparing the Stage
**Round Table Discussion**

Mike Mussallem (CEO Edwards)
Alistair Simpson (GM Cardiac Surgery LivaNova)
Tim Ring (CEO Bard via Videolink)
David Chung (CEO NeoCord)
Jan Kimpen (Chief Med. Off. Royal Philips)

Sidhant Jena (CEO Jana Care)

Mike P. Phalen (Executive President MedSurg; Boston Scientific)
Markus Stirner-Schilling (VP Marketing & Academy Getinge)
Lenias Hwenda (CEO Medicines for Africa)
Patrice Matchaba (Global Head Cardiac; Novartis)
Salah Malek (Getinge)

**Chair: Barry Wilson (Former President Medtronic International)**
**Co-Moderators:**
Richard Kamwi
(Ex-Minister of Health Namibia)
Karen Sliwa
(President Elect WHF)

---

**16:20 -16:40**

Coffee Break

---

**16:40 - 18:20**

Session MC: Peter Zilla

**Round Table “Consensus”**

*Cape Town Declaration*

**“South Panel”: Ahmed El Sayed (Khartoum)**
Sampath Kumar (Delhi/India)
Karen Sliwa (Cape Town/South Africa)
Bongani Mayosi (Cape Town/South Africa)
Charles Yankah (Berlin / Accra Ghana)
Theodoros Koffidis (Singapore)
Juan Mejia (Fortaleza/Brazil)
Devi Prasad Shetty (Bangalore/India)
Wen Wang (Beijing/China)
Ana Olga Mocumbi (Maputo/Mozambique)
Jacques Kpodonu (Ghana and USA)
Devagourou Velayoudam (Delhi)
Manuel Antunes (Coimbra, ex. Johannesburg)
Lenias Hwenda (Zimbabwe / Switzerland)
Abdelmalek Bouzid (Constantine; Algeria)
Liesl Zühlke (Cape Town/South Africa)
Saeid Hosseni (Teheran/Iran)
Solly Benatar (Toronto/Cape Town)
Kumud Dhital (Sydney/Australia)

**“North Panel”: Jose Pomar (Barcelona/Spain)**
Shinichi Takamoto (Tokyo/Japan)
Lee Chuen Neng (Singapore)
Alksendylos Kalangos (Athens/Greece)
Alex Pearson (St. Louis/USAs)
Bernard Gersh (Mayo Clinic Rochester/USA)
James Kirklin (Birmingham/USA)
Rainald Seitelberger (Salzburg/Austria)
Robert Frater (New York / South Africa)
R. Morton Bolman, III (Burlington/ UVMMC USA)
Marko Turina (Zurich/Switzerland)
Bruno Podesser (Vienna/Austria)

---

**18:30**

Welcome Reception (Groote Schuur Hospital)
## Sunday 3rd December

### Courage and Innovation

Parallel Lecture Theatres 1 & 2, Groote Schuur Hospital

### Session MC: Peter Zilla/ Dan Corder (Cape Town)

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:00</td>
<td>Welcome</td>
</tr>
<tr>
<td></td>
<td>Peter Zilla</td>
</tr>
<tr>
<td>08:02</td>
<td>History Revisited</td>
</tr>
<tr>
<td>08:10</td>
<td>Tribute to a famous father</td>
</tr>
<tr>
<td></td>
<td>Christiaan Barnard Jr. (Cape Town)</td>
</tr>
<tr>
<td>08:20</td>
<td>Christiaan Barnard – One life</td>
</tr>
<tr>
<td></td>
<td>David Cooper (Pittsburgh/ ex Cape Town)</td>
</tr>
<tr>
<td>08:35</td>
<td>Christiaan Barnard: The Minnesota Years</td>
</tr>
<tr>
<td></td>
<td>Richard Blanco (Minneapolis USA)</td>
</tr>
<tr>
<td>08:43</td>
<td>Cardiology and Christiaan Barnard: Partners and Drivers</td>
</tr>
<tr>
<td></td>
<td>Mervyn Gotsman (Jerusalem, Israel)</td>
</tr>
<tr>
<td>08:51</td>
<td>The Operation - The Anaesthetic Side</td>
</tr>
<tr>
<td></td>
<td>Pete Gordon (Cape Town, SA)</td>
</tr>
<tr>
<td>08:59</td>
<td>Upholding the Legacy</td>
</tr>
<tr>
<td></td>
<td>Peter Zilla (Cape Town, SA)</td>
</tr>
<tr>
<td>09:07</td>
<td>Norman Shumway: a visionary and his dream</td>
</tr>
<tr>
<td></td>
<td>Paul Mohacsi via Skype (Ex-Stanford / Zurich, CH)</td>
</tr>
<tr>
<td>10:30</td>
<td>Coffee Break</td>
</tr>
<tr>
<td>10:45</td>
<td>Session MC: Alec Patterson (St.Louis, USA) / Dan Corder (Cape Town)</td>
</tr>
<tr>
<td>10:45</td>
<td>Willem Kolff, Robert Jarvik, Denton Cooley and beyond: The Artificial</td>
</tr>
<tr>
<td></td>
<td>Heart of Barney Clark</td>
</tr>
<tr>
<td></td>
<td>Georg Wieselthaler (San Francisco, USA)</td>
</tr>
<tr>
<td>10:57</td>
<td>Heart Transplantation vs. Mechanical Circulatory Support – is the Gold</td>
</tr>
<tr>
<td></td>
<td>Standard Changing?</td>
</tr>
<tr>
<td></td>
<td>Hermann Reichenspurner (Hamburg, GER)</td>
</tr>
<tr>
<td>11:09</td>
<td>The Return of DCD Hearts: Back to the Future</td>
</tr>
<tr>
<td></td>
<td>Kumud Dhital (Sydney, AUS)</td>
</tr>
<tr>
<td>11:21</td>
<td>Is the era of Transgenic Xenotransplantation dawning</td>
</tr>
<tr>
<td></td>
<td>Bruno Reichart (Munich, GER)</td>
</tr>
<tr>
<td>11:33</td>
<td>The bumpy road of immune-suppression</td>
</tr>
<tr>
<td></td>
<td>Howard J. Eisen (Philadelphia, USA)</td>
</tr>
<tr>
<td>11:45</td>
<td>HIV-positive donors, multi-organ recipients and beyond</td>
</tr>
<tr>
<td></td>
<td>Elini Muller (Cape Town, SA)</td>
</tr>
<tr>
<td>12:00</td>
<td>Finger Fork Lunch</td>
</tr>
<tr>
<td>12:45</td>
<td>Session MC: Friedhelm Beyersdorf (Freiburg GER)/ Dan Corder (Cape Town)</td>
</tr>
<tr>
<td>12:45</td>
<td>Robotic Heart Surgery: Has the Future begun (too early)?</td>
</tr>
<tr>
<td></td>
<td>Volkmar Falk (Berlin, GER)</td>
</tr>
<tr>
<td>12:57</td>
<td>Does one really need a Robot for Endoscopic Mitral Valve Repair?</td>
</tr>
<tr>
<td></td>
<td>Herrmann Reichenspurner (Hamburg, GER)</td>
</tr>
<tr>
<td>13:09</td>
<td>Andreas Grünzig: It started in Zurich...</td>
</tr>
<tr>
<td></td>
<td>Marko Turina (Zurich, CH)</td>
</tr>
<tr>
<td>13:21</td>
<td>The Idea of Heart Valve Replacement on a Wire</td>
</tr>
<tr>
<td></td>
<td>Henning-Rud Andersson on (Aarhus, Denmark)</td>
</tr>
<tr>
<td>13:33</td>
<td>The Odyssey of Trans-catheter Aortic Valve Replacement: from Concept</td>
</tr>
<tr>
<td></td>
<td>to Clinical Reality</td>
</tr>
<tr>
<td></td>
<td>Joseph Bavaria (Philadelphia/USA)</td>
</tr>
<tr>
<td>13:45</td>
<td>Against the Odds</td>
</tr>
<tr>
<td></td>
<td>Mike Mussallem (CEO Edwards, Irvine USA)</td>
</tr>
<tr>
<td>13:57</td>
<td>Breaking through Ceilings: Challenging the gold standard</td>
</tr>
<tr>
<td></td>
<td>Hendrik Treede</td>
</tr>
<tr>
<td>14:09</td>
<td>A Clip on the Mitral Valve: an unlikely beginning to the rapid rise of</td>
</tr>
<tr>
<td></td>
<td>transcathetermitral therapy</td>
</tr>
</tbody>
</table>
Sunday 3rd December

Ted Feldman (Evanston, USA)
14:21 New Mitral Chordae: Padova pioneers again
Gino Gerosa (Padova, Italy)
14:33 Trans-Catheter Mitral Valve Replacement:
Pioneering a Steep Mountain
George Lutter (Kiel, GER)
14:45 "Living" Trans-Catheter Valves
Simon Hoerstrup (Zurich, CH)

Coffee Break

15:30 - 16:00

16:00 - 17:25

Session MC: Bruno Reichart (Munich, GER)/Dan Corder (Cape Town)
16:00 The Dawn of Mitral Repair
Alain Carpentier (Paris, France)
16:12 Pioneering Rheumatic Mitral Repairs in Africa
Manuel Antunes (Coimbra, Portugal)
16:24 Pushing the boundaries of mitral repair in RHD
Taweesak Chotivatanapong (Nonthaburi, Thailand)
16:36 The vision of tackling tricuspid regurgitation
Norberto G. de Vega (Malaga, Spain)

Monday 4th December

Transplantation: 50 years on

(Groote Schuur Hospital Lecture Theatre 2)
(Host Society: European Society for Heart Lung Transplantation ESHLT)

08:30 - 10:40

Chairs: Hermann Reichenspurner (Hamburg) and Andreas Zuckermann (Vienna)
08:30 Recent Changes in Organ allocation in Europe Günter Lauffer (Vienna, AT)
08:50 Donation after Circulatory Death
Kumud Dhital (Sydney, AUS)
Invited Comment: David McGiffin (Melbourne, AUS)
09:20 Will there still be heart transplantation in 50 years? Andreas Zuckermann (Vienna, AT)

Coffee Break

10:40 - 11:00

Chairs: Hermann Reichenspurner (Hamburg) and Andreas Zuckermann (Vienna)
11:00 Heart Transplantation in patients with Chagas Disease
11:20 Immunosuppression: what have we learned?
Howard J Eisen (Philadelphia, USA)

09:40 Lung Transplantation: view of the surgeon
Alec Patterson (St.Louis, USA)
10:00 Lung Transplantation: view of the pulmonologist
Allan Glanville (Sydney, AUS)
10:20 Experience with Ex-Vivo Lung Perfusion
Walter Klepetko (Vienna/AT)

11:40 How I envision the Future of heart Transplantation
Bruno Reichart (Munich)
12:00 Combined Heart and Liver Transplantation:
Immunologic Benefits and the Challenge of the Sensitized Patient" Richard Daly (Rochester)
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>12:20 - 13:10</td>
<td><strong>Finger Fork Lunch</strong></td>
</tr>
</tbody>
</table>
| 13:10 - 14:55 | **ASSISTED CIRCULATION: The Past, the Present and the Future of Mechanical Circulatory Support**<br>**Host Society: International Society for Mechanical Circulatory Support, (ISMCS)**<br>**Chair: Georg M. Wieselthaler UCSF, USA**<br>**Minoru Ono, Japan**<br>**Participants:**<br>Bud Frazier, Texas Heart Institution, Houston, USA<br>Paul Jansz, St. Vincent's Hospital, Darlington, NSW, AUS<br>Simon Maltais, Mayo Clinic Rochester, USA<br>Christian Hagl, Ludwig-Maximilians-University, Munich, Germany<br>Stephan Schueler, Newcastle upon Tyne, UK<br>Ivan Netuka, Prague, Czech Republic<br>Uli Steinseifer, RTWH Aachen, Germany<br>Christian Hagl, Ludwig-Maximilians-University, Munich, Germany<br>Jim Schurmann, Medtronic Inc., USA<br>Minoru Ono, Tokyo Medical University, Japan<br>Willie Koen, Cape Town, RSA<br>Nir Uriel, University of Chicago, USA<br>Georg Wieselthaler, University of San Francisco, USA<br>Bojan Biocina, University of Zagreb, Croatia<br>James Kirklin, University of Alabama, Birmingham, USA<br>**13:10** Cardiopulmonary Resuscitation: Light at the end of the tunnel?<br>Friedhelm Beyersdorf (Freiburg / Germany)<br>**13:25** There is no Future without the Past – 50 years of Innovation at the THI<br>Howard O. Frazier (Texas Heart Institute, Houston, USA)<br>**13:40** Development of MCS Programs under the Pressure of the NHS<br>Stephan Schueler (Newcastle upon Tyne, UK)<br>**13:55** Mechanical Circulatory Support – Down Under<br>Paul Jansz (St Vincent Hosp, Darlington, AUS)<br>**14:10** MCS Development in Japan the Future Projections<br>Minoru Ono (Tokyo Medical University, JP)<br>**14:25** Miniaturized Pumps for Minimal Invasive Implantation<br>Simon Maltais (Mayo Clinic Rochester, USA)<br>**14:40** Assisted Circulation at the Tip of Africa<br>Willie Koen (Cape Town, SA)<br>**14:55 - 15:20** **Coffee Break**<br>**15:20** Neo-angiogenesis for LVAD patients<br>Nir Uriel (University of Chicago, USA)<br>**15:35** Current trends and concepts in hemocompatibility advancement in LVADs<br>Ivan Netuka (Prague, Czech Republic)<br>**15:50** The Perfect Pump: State of the Art and Future Trends in VAD Technologies<br>Ulrich Steinseifer (RTWH Aachen, Germany)<br>**16:05** Future Developments in LVAD Technology – The Industry Perspective<br>Jim Schurmann (Medtronic Inc., USA)<br>**16:20** Boon and bane of extracorporal life support (ECLS) in cardiogenic shock and resuscitation<br>Christian M. Hagl (Ludwig-Maximilians-University, Munich, Germany)<br>**16:35** Achievements and limits of temporary MCS : lessons learned from Croatian national ECLS network<br>Bojan Biocina (University of Zagreb, Croatia)<br>**16:50** Mechanical circulatory support: strategies and outcomes in pediatric congenital heart disease<br>James Kirklin (University of Alabama, Birmingham, USA)<br>**15:35 - 16:50** Sunday 3rd December
### Event Programme

**Chair** Georg M. Wieselthaler, UCSF, USA  
**15:35** The Perfect Pump: State of the Art and Future Trends in VAD Technologies  
Ulrich Steinseifer (RTWH Aachen, GER)  
**15:50** Future Developments in LVAD Technology – The Industry Perspective  
Jim Schurman (Medtronic Inc., USA)  

**16:05** Neo-Angiogenesis for LVAD patients  
Nir Uriel (Univ. of Chicago, USA)  
**16:20** Boon and Bane of Extracorporeal Life Support in Cardiac Shock and Resuscitation  
Christian Hagi (LMU Munich, GER)  
**16:35** Mechanical circulatory support: strategies and outcomes in pediatric congenital heart disease  
James Kirklin (Birmingham, Alabama USA)

---

### “ISACB 30 YEARS OLD: The era of Repair, Replacement and Regeneration”

**Groote Schuur Hospital, Lecture Theatre 1**

**Morning Session**  
**Pathologic Arterial Remodelling and Aneurysmal Degeneration - The interaction of Nature and Nurture**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
</table>
| 08:05 - 09:55 | Pathologic Arterial Remodeling and Bioengineering Solutions  
**Moderators:** Beat Walpoth, Toshi Shinoka, Tim Pennel  
08:05 - 08:25 Plenary  
Toshi Shinoka: History of Vascular Tissue Engineering Research and Long-term Clinical Results of Tissue Engineered Vascular Grafts  
08:25 - 08:55 Invited Speakers and Abstracts  
08:25 - 08:39 New Mechanisms for Macrophage Activation as Therapeutic Targets for Vascular Disease (Masanori Aikawa)  
08:39 - 08:53 Translational Models of PAD—a voyage or an important destination? (Luke Brewster)  
08:53 - 09:07 Novel Treatments for Cerebrovascular Aneurysms (Mike Wolf)  
09:07 - 09:21 Protein Sorting in Cardiovascular Calcification (Claudia Goettsch)  
09:21 - 09:35 Bioengineering Solutions for Vascular Tissue Engineering (Beat Walpoth)  
09:35 - 09:49 Molecular Remodeling Mechanisms in Carotid Atherosclerosis—lessons learned from carotid plaque biobanking Ulf Hedin  |

09:50 - 10:15 **Coffee Break**  
10:15 - 12:05
### Aneurysmal degeneration: The interaction of Nature and Nurture

**Moderators: David Vorp, John Curci**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:15-10:25</td>
<td>Plenary</td>
</tr>
<tr>
<td></td>
<td>Helena Kuivaniemi: Genetics of Aortic Aneurysms</td>
</tr>
<tr>
<td>10:35-11:50</td>
<td>Invited Speakers and Abstracts</td>
</tr>
<tr>
<td>10:35-10:50</td>
<td>The Unique Challenges of Developing Novel Therapies for Abdominal Aortic Aneurysms (John Curci)</td>
</tr>
<tr>
<td>10:50-11:05</td>
<td>Serum Amyloid A Exacerbates Acute Vascular Events by Activation of the NLRP3 Inflammasome (Fred De Beer)</td>
</tr>
<tr>
<td>11:05-11:20</td>
<td>Advanced Glycation End Products: Pathophysiologic Role and Therapeutic Target in Ascending Aortic Disease (Giovanni Ferrari)</td>
</tr>
<tr>
<td>11:20-11:35</td>
<td>Ultrasound Imaging and Hemodynamic Simulations of Murine Dissecting Aneurysms (Craig Goergen)</td>
</tr>
<tr>
<td>11:35-11:55</td>
<td>Aortic Aneurysm Biomechanics (David Vorp)</td>
</tr>
<tr>
<td>11:50-12:05</td>
<td>Round Table with Moderators and Speakers</td>
</tr>
</tbody>
</table>

**Afternoon Session**

**Cardiac and valve repair, remodeling and regeneration**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>13:00-15:05</td>
<td>Valves replacement and repair</td>
</tr>
<tr>
<td></td>
<td>Chairs: Dan Simionescu, Magdi Yacoub</td>
</tr>
<tr>
<td>13:00-13:20</td>
<td>Plenary Integrating heart valve biology into surgery</td>
</tr>
<tr>
<td></td>
<td>Magdi Yacoub</td>
</tr>
<tr>
<td>13:20-15:05</td>
<td>Invited Speakers and Abstracts</td>
</tr>
<tr>
<td>13:20-13:35</td>
<td>In Vitro Regeneration of Living Aortic and Pulmonary Valve Roots and Preclinical Testing (Dan Simionescu)</td>
</tr>
<tr>
<td>13:35-13:50</td>
<td>Calcific Aortic Valve Disease: From calcifying Exosomes to Systems Biology (Elena Aikawa)</td>
</tr>
<tr>
<td>13:50-14:05</td>
<td>Aortic Valve Repair Using Geometric Ring Annuloplasty (Teddy Fischlein)</td>
</tr>
<tr>
<td>14:05-14:20</td>
<td>Growing Heart Valves Inside the Heart: from immunomodulatory scaffolds to long-term follow-up (Carlijn Bouten)</td>
</tr>
<tr>
<td>14:20-14:35</td>
<td>A Role for Telomerase in Valvular Calcification (Cynthia St. Hilaire)</td>
</tr>
<tr>
<td>14:35-14:50</td>
<td>Tissue-engineered Matrices to Regenerate the Heart (Max Emmert)</td>
</tr>
<tr>
<td>14:05-15:05</td>
<td>Aortic Valve Melanocytic Cells Control Valvular Elastogenesis (Joshua Hutcheson)</td>
</tr>
</tbody>
</table>

**Coffee Break**

<table>
<thead>
<tr>
<th>Time</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>15:05-15:20</td>
<td></td>
</tr>
<tr>
<td>15:20-17:40</td>
<td></td>
</tr>
</tbody>
</table>
Tissue engineering and regeneration

Moderators: Simon Hoerstrup, Agneta Simionescu

15:20-15:40  Plenary
  Simon Hoerstrup: Translational Challenges in Cardiovascular Tissue Engineering

15:40-15:53  Invited Speakers and Abstracts
  Mitral Valve Tissue Engineering—a model for investigating valve degeneration
  (Agneta Simionescu)

15:53-16:06  30 Years of Endothelial Cell Transplantation on Vascular Grafts (Jo Meinhart)
16:06-16:19  Building Completely Biological, Human Tissue Engineered Blood Vessels (Nico L’Heureux)
16:19-16:32  Spinach Leaves for Regenerating Function in the Heart (Glenn Gaudette)
16:32-16:45  Cardiac Cell Repair Therapy: current status (Bernard Gersh)
16:45-16:58  Wrong models, wrong questions, no healing and still no change (Tim Pennel)
17:00-17:15  Round Table with Moderators and Speakers

17:15-18:30  “Translational challenges in endothelial cell seeding and related device concepts—lessons learned”

Discussion/round table - sponsored by the Industry Working Group of ISACB:

Moderators: David Williams and Mike Wolf
17:15-17:30  Cocktails / Break
17:30-17:35  Welcome and Introduction (Mike Wolf and DF Williams)
17:35-17:50  Lessons learned from Preclinical and Clinical External Saphenous Vein Stenting (Peter Zilla)
17:50-18:05  Lessons Learned from 2-Stage Human Clinical Endothelial Cell Seeding (Jo Meinhart)
18:05-18:20  Lessons Learned from a Preclinical 1-Stage Cell Seeding Concept (M Wolf)
18:20-18:30  Open discussion

19:30  Faculty Dinner: ON19 Restaurant -Rooftop: The Westin
Invited Faculty

IRAJ ABEDIAN (BA, MA, PH.D)

is one of South Africa’s most eminent economists. He currently serves as Executive Chairman and Chief Executive Officer of Pan-African Capital Holdings (PTY) Ltd. Dr. Abedian is an economist by training and has extensive business and research experience in South Africa. Since 1994, he has been involved in formulating macroeconomic policies. From 2000 to 2004, Dr. Abedian served as the Chief Economist and EXCO member of the Standard Bank Group of South Africa Limited. He was extensively involved in economic and financial policy as well as institutional restructuring of South Africa’s public policy after 1994. Dr. Abedian founded Pan-African Capital Holdings (PTY) Ltd. in 2005 along with Prof. Wiseman Nkuhlu and also serves as the Chief Executive Officer of its subsidiary companies.

ELENA AIKAWA

BOSTON, USA

Dr. Elena Aikawa is an Associate Professor of Medicine at Harvard Medical School and a Principle Investigator at the Center for Excellence in Vascular Biology, and Director of the Vascular Biology Program at the Center for Interdisciplinary Sciences at Brigham and Women’s Hospital, Boston, MA, USA. Dr. Aikawa has played a pioneering role in the discovery of inflammation-dependent mechanisms of calcification, and in advocacy for the early imaging and treatment of calcific aortic valve disease. Her current research aim is to develop new therapies to cure calcific aortic valve stenosis, a disease that currently has no treatment except surgical valve replacement. Dr. Aikawa is a member of the National Heart, Lung, and Blood Institute (NHIBI) Working Group on Calcific Aortic Valve Stenosis and the Alliance of Investigators on Calcific Aortic Valve Disease. She is an Editorial Board Member of Arteriosclerosis, Thrombosis and Vascular Biology, PLoS ONE, Journal of Extracellular Vesicles, and Circulation Research. Dr. Aikawa has delivered over 100 keynote lectures, invited talks and cardiovascular grand rounds, and authored more than 150 manuscripts on cardiovascular pathobiology.

HENNING-RUD ANDERSSON

AARHUS UNIVERSITY HOSPITAL, DENMARK

Since 1995, Henning Rud Andersen has been a specialist in cardiology. Henning Rud Andersen is employed as a chief physician at the Department of Cardiology B at Aarhus University Hospital in charge of ischemic research and animal experiments. Henning Rud Andersen is a Danish pioneer in the early development of artificial heart valves, and in 2009 he received the Hartmann Award for his contribution to Danish heart research. Henning Rud Andersen is involved in numerous research projects and is also active as a supervisor for students and PhD students. He has been a clinical associate professor at AU for several years, where he is involved in teaching medical students and has also instructed junior doctors for a number of years.

MANUEL ANTUNES

UNIVERSITY HOSPITAL, PORTUGAL

Manuel Antunes is Full Professor at the University of Coimbra; Director of the Department of Cardiothoracic Surgery and Transplantation of Thoracic Organs of the Hospital and University Center of Coimbra; Deputy Director of the Portuguese Journal of Cardiology; Associate Editor of the Brazilian Journal of Cardiovascular Surgery; Board of the Journal of Thoracic and Cardiovascular Surgery; Fellow European Society of Cardiology and of the American College of Cardiology; Honorary President of the Portuguese Society of Cardiology; President of the National Academy of Medicine of Portugal; Author of more than 350 scientific papers published in indexed scientific journals (more than 10K citations) and more than 950 presentations in congresses and other scientific meetings. Interests include: Valve Surgery, Mitral Valvuloplasty, Rheumatic Valve Disease, Cardiac Transplantation, Coronary Artery Surgery under VF, Congenital Heart Surgery, Health Care, Policy/Management

JOSEPH BAVARIA

UNIVERSITY OF PENNSYLVANIA, USA

Dr. Joseph Bavaria is a thoracic and cardiac surgeon in Philadelphia, Pennsylvania and is affiliated with multiple hospitals in the area, including Hospitals of the University of Pennsylvania-Penn Presbyterian and Penn Medicine Chester County Hospital. He received his medical degree from Tulane University School of Medicine and has been in practice for more than 20 years. Dr. Bavaria accepts several types of health insurance, listed below. He is one of 40 doctors at Hospitals of the University of Pennsylvania-Penn Presbyterian and one of 10 at Penn Medicine Chester County Hospital who specialize in Thoracic & Cardiac Surgery.
SOLLY BENATAR  
UCT, SOUTH AFRICA
Solomon (Solly) Benatar is Emeritus Professor of Medicine at the University of Cape Town, and Distinguished Senior Scholar at the University of Toronto’s Dalla Lana School of Public Health. He started his career as a GP, then trained in Anaesthetics and Internal Medicine. He was HOD Medicine at UCT and Groote Schuur Hospital for 19 years and Founding Director of the UCT Bioethics Centre for 20 years. He has held many professional positions and has been a visiting Professor at medical schools globally. Since 2000 he has been an annually invited scholar, teacher and mentor at the University of Toronto. He is an elected Foreign Member of the US National Academy of Medicine and of the American Academy of Arts and Sciences. His awards include the Hastings Center’s Henry Knowles Beecher Award in 2011 in recognition of lifetime contributions to ethics and the life sciences and a career devoted to excellence in scholarship, research, and ethical inquiry. His academic interests have included respiratory medicine, health services, human rights, academic boycott, medical ethics and global health on which he has published widely. Global Health and Global Health Ethics, co-edited with Gillian Brock, a New Zealand philosopher, was published by Cambridge University Press in 2011.

FRIEDHELM BEYERSDORF  
HEART CENTER FREIBURG UNIVERSITY, GERMANY
Friedhelm Beyersdorf is Professor of Surgery and Chairman of the Department of Cardiovascular Surgery at the Heart Center Freiburg University since 1994. He has performed the first combined heart lung transplantation in the county of Baden-Wuerttemberg in Germany and has started a large heart transplant program (including pediatric transplantation) and mechanical assist program (including total artificial heart implantation). He is the Editor-in- Chief of the EJCTS and ICVTS since 2010. He served as the President of the German Society for Thoracic and Cardiovascular Surgery from 2009 to 2011 and has published more than 250 original articles and has received the “Professor honoris causa” in 2000 from the Manilia University in Brasil and the “Doctor honoris causa” from the State University in Laos in 2008. He was the principal investigator of many national and international studies and received numerous national and international awards.

RICHARD BIANCO  
UNIVERSITY OF MINNESOTA, USA
Richard Bianco is the Director of Experimental Surgery at the University of Minnesota, where he held a number of roles, including Senior Member of Graduate School Faculty (Biological Sciences), Director (Cardiovascular Surgical Research Laboratories) and Deputy Vice Chair for Research (Department of Surgery). He is Professor of Surgery and Adjunct Associate Professor of Veterinary Population Medicine and Fellow of the American Institute for Medical and Biological Engineering (AIMBE). Throughout his career, Bianco has held memberships and offices in 19 professional societies and is still actively involved in 16 of them, including The American Heart Association (AHA) and the Heart Valve Society of America. He was Chair of the International Medical Devices Society from 2010 to 2012 and in 2012 he received the Director’s Award from the Institute for Engineering in Medicine. Bianco also received six Federal Grants including one for the project: ‘Completely Bioengineered Tissue Valve’. He has 97 peer-reviewed publications to his name, alongside over 55 presentations and abstracts, and he is active on a number of committees including International Standards Cardiac Valve Committee, the Journal of Heart Valve Disease Scientific Advisory Board, and co-chairman of the Vascular Prosthesis Working Group.

BOJAN BIOCINA  
UNIVERSITY HOSPITAL CENTRE ZAGREB, CROATIA
School of Medicine , University of Zagreb 1981 General Surgery- University Hospital Center Zagreb 1986-1991 Cardio-thoracic Surgery. Papworth Hospital , Cambridge , UK 1991-1992 Cardiac Surgeon , University Hospital Center Zagreb 1992-1995 Cardiac Surgeon , University Hospital Dubrava Zagreb & co-founder of the 2nd cardiac surgery center in Croatia 1995-2008 Head of the Department of Cardiac Surgery , University Hospital Center Zagreb, 2008- Associate Professor , Health Polytechnics Zagreb 2002 Professor, Health Polytechnics Zagreb , 2007 Associate Professor , School of Medicine , University of Zagreb 2010 Fields of interest: heart failure surgery , HTx&VAD , mitral and aortic valve repair , homografts Professional achievements : member of the first MCS-ECMO team in the region ( 1987) , member of the first Htx team in the region ( 1988) , founder of the comprehensive MCS programme in Croatia (2008)and facilitator of HTx and MCS programmes in several neighbouring countries ( Serbia , Romania , Montenegro , Macedonia etc.) , founder of the first cardiovascular tissue bank in Croatia and in the region ( 2010).
RALPH MORTON BOLMAN III  
UNIVERSITY OF VERMONT, USA

Dr. Bolman is a fourth generation physician who traces his roots to the Midwest. Following completion of his formal training, Dr. Bolman remained at the University of Minnesota as Assistant Professor of Surgery. He was placed in charge of the new heart transplant program. In 1984, Dr. Bolman was recruited to Washington University, St. Louis and Barnes Hospital to initiate a heart transplant program at that institution. Over the next four years, his team performed more than 100 heart transplants. In addition, he performed the first heart-lung and lung transplant at that center. Dr. Bolman returned to the University of Minnesota in 1989 as Chief of the Division of Cardiovascular and Thoracic Surgery in the Department of Surgery. He was named the first recipient of the C. Walton and Richard C. Lillehei Professorship in Cardiovascular and Thoracic Surgery in 1989. Dr. Bolman then served as Professor of Surgery at Harvard Medical School and Chief of the Division of Cardiac Surgery at the Brigham and Women's Hospital in Boston from 2005-2013. Dr. Bolman has been active on the national scene in transplantation and thoracic surgery. He served on the heart transplant committee and as the first thoracic transplant representative on the Board of the United Network of Organ Sharing. He served for 6 years on the Residency Review Committee of the ACGME for Thoracic Surgery from 2005-2011. He served as the Chair of the Education Committee of the American Association for Thoracic Surgery from 2007-2011. He was a Councillor of the AATS from 2009-2011. While in Boston, Dr. Bolman and his wife, Ceeya Patton-Bolman, co-founded Team Heart Rwanda. This is a 501-C3 non-profit organization formed in 2006 to address the need for cardiac surgery services for the population of Rwanda, an East African country of 12 million people which lacks any sustainable cardiac surgery. Team Heart has traveled to Rwanda on an annual basis every year between 2008 and 2017 to perform cardiac surgery on the vulnerable population. Since July, 2015, Dr. Bolman is a Professor of Surgery in the Division of Cardio-Thoracic Surgery at the University of Vermont.

FRANCOIS BONICI  
UNIVERSITY OF CAPE TOWN, SOUTH AFRICA

François Bonnici is Director of the newly established Bertha Centre for Social Innovation & Entrepreneurship at the University of Cape Town’s Graduate School of Business. Originally trained as a physician in South Africa, Dr. François also read for a Masters degree in Public Health (London) and a MBA (Oxford) as a Rhodes Scholar. He has worked in paediatric clinical medicine, in humanitarian and development programmes. As a Global Leadership Fellow of the World Economic Forum, he worked on developing public-private partnerships and innovations for development, later heading up the Forum’s own Schwab Foundation work in social entrepreneurship in Africa and the Middle East. He cofounded the African Social Entrepreneurs Network and with colleagues has established an award winning social enterprise building low-cost medical devices for low-resource settings.

CARLIJN BOUTEN  
EINDHOVEN UNIVERSITY OF TECHNOLOGY, THE NETHERLANDS

Carlijn Bouten is professor of Cell-Matrix Interactions at the department Biomedical Engineering of the Eindhoven University of Technology (TU/e). She was trained in functional anatomy and biomechanics, as well as exercise physiology, at the department of Human Movement Sciences, VU Amsterdam (MSc 1991), and obtained her PhD degree in 1995 from the TU/e. She performed postdoctoral research at the Université Laval (Quebec), University of London, and Eindhoven University of Technology. In 1998 she became assistant professor in Cellular Biomechanics in the department of Mechanical Engineering, TU/e, and in 2002 she became associate professor of Tissue Engineering in the department of Biomedical Engineering, TU/e. Her current research focuses on cell-matrix interactions in cardiovascular tissues, with special emphasis on regulating growth, differentiation, adaptation and remodeling. She uses ‘living’ model systems at different length scales (cell, cell-matrix, engineered tissue, native tissue) to quantify these aspects, preferably in real-time. In 2002 she was awarded by the NWO-Aspasia program and in 2003 she received a NWO-Vici grant for her research on skeletal muscle and heart valve tissue engineering, respectively. Professor Bouten leads the national gravitation program Materials-Driven Regeneration. Since 2017 she is elected member of the Royal Netherlands Academy of Arts and Sciences.
ABDELMALEK BOUZID
FACULTY OF MEDICINE, CONSTANTINE, ALGERIA

LUKE BREWSTER
EMORY UNIVERSITY, USA
Dr. Brewster graduated from the Saint Louis University School of Medicine in 2001. He works in Atlanta, GA and specializes in Vascular Surgery. Dr. Brewster's clinical practice is focused on general vascular surgery with a clinical research interest in the use of ultrasound to diagnose and treat vascular disease, the patient and surgeon perspective in surgical decision-making, selection and outcomes of carotid artery stenosis therapy, and optimal therapy for limb salvage. His lab is investigating the role of arterial stiffness in arterial remodeling after interventions and the regenerative opportunities of biologic therapies in patients with cardiovascular disease. Through his joint affiliations with the Atlanta Clinical and Translational Science Institute, Emory and the Georgia Institute of Technology's Coulter Department of Biomedical Engineering, and GA Tech's Petit Institute for Bioengineering and Bioscience, Dr. Brewster has access to an exceptional pool of collaborators. Dr. Brewster’s current studies include an NIH-NHLBI funded examination of the molecular mechanisms involved in arterial stiffening through blood flow and arterial wall changes, and a DoD funded study of Raman spectroscopy and 3D imaging as decision support tools in the assessment of neuronal fibrosis and sarcopenia in veterans and combat casualty amputees.

JOHAN BRINK
UNIVERSITY OF CAPE TOWN, SOUTH AFRICA
Assoc. Prof Johan Brink obtained his academic qualifications and undergraduate and postgraduate training from the University of Cape Town and his clinical and specialist qualifications from the College of Medicine of South Africa. He commenced his training in Cardiothoracic Surgery at Barnes Hospital at Washington University in St Louis, Missouri USA in 1982 and completed his training at Groote Schuur (GSH) and Red Cross Children's (RXH) Hospitals at the University of Cape Town under Christiaan Barnard and his successors from1984 to 1988 when he was awarded the Fellowship in Cardiothoracic Surgery of the Colleges of Medicine of South Africa. He was then appointed as Specialist Cardiothoracic Surgeon in the Christiaan Barnard Department of Cardiothoracic Surgery. He has developed special interests in the following fields of cardiothoracic surgery: Thoracic organ transplantation; off-pump coronary artery bypass surgery; aortic and mitral valve repair; thoracic aortic surgery; arrhythmia surgery; adult and paediatric congenital heart disease; pulmonary thrombo-endarterectomy; HOCM surgery; minimally invasive cardiac surgery. He has also played a supportive and advocacy role in the Cardiovascular Research Unit at the University of Cape Town under Prof Peter Zilla. He was convener of the 2008 South African Heart Association congress with a record number of over 1300 delegates. Since 1993 Prof. Brink has been the Director of Heart Transplantation within the Chris Barnard Division and in 1999 was acting Head of Department during the sabbatical of the then-Head. After having been short-listed for the Chris Barnard Chair of Cardiothoracic Surgery at the University of Cape Town Prof Brink was appointed Director of Clinical Services in the Chris Barnard Division of Cardiothoracic Surgery for its associated academic hospitals, Groote Schuur, Red Cross Children's, and UCT Private Academic Hospitals. In 2003 he was awarded Associate Professorship by UCT. Over the last 15 years Prof. Brink has held many prestigious positions such as that of President of the South African Transplantation Society; President of the South African Society of Cardiothoracic Surgeons as well as President and Senator of the College of Cardiothoracic Surgery within the Colleges of Medicine of South Africa.

ALAIN CARPENTIER
ROUEN, FRANCE
Alain Frédéric Carpentier M.D. Ph.D. (born 11 August 1933 in Toulouse, Haute-Garonne) is a French surgeon whom the President of the American Association for Thoracic Surgery calls the father of modern mitral valve repair. He is the recipient of the 2007 Lasker Prize. He received his MD from the University of Paris in 1966 and his PhD from the same university in 1975. A professor emeritus at Pierre and Marie Curie University, in the 1980s Carpentier published a landmark paper on mitral valve repair entitled The French Correction. A visiting professor at Mount Sinai School of Medicine in New York City, he currently heads the Department of Cardiovascular Surgery at the Hôpital Européen Georges-Pom-
pidou in Paris. In 1986, he and Gilles Dreyfus performed the first artificial heart implant in Europe. Carpentier is a member of the French Academy of Sciences and sits on the Board of Directors of the World Heart Foundation. The recipient of numerous awards, including the 1996 Prix mondial Cino Del Duca, in 2005 the American Association for Thoracic Surgery (AATS) bestowed its Medallion for Scientific Achievement for only the fifth time in its history. In announcing Carpentier as the recipient, the AATS also noted that he is “one of the foremost medical philanthropists in the world, having established a premier cardiac center in Vietnam a decade ago where over 1,000 open-heart cases are now performed annually. In addition, he has founded cardiac surgery programs in 17 French-speaking countries in Africa.” In October 2001 he received an Honorary Doctor of Medicine and Surgery degree from University of Pavia. In 2006, Carpentier received considerable media attention in the United States as the surgeon who performed an emergency mitral valve repair procedure on Charlie Rose when the PBS television interviewer fell ill while en route to Damascus to interview Syrian President Bashar al-Assad. Writer Adam Gopnik, who authored a book about his five years living in Paris and is a personal friend of Charlie Rose, called Carpentier the most famous surgeon in France. In 2008, Carpentier announced a fully implantable artificial heart will be ready for clinical trial by 2011, and for alternative to transplant in 2013. It was developed and will be manufactured by him, Biomedical firm Carmat, and venture capital firm Truffle. The prototype uses electronic sensors and is made from chemically treated animal tissues, called “biomaterials,” or a “pseudo-skin” of biosynthetic, microporous materials, amid another US team’s prototype called 2005 MagScrew Total Artificial Heart, and Japan and South Korea researchers are racing to produce similar projects.[3][4] The first clinical trial are under process since 2013. From 2009 to 2012, Carpentier was vice-president and then president of the French Academy of Sciences.

SYLVAIN CHAUVAUD
HÔPITAL EUROPÉEN GEORGES POMPIDOU, FRANCE

TAWEESAK CHOTIVATANAPONG
BANGKOK HEART HOSPITAL, THAILAND

Dr. Taweesak Chotivatanapong is now The Chairman of International Academic Institute Program and Senior Consultant at Central Chest Institute of Thailand. He is now also serving as a PCU Director of Cardiovascular Surgery of Bangkok Heart Central Hospital, BDMS Hospital Network , Bangkok, Thailand. Currently he is The President of the Society of Thoracic Surgeons of Thailand . He is a councillor member of the ASCVST and International Fellow Member of STS and ANZSTCS. During last several years he set up Heart Care Foundation that he serves as the President of the foundation. The main activities of this foundation are to provide operations for valvular heart patients in the long waiting list and training for young surgeons under " Train The Trainer" program throughout Thailand and the region. Several Center Of Excellences for valve repair are now successfully established under this program. His main practice is in adult cardiac surgery. He has special interest in mitral valve repair especially for rheumatic valve. During last several years , he has developed many innovative approaches and techniques that expands the boundary of rheumatic valve repair to all spectrum of the disease with gratifying results.

DAVID CHUNG
NEOCORD INC, USA

Mr. Chung has over twenty-five years of hospital-focused, global medical device and pharmaceutical leadership, most recently serving in the role as Chief Commercial Officer for AcelRx Pharmaceuticals. Prior to AcelRx, Mr. Chung served as Chief Commercial Officer for Conceptus (Bayer), where he oversaw the strategic and day-to-day leadership for a 150-member global sales and marketing team. Prior to Conceptus, Mr. Chung served as President and CEO of Mitralis, an early-stage mitral valve repair company. He previously held roles of Vice President North America Sales and Marketing, and Global Vice President, Commercial Operations, for the Heart Valve Therapy business at Edwards Life sciences. Mr. Chung began his career in the commercial organization at Pfizer Pharmaceuticals. Mr. Chung also served as a PATRIOT missile officer in the U.S. Army, with multiple distinctions, including Airborne, Desert Storm Veteran and Bronze Star Medal. He received his Bachelor of Science degree from the United States Military Academy at West Point.

DAVID COOPER
UNIVERSITY OF ALABAMA AT BIRMINGHAM, USA

David Cooper studied medicine in the UK at Guy’s Hospital Medical School (now part of King’s College London), and trained in general and cardiothoracic surgery in Cambridge and London. Between 1972 and 1980, he was a Fellow and Director of Studies in Medical Sciences at Magdalene College, Cambridge. In 1980 he took up an appointment
in cardiac surgery at the University of Cape Town where, under Professor Christiaan Barnard, he had responsibility for patients undergoing heart transplantation. In 1987, he relocated to the Oklahoma Transplantation Institute in the USA where he continued to work in both the clinical and research fields. After 17 years as a surgeon-scientist, he decided to concentrate on research, initially at the Massachusetts General Hospital/Harvard Medical School in Boston, and subsequently at the University of Pittsburgh, and now at UAB (since 2016). His major interest is in developing cross-species transplantation with the aim of using pigs as sources of organs, cells, and corneas for transplantation in humans. Professor Cooper has published 850 medical and scientific papers and chapters, has authored or edited 11 books, has given more than 300 invited presentations worldwide, and received numerous awards for his work.

**DAN CORDER**  
GOODHOPE FM, SOUTH AFRICA

Beyond his studies, he became the record holder for being on half of the best performing debating team representing an African Institution at the World Universities Debating Championship, a tournament which assembles hundreds of the best teams and thousands of the best debaters from around the world. He was also reigning African champion for 2013-2014, and the 3rd best speaker in Africa in 2014. A campaign he launched through his show on Good Hope FM was nominated and shortlisted for Best Radio Innovation 2017. The campaign is named Finding The Hype, and provides unknown and unsigned musicians with great songs the opportunity to assisted in registering with legal music bodies and mix and mastering their music for radio. Then, their music is given its radio debut on the show and they are interviewed. The campaign mechanic cuts through the bureaucratic tape that prevents many musicians from getting opportunities to have their music played on the radio. Many artists who got their radio debuts through the campaign have since launched very successful careers.

**JOHN CURCI**  
VANDERBILT UNIVERSITY MEDICAL CENTER, USA

Dr. John Curci is Associate Professor of Surgery at Vanderbilt University Medical Center and the Chief of Vascular Surgery of the Tennessee Valley Healthcare System. He is a Fellow of the American College of Surgeons (FACS) and the American Heart Association (FAHA). He is a member of the Alpha Omega Alpha Honor Medical Society. He is currently serving as the Chair of the SVS Foundation Development Committee. Dr. Curci’s primary research interest is in the biology of the abdominal aortic aneurysm. Specifically his laboratory work is focused on the changes that occur in the smooth muscle cells of the aortic wall that predispose to aortic wall failure. His lab activities also include interest in the enzymes that modify the structural elements of the aortic wall. He is a Principal Investigator of the on-going multicenter, randomized trial in the US, N-TA3CT. This trial evaluates the effect of stabilizing the aortic wall structural strength through pharmacologic inhibition of the enzymatic activity in the aneurysm wall. Secondary research and interests include the inflammation that results in atherosclerotic disease and the recovery of patients after lower extremity amputation.

**RICHARD DALY**  
MAYO CLINIC, ROCHESTER, USA

Richard (Rocky) Daly, M.D. is a consultant in the Department of Cardiovascular Surgery at Mayo Clinic in Rochester, Minnesota, and holds the academic rank of Professor of Surgery, Mayo Clinic College of Medicine and Science. He is Surgical Director of the Heart and Lung Transplant Programs and holds a joint appointment in the Division of Transplantation Surgery, Department of Surgery. Dr. Daly earned his M.D. at Mayo Clinic School of Medicine. He completed an internship at Hennepin County Medical Center, followed by a residency in general surgery and fellowship in Thoracic and Cardiovascular Surgery at Mayo Clinic. He completed a fellowship in cardiopulmonary transplantation at National Heart and Lung Institute and Harefield Hospital in London, U.K., with Professor Sir Magdi Yacoub. Dr. Daly has received many awards and honors, including the Translational Research Award; the Socrates Award, conferred by the Thoracic Surgery Residents Association; and the Alumni Achievement Award, conferred by Normandale College. He is also recognized with the Mayo Clinic Distinguished Clinician Award. He currently serves on the Clinical Advisory Board and as chair of the Thoracic Surgery Committee for the Upper Midwest Organ Procurement Organization. He is the Region 7 representative to the national Thoracic Committee of the United Network for Organ Sharing.
FREDERICK DE BEER
UNIVERSITY OF KENTUCKY - UK HEALTHCARE, USA
Dr. Frederick C. de Beer, University of Kentucky faculty member and chair of the Department of Internal Medicine, dean of the College of Medicine. De Beer received his medical degree from the University of Pretoria, South Africa, with postgraduate education at the Royal Postgraduate Medical School in London. Before coming to the United States in 1989, he was a professor of medicine at the University of Stellenbosch in South Africa.

NORBERTO DE VEGA
SAINT ELANA CLINIC, SPAIN
Staff surgeon at the Department of Cardiovascular Surgery. Jimenez Díaz Foundation, Madrid, Spain. (1970-1980). Head of the Department of Cardiovascular Surgery at Carlos Haya Regional Hospital and Santa Elena Clinic. Málaga, Spain (1980-2010). In 1972 “La anuloplastia tricúspide selectiva, regulable y permanente”, published in the Spanish Journal of Cardiology was globally accepted and renamed by others as “The De Vega tricuspid annuloplasty” as the technique of choice to repair the tricuspid valve. In 1982, he performed the first pulmonary valvotomy with the aid of an angioplasty catheter on a premature newborn. The technique and its result on three patients was published in the same journal. He has been invited to do surgery and to lecture about his approach on the treatment and prevention of tricuspid regurgitation in different centres in Germany, France, U.K., India, China, Australia, South Africa, USA, Canada, Russia, Ghana and Taiwan. He was one of the first surgeons to land in Cape Town in December 1967. Nowadays he misses the times when medicine and surgery could be practiced without the the burden of bureaucracy and financial profit present today.

KUMUD DHITAL
ST VINCENT’S HOSPITAL SYDNEY, AUSTRALIA
Dr Dhital qualified in medicine at the University of Oxford with Cardiothoracic surgical training in the UK at various institutions including the Brompton and Guy’s & St Thomas’ Hospitals in London, John Radcliffe Hospital in Oxford before a transplant fellowship at Papworth Hospital, Cambridge. He was a consultant cardiothoracic and transplant surgeon there prior to moving to a similar position at St Vincent’s Hospital, Sydney, Australia in 2009. Dr Dhital is an Associate Professor of Surgery at the University of New Wales and on the Faculty at the Victor Chang Cardiac Research Institute (VCCRI). Together with Prof Peter Macdonald, the Director of Heart Transplantation, and with close collaboration between St Vincent’s Hospital and the VCCRI, they developed the donation after circulatory death (DCD) heart transplant program. In July 2014, Prof Dhital performed the world’s first heart transplant with a distantly procured DCD heart which was reanimated on an extra-corporeal perfusion device for transport and assessment. He is the lead surgeon for the St Vincent’s Hospital’s DCD heart transplant program which to date has performed 17 successful transplants from this donation pathway in Sydney.

HOWARD J. EISEN
DREXEL UNIVERSITY COLLEGE OF MEDICINE, USA
Howard J. Eisen, MD was born in Queens, New York and was graduated with an AB degree cum laude with distinction in all subjects and Phi Beta Kappa from the Cornell University College of Arts and Sciences in 1977. He received his MD from the University of Pennsylvania School of Medicine in 1981 and was elected to Alpha Omega Alpha. He did his Internal Medicine residency at the Hospital of the University of Pennsylvania. He then did his Cardiovascular Fellowship at Washington University in St. Louis/Barnes Hospital and completed this training in 1987. He was then an Assistant Professor of Medicine and Medical Co-Director of the Cardiac Transplant Program at the University of Pennsylvania. In 1993, he moved to the Temple University School of Medicine to be Medical Director of the Heart Failure and Cardiac Transplant Program which became one of the largest in the country. He rose to the rank of Professor of Medicine and Physiology at Temple. In 2005, Dr.Eisen was appointed Thomas J. Vischer Professor of Medicine and Chief of the Division of Cardiology at the Drexel University College of Medicine and Hahnemann University Hospital. He subsequently also was installed as the Joseph DiPalma MD Famaily Professor of Cardiology. Dr. Eisen is an Associate Editor of the American Journal of Transplantation and Transplantation and a Deputy editor the Journal of Clinical Transplantation. He is on the Editorial Board of the Journal of the American College of Cardiology Heart Failure, the Journal of Heart and Lung Transplantation and the Journal of Cardiac Failure. Dr. Eisen has led several clinical trials in cardiac transplant recipients.
including the everolimus clinical trials and has been involved in the development of gene expression profiling in cardiac transplant patients. He has chaired AHA research study sections and has been a member of NIH study sections. Dr. Eisen's research has been funded by the American Heart Association of which he was an Established Investigator, the NIH and industry.

**MAXIMILIAN EMMERT, MD, PHD**
UNIVERSITY HOSPITAL ZURICH, SWITZERLAND

Maximilian Emmert is a professor for Cardiac Surgery at the University and the University Hospital Zurich, Switzerland. He is a consultant cardiac surgeon at the University Heart Center Zurich, Switzerland with the main clinical interest on heart valves, CABG and surgical Left Atrial Appendage management. Besides that, he holds a PhD in Biomedical Engineering from the Technical University Eindhoven, The Netherlands and has extensive experience in basic, preclinical and translational research with a main focus on regenerative medicine including stem cell therapy, cardiovascular tissue engineering and 3D organoid bioengineering technologies for organ preservation, repair and regeneration. His research includes the development of a 3D bioengineering microtissue platform for advanced organ preservation and regeneration as well as the development of clinically-relevant platforms for next-generation tissue engineered and matrix-based cardiovascular replacements. One example is the LifeMatrix Program at the Wyss Translational Center @ UZH and ETH Zurich, where he serves as a Project Leader and is currently advancing this technology platform into clinical translation. Maximilian Emmert has published more than 150 scientific articles in high-ranking, international scientific journals. He has received numerous awards for his research such as the prestigious Pfizer Prize from the Pfizer Research Foundation, Switzerland or the renowned Siegenthaler Award from the University of Zurich where he was named as the distinguished translational researcher 2016 for his scientific achievements in the field of translational cardiovascular regenerative medicine. Maximilian Emmert is also a lecturer at the University of Zurich and serves as a board member and reviewer for numerous international peer-reviewed scientific journals. He is also a member of numerous cardiovascular societies and he holds an active chair in Adult Domain of the European Association for Cardio Thoracic Surgery (EACTS). Before moving to the University Hospital Zurich for cardiac surgery specialty training in 2008, Maximilian Emmert obtained basic medical training at the Universities of Hamburg and Hannover, Germany, as well as at the prestigious King’s and Imperial College London, UK and at the University Hospitals in Sydney and Singapore.

**GIUSEPPE FAGGIAN**
UNIVERSITY OF VERONA MEDICAL SCHOOL, ITALY

Prof. Dr. Giuseppe Faggian (born 1952 in Padua -ITALY) is an Italian cardiac surgeon who has made important scientific and surgical contributions in the fields of aortic surgery, heart transplantation and mechanical circulatory support. He is Professor of Cardiovascular Surgery and Chief of the Department Cardiovascular and Thoracic Surgery of the University of Verona Medical School. He received his MD from University of Padua Medical School in 1979, with an M.D. thesis made at Harvard University in Boston, under the guidance of Dr. Aldo Castaneda and Dr. Richard Van Praagh. He completed cardiothoracic surgery residencies at Royal Children’s Hospital in Melbourne Australia and pursued additional training at Boston Children’s Hospital and Stanford University Medical School. Scientific work: Prof. Dr. Faggian and his colleagues developed a multi-institutional collaborative outcomes research in adult heart surgery with more than 300 publications in peer review journal. Prof. Dr. Faggian and Prof. V.Gallucci established the Cardiac Transplantation program in 1985 with the first heart transplantation in Italy, done in the same year. Prof. Dr Faggian is an active member of many scientific Society i.e.: AATS, STS, EACTS, ISHLT, ESAO

**VOLKMAR FALK**
GERMAN HEART CENTER BERLIN, GERMANY

Professor Volkmar Falk, MD, is the Medical Director and Director of the Department of Cardiothoracic and Vascular Surgery at the German Heart Center Berlin and the department of Cardiovascular Surgery at the Charité. He is an expert in adult cardiac and minimally invasive cardiac surgery especially in the field of reconstructive valve surgery. As an author and co-author, he has been involved in more than 450 scientific publications and has been involved in several national and European guidelines, which have significantly impacted the standards of care for coronary revascularization, treatment of valve disease and heart failure. His current research interests include image-guided therapy to optimize catheter-based valve interventions and the development of new artificial heart systems with a focus on biocompatible solutions.
TED FELDMAN  
EVASTON HOSPITAL, USA

Dr. Feldman received his undergraduate and medical training at Indiana University, completing residency as Chief Resident at Rush-Presbyterian-St. Luke’s Medical Center, Chicago, Illinois. After finishing his Cardiology Fellowship at the University of Chicago, he remained there as Professor of Medicine and Director of the Cardiac Catheterization Laboratory. He currently practices at Evanston Hospital, where he is Director of the Cardiac Catheterization Laboratory, holds the Walgreen Chair in Interventional Cardiology, and is Professor of Clinical Medicine at University of Chicago Medical School. He has authored over 600 manuscripts, chapters, abstracts, and editorials and edited or co-edited several books. He is a Percutaneous Coronary Intervention Guideline co-author and has served on the American Board of Internal Medicine Interventional Cardiology test writing committee. Chicago Magazine has repeatedly named him among Chicago’s Top Doctors. Dr. Feldman is a past-President of the Society of Cardiovascular Angiography & Interventions (SCAI), and chaired the Annual Scientific Sessions of the Society, as well as the American College of Cardiology Annual Meeting Interventional Sessions. He is an active interventional practitioner and performs hundreds of catheter procedures every year and is a Master Fellow the SCAI. He has been the national principal investigator of the EVERESTI and II MitraClip trials, REPRISE III TAVR trial, and CorVia REDUCE LAP trial. He participates in numerous clinical investigations, with major research interests that include non-surgical, percutaneous repair and replacement of the mitral valve, catheter based aortic valve replacement, device closure for paravalvular leak and congenital heart disease, left atrial appendage closure, and development of novel catheter devices.

GIOVANNI FERRARI  
COLUMBIA UNIVERSITY, USA

Dr Ferrari is a group leader and Associate Professor at Columbia University, Dept. of Surgery. He is the Scientific Director of the Cardiothoracic Research Program and Director of the Columbia Biobank for Translational Science, an applied biobank supporting translational and precision medicine initiatives. Heart valve and vascular cell physiology, cardiac biomechanics, and the brain-heart axis are his main interests. He is Adjunct Associate Professor at University of Pennsylvania, Dept of Surgery.

TEDDY FISCHLEIN  
KLINIKUM NUERNBERG, GERMANY

University of Vienna, Medical School (M.D. 1985)  
University of Vienna, General Hospital Wels and Salzburg, General Surgery Residency (1985-1991)  
University of Munich Cardiothoracic Residency and Consultant (1991-1997)  
Professor of Cardiac Surgery, University of Erlangen-Nürnberg (since 2000)  
Head of Department Cardiac Surgery - Klinikum Nürnberg, Paracelsus Medical University (since 2007)

ROBERT FRATER  
MONTEFIORE MEDICAL CENTER, USA

Dr R W M Frater graduated with Honors from the University of Cape Town. Postgraduate studies were pursued at the Council for Scientific Research in S Africa, the Royal College of Surgeons in London and as a Fellow in General and Cardiothoracic Surgery at the Mayo Clinic in Minnesota. While at the Mayo he did pioneering work on the treatment of diseased mitral valves by the use of natural tissues for their repair and also by their replacement with artificial valves. A Noble Foundation prize awarded at the completion of his Fellowship was used to tour European cardiac surgery centres. He joined the Faculty of the Cape Town Medical School in 1962 working with Dr C Barnard. The work on mitral valve disease and its surgical treatment by repair and replacement continued. An invitation to establish a Cardiac Surgical Center at the Albert Einstein College of Medicine, Bronx NY was accepted in 1964. The Division of Cardiothoracic Surgery at the Albert Einstein College of Medicine and Montefiore Cardiac Center in the Bronx was set up from the start as a multidisciplinary team with clinical and laboratory research and teaching proceeding side by side with clinical surgery. Excellence in patient care and outcomes came first and was the base. There were many fields of study but every thing about heart valves natural and artificial, normal and diseased, and the atrial and ventricular muscular chambers to which they are attached was continually under study. There were many contributions. Among these were methods and guidelines for the evaluation and testing of both performance and durability of artificial heart valves. These were incorporated into official government guidelines in the US and Europe. A dedicated echocardiography machine in the cardiac
operating room was introduced at the Einstein-Weiler hospital in 1973. The use of echocardiography in the conduct if cardiac surgery is now standard. Together with other cardiac surgical units in NY we agreed to report all our results to the NY State Dept of Health. Versions of this system have been adopted around the world. In Dec 1984 the first deliberate cardiac surgical operation on a patient known to be HIV positive was performed. The use of animal tissues in the repair of cardiac defects was advanced by the development of treatment that removed the toxicity of aldehyde crosslinking. The use of goretex sutures for the repair of degenerated valves was introduced in 1985 and has become standard. Dr Frater’s last three years as Division Chief were 1989, 1990 and 1991. During those three years the cumulative cardiac surgical results for the Weiler -Einstein Hospital were the best in the state. Many doctors and scientists from around the world participated in these efforts. They came from Germany, Italy, Spain, the UK, South Africa, China, Japan, and the USA. A majority later headed their own units. After retirement from clinical surgical practice, Dr Frater was, for ten years, Medical Director of St Jude Medical in the USA. He has established a small plant in South Africa that makes his specially treated bovine membrane for use in cardiac surgical repairs in the USA, Europe and the Middle East. The Robert Frater Cardiovascular Research Center was established at the University of the Free State in Bloemfontein, in 2015. Research on new treatments and designs of biological and mechanical cardiovascular devices continues in cooperative ventures with UCT and the University of Stellenbosch.

O HOWARD FRAZIER
TEXAS HEART INSTITUTE AT BAYLOR ST LUKE’S MEDICAL CENTER, USA
For more than 40 years, Dr. O. H. Frazier has been a pioneer in the treatment of severe heart failure and in the fields of heart transplantation and artificial devices that may be used either to substitute for or assist the pumping action of the human heart. As a result of his work, the Texas Heart Institute at BSLMC has become one of the top transplantation and mechanical circulatory support programs in the world. Dr. Frazier has performed over 1,200 heart transplants and implanted more than 900 left ventricular assist devices, more than any other surgeon in the world. Dr. Frazier’s interest in mechanical circulatory support began in 1969, when, as a student at Baylor College of Medicine, he wrote a research paper about the experimental total artificial heart, which was first implanted in 1969 by Dr. Denton Cooley. Throughout the 1970s and 1980s, Dr. Frazier continued experimental work toward developing an implantable left ventricular assist device (LVAD) to aid the failing heart. He implanted the first LVAD in 1986 with the HeartMate I. He also implanted the first HeartMate II in 2003; since then this device has become the most widely used implantable LVAD in the world. In 2011, Dr. Frazier implanted the first successful continuous-flow total artificial heart using two second generation HeartMate II LVADs to replace a patient’s failing heart.

GLENN GAUDETTE
WORCESTER POLYTECHNIC INSTITUTE, USA
Prof Gaudette’s research aims to develop a treatment for the millions of Americans suffering from myocardial infarction and other cardiovascular diseases. They are focused on regenerating mechanical and electrophysiological function in the heart. Their work has demonstrated the induction of adult cardiac myocytes into the cell cycle. They also have differentiated adult stem cells into cardiac myocytes. In addition, to confirm that the regenerated tissue is mechanically active, their lab has developed a method for accurately measuring regional function at very high spatial resolution in the heart. To deliver stem cells with high engraftment efficiency, their laboratory has developed a novel suture-based method. His research has been supported by government (National Institutes of Health), nonprofit (American Heart Association), and private agencies (Synovis Life Technologies). He has 18 years of experience in the cardiac research field, including 10 years in cardiac surgery research. He currently teaches biomedical engineering design, biomechanics, physiology and tissue engineering.

GINO GEROSA
PADOVA UNIVERSITY HOSPITAL, ITALY
Verona Medical School (M.D.1983)
Verona University Cardiac Surgery Residency (1983-1988)
Registrar Dept. Cardiac Surgery Verona University Hospital (1989-1992)
Registrar Dept. Cardiac Surgery Padova University Hospital (1992-1994)
BERNARD GERSH
MAYO CLINIC ROCHESTER, USA
Professor of Medicine at Mayo Clinic College of Medicine. Past positions include The W. Proctor Harvey Teaching Professor of Cardiology and Chief Division of Cardiology at Georgetown University. He received his MB, ChB, from the University of Cape Town and his D.Phil degree from Oxford University where he was a Rhodes Scholar. He has 1099 publications (953 manuscripts and 146 book chapters) (h-index 116). He was named in the Thomson Reuters list of individuals with the greatest number of cited scientific papers 2002-2012. Dr. Gersh is the editor of 15 books and on the editorial board of 27 journals, including The European Heart Journal (Deputy Editor) He is Editor-in-Chief of UpToDate in Cardiology. He has received Teacher of the Year Awards from the Division of Cardiovascular Diseases Mayo Clinic and numerous Visiting Professorships and Invited Lectures both nationally and internationally. He is an Honorary Fellow of multiple international societies, an Honorary Professor of Medicine at the University of Cape Town, and an Adjunct Professor of Medicine at Duke University. Dr. Gersh was the 2004 recipient of the Distinguished Achievement Award of the AHA Council of Clinical Cardiology and the 2007 recipient of the ACC Distinguished Service Award, the Hatter Award for “Advancement in the Cardiovascular Science” from the University College London and the University of Cape Town in 2009 and 2016 He received the degree of Ph.D. (honoris causa) from The University of Coimbra, Portugal in 2005. Dr. Gersh is the recipient of the 2012 James B. Herrick award of the AHA, and in 2013 was designated Master of the American College of Cardiology. He is the 2015 recipient of the Mayo Clinic Distinguished Alumni Award, the Silver and Gold Medals of the ESC in 2016.

ALLAN GLANVILLE
ST.VINCENT’S HOSPITAL, AUSTRALIA

CRAIG GOERGEN
PURDUE UNIVERSITY, USA
Assistant Professor of Biomedical Engineering. Craig J. Goergen obtained his B.S. in biomedical engineering from Washington University in St. Louis and M.S. and Ph.D. degrees in bioengineering from Stanford University. His post-doctoral research fellowship at Harvard Medical School focused on optical imaging of cardiac disease. He joined the faculty at Purdue in December of 2012, and is the principal investigator for the Purdue Cardiovascular Imaging Research Laboratory (CVIRL). His current research interests focus on developing advanced imaging techniques to study cardiovascular disease. Through the use of biomedical optics, magnetic resonance, and ultrasound, his group is studying a variety of diseases (including abdominal aortic aneurysms, congenital heart disease, atherosclerosis, and left ventricular hypertrophy). Ultimately, Goergen hopes to help develop therapeutics, devices, and imaging techniques to directly improve patients’ lives.

CLAUDIA GOETTSCH
RWTH UNIVERSITY, GERMANY
Dr. Goettsch is a biologist who specializes in the understanding of the biology of vascular diseases, particularly the underlying mechanisms of atherosclerosis and cardiovascular calcification. The overarching goal of her research is to expedite the translation of basic science into clinical applications and thereby improve the care for patients with cardiovascular calcification, a currently untreatable condition that can lead to severe clinical outcomes (e.g., plaque rupture,
aortic stenosis). After completing her PhD training in Metabolism and Endothelium at the Technical University Dresden, she joined labs with a focus on bone and vascular biology at the University Hospital Dresden and Brigham and Women’s Hospital/Harvard Medical School, Boston, USA. In 2016, Dr. Goettsch started her own research group ‘Calcific Tissue Biology’ at the Department of Internal Medicine I, University Hospital RWTH Aachen. Dr. Goetzsch’s scientific interests and expertise revolve around bone-vascular-inflammation axis. Her research focuses on identifying novel mechanisms and targets to better understand the progression of cardiovascular calcification and to enhance our knowledge for the possibility of therapeutic intervention.

PETER GORDON
UNIVERSITY OF CAPE TOWN, SOUTH AFRICA
Associate Professor Peter Gordon recently retired as Head of Clinical Services at Groote Schuur Hospital and is the archivist of the SA Society of Anaesthesiologists.

MERVYN GOTSMAN
HEBREW UNIVERSITY OF JERUSALEM AND HADASSAH MEDICAL CENTER, ISRAEL
Mervyn Gotsman is Professor Emeritus of Cardiology at the Hebrew University of Jerusalem and Hadassah Medical Center in Jerusalem, Israel. He studied medicine at the University of Cape Town, graduating summa cum laude in 1958. After interning at Groote Schuur Hospital, he worked as a general practitioner in Zimbabwe. He specialized in tropical medicine, and then completed his training in Internal Medicine, Paediatrics and Cardiology at The Hammersmith Hospital in London and the teaching hospitals of the University of Birmingham, England. In 1964 he returned to South Africa as lecturer in Medicine at the University of Cape Town. In 1968 he was appointed the director of the Department of Cardiology in Durban, South Africa, and professor of medicine at the University of Natal. He served as the chief cardiologist of the former Natal Province. He was elected FRCP(London) and Glasgow in 1973. In 1973, he was appointed as Director of the Department of Cardiology at the Hadassah Medical Center in Jerusalem, a position he held until his retirement in 2000. Then he was responsible for training General practitioners in Cardiology throughout Israel and still teaches senior medical students and cardiology fellows at the Hadassah University Hospital. He served as Chairman of the South African Cardiac Society and the Israel Heart Society. He was founding editor of the Journal of the Israel Heart Society and served on the editorial Boards of several leading cardiac journals. He has been advisor to the Israeli Department of Health since 1995. He has been active in clinical research and published more than 400 scientific papers and several monographs. He received the Freedom of Jerusalem award in 2007 for his contribution to cardiology in Israel.

CHRISTIAN HAGL
LUDWIG-MAXIMILIANS UNIVERSITY, GERMANY

ULF HEDIN
KAROLINSKA INSTITUTE, SWEDEN
Research group leader of the group Vascular Surgery

ROBERT HIGGINS
JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE, USA
Robert S. D. Higgins joined Johns Hopkins Medicine in July 2015 as The Johns Hopkins Hospital’s surgeon-in-chief, the William Stewart Halsted Professor of Surgery and the director of the Department of Surgery at the Johns Hopkins University School of Medicine. He is a leading authority in the field of heart and lung transplantation and in coronary artery
bypass surgery. His research interests are broad, including the mechanisms of cell injury in failing hearts, health economics and policy, competency-based residency training, and racial disparities in post-transplant outcomes. Dr. Higgins is the second Vice President and President-elect of the Society of Thoracic Surgeons, the Councilperson-at-Large of the Society of Surgical Chairs. He also previously served as the president of the United Network for Organ Sharing and the Society of Black Academic Surgeons. He has authored over 100 scientific articles and book chapters.

SIMON HOERSTRUP
UNIVERSITY OF ZURICH, SWITZERLAND
Simon P. Hoerstrup, MD, PhD, is a physician and leader in the field of Tissue Engineering and Regenerative Medicine. He is Chair and Director of the Institute for Regenerative Medicine (University Zurich) and Founding Co-Director of the Wyss Zurich (University Zurich & ETH Zurich) in Switzerland. Hoerstrup is also Professor of Biomedical Engineering at the Technical University Eindhoven in the Netherlands, Associate Member of the Department of Health Science Technology at the Swiss Federal Institute of Technology (ETH) and associate faculty of the Harvard Wyss Institute for Biologically Inspired Engineering in Boston (USA). His work at the interface of basic science and translational research has resulted in more than 150 peer-reviewed scientific publications and a unique patent portfolio in the field of Regenerative Medicine. Furthermore, Hoerstrup is Co-Founder of a series of medtech and biotech spin-off companies (Symetis AG, Xeltis AG, Insphero AG, etc.), and leads the recently started BioEntrepreneurship & Innovation Program at the University of Zurich. Hoerstrup leads several major scientific international consortia projects funded by the European Commission, the Swiss National Science Foundation, Commission for Technology and Innovation, etc. Simon Hoerstrup obtained his medical and scientific education in Germany, USA and Switzerland. He was postdoctoral research fellow at Boston Children’s Hospital and Massachusetts General Hospital, both Harvard Medical School. His main research expertise lies in the fields of tissue engineering, cell based therapies, organoid technologies and disease modelling.

SAEID HOSSEINI
RAJAEI CARDIOVASCULAR, MEDICAL, AND RESEARCH CENTER IRAN
Saeid Hosseini, MD, FETCS, is a graduate of Shiraz University of Medical Sciences (1984–1991). Having been trained in general surgery (1992–1996) in the same university, he went on to train as a cardiac surgeon at Rajaei Cardiovascular, Medical, and Research Center (1996–1999). Upon finishing his studies in Iran, in order to further his knowledge in the field of cardiac surgery, Dr. Hosseini pursued his studies in Paris, where he received training for mitral valve repair under professor Gandjbakhch and Professor Acar in La-Pitie Hospital (2000–2001) and congenital heart surgery under Professor Planche in CCML. He succeeded in receiving AFSA, French specialty certificate in 2002. He then joined the faculty at Rajaei Cardiovascular, Medical, and Research Center, where he is currently director of the Heart Transplant and VAD Department and head of the Heart Valve Disease Research Center. A professor of cardiac surgery, Dr. Hosseini’s clinical interests include all aspects of adult cardiac surgery, particularly valve repair as well as aorta and heart failure surgery.

JOSHUA HUTCHESON
FLORIDA INTERNATIONAL UNIVERSITY, USA
Assistant Professor, Florida International University (August 2016 – Present)- Biomedical Engineering. Research interests include: Cardiovascular disease and mechanobiology – Cellular mechanisms of disease Cell-cell and cell-matrix interactions – Cellular interactions in tissue homeostasis Tissue engineering – Development of engineered tissue substitutes Molecular imaging – Imaging of cardiovascular tissue remodeling and disease

LENIAS HWENDA
MEDICINES FOR AFRICA, ZIMBABWE/SWITZERLAND
Dr Lenias Hwenda is the Founder and CEO of Medicines for Africa, a start-up social enterprise working to solve the problem of poor availability of medicines that are not supported by donors, such as medicines for non-communicable disease like diabetes and cancer that are bought by governments quite inefficiently and at very high cost. Lenias is a global health policy expert with significant experience in international affairs, public and private health sector in Africa and Europe. Lenias began her career in international affairs working at the World Health Organization with the African Group of country missions to the UN in Geneva. She later served as an external expert for the World Health Organisation Prequalification Programme for Medicines supporting improvements in production quality standards by manufacturers in India, China, Europe and Africa. She trained as an immunologist and began her career on improving access to medicines working on vaccine development at the University of Oxford.
SIDHANT JENA
INDIA
Co-founder and CEO of Jana Care, worked at Medtronic in various R&D roles, before founding Jana Care. He received his BS and MS in Electrical Engineering from Georgia Tech and an MBA from Harvard Business School.

AFKSENDIYOS KALANGOS
MITERA HOSPITAL, GREECE
Professor Afksendiyos Kalangos was born in Istanbul in 1960. He graduated from a French college in 1978 and from medical school in 1984. After a long period of training in cardiovascular surgery in Istanbul, London, and Paris, he was nominated associate professor of cardiovascular surgery at the University of Istanbul in 1995 and then became staff surgeon at the University Hospital of Geneva in 1993. Finally, he was appointed chairman of the clinic for cardiovascular surgery in 2001 and director of the cardiovascular centre in 2011. In 2006, he was nominated associate professor and in 2012, full professor by the University of Geneva. At the end of 2015, he left Geneva and became director of pediatric heart surgery at Mitera Hospital in Athens where he runs the biggest national program of pediatric heart surgery in Greece. In 1998, he founded the humanitarian association “Hearts for all” and then in 2002 the “Kalangos Foundation” in Geneva. He is the president of both foundations which are strongly involved in the promotion of cardiac surgery in 25 low and mid income countries. Kalangos Foundation especially contributed to the training of more than 100 health professionals in these countries. In 2012, Prof A Kalangos was one of the 4 co-founders of the humanitarian foundation “Global Heart Network” in USA, and since this date he continues to be the chair of the board of the foundation. Professor Kalangos is the author of more than 300 articles published in journals with editorial policy, he was invited more than 400 times as guest speaker at national and international congresses. He is the owner of the intellectual property on the biodegradable annuloplasty ring and a new generation of biological prosthesis. His main interest in basic research is focused on the use of biodegradable material in cardiovascular domain. Many national distinctions were conferred upon him by Serbia, Lebanon, Greece, Turkey, Mauritius for his humanitarian work.

RICHARD KAMWI
FORMER MINISTER OF HEALTH, NAMIBIA
Until recently the minister of health of Namibia. His initiative to create a partnership with South Africa and the Chris Barnard Department in particular led to the successful establishment of cardiac surgical services in Windhoek in 2008. Dr. Kamwi graduated as an MD at the University of Natal and from the technikon Madikoti in Pietersburg, South Africa in 1980. After a period as health inspector in Katima Mulilo he was arrested by the Apartheid administration in 1985. He subsequently went into exile in Botswana where he served in the People’s liberation Army of Namibia until his repatriation in 1989. There, he resumed his position as health inspector until joining the National Assembly in 1999. In 2000, President Sam Nujoma appointed him to the post of Deputy Minister of Health and Social Services. Under President Hifikepunye Pohamba, he was appointed minister of health. After his tenure, he became Ambassador for Malaria Elimination of the SADC region.

GENNADIY KHUBULAVA
SM KIROV MILITARY MEDICAL ACADEMY, RUSSIA
Chief Cardiac Surgeon for the Russian Military Medical Academy.

JAN KIMPEN
CHIEF MEDICAL OFFICER, PHILIPS, THE NETHERLANDS
Jan Kimpen is the Philips Chief Medical Officer, a position he has held since January 2016. As the functional leader for clinical innovation and strategy, medical affairs and health economics at Philips, Jan and his team work collaboratively to advance clinical competencies and organic and external growth opportunities for Philips. Jan also leads the Medical Leadership Team, with overall responsibility for medical strategy. This includes advocacy and partnerships, clinical trials and guidelines, and involvement in M&A. As a frequent speaker on cardiology and oncology solutions, eHealth and digital innovation, Jan also represents Philips on the Global Health Security Agenda private sector roundtable and the WEF Global Health Security Advisory Board. Jan joined the company from the University Medical Center Utrecht - one of the largest healthcare organizations in the Netherlands - where he served as professor and chairman of Pediatrics before being appointed as CEO in 2009.
JAMES KIRKLIN  
UNIV OF ALABAMA, USA  
Dr. James Kirklin is Professor of Surgery, former Director of the Division of Cardiothoracic Surgery, and currently Director of the Kirklin Institute for Research in Surgical Outcomes at the University of Alabama at Birmingham (UAB). He graduated from Ohio State University in 1969 and received his MD from Harvard Medical School in 1973. After completing general and cardiothoracic surgery residencies at Massachusetts General Hospital in 1979, he pursued additional training at Boston Children’s Hospital and UAB. Dr. Kirklin previously held the UAB Endowed Chair of Cardiovascular Surgical Research and the John Kirklin Chair of Cardiovascular Surgery. His research interests involve cardiac transplantation, mechanical circulatory support, congenital heart disease, and outcomes research in cardiac surgery. In 1993, Kirklin and his UAB research group initiated the multi-institutional Pediatric Heart Transplant Study Group. Currently Kirklin is Principal Investigator of the NIH-sponsored national Registry for Mechanically Assisted Circulatory Support (INTERMACS). Dr. Kirklin is past President of the International Society for Heart and Lung Transplantation (ISHLT) and former Editor of the Journal of Heart and Lung Transplantation. He currently serves on the Editorial Board of the Journal of Thoracic and Cardiovascular Surgery.

ROBERT KLEINLOOG  
DURBAN, SOUTH AFRICA  
Mr Robert Kleinloog qualified as a Pharmacist from the Potchefstroom University, read pharmacology as a post graduate student at the same institution where after he qualified in medicine from the University of Pretoria in 1983, after which he became a Fellow of the South African College of Medicine in Cardio-thoracic surgery in 1990. He was a consultant surgeon attached to the University of Natal for 25 years and has been the President of the Society of Cardio-thoracic surgeons of South Africa for 15 years and is the current President of the World Society of Cardio-thoracic surgeons. He is also the founder and the head of the transplant unit in KZN and performed the first successful heart transplant in KZN and the first successful lung and heart/lung transplant in South Africa. Currently he is in Private Cardio-thoracic Surgical Practice in Durban South Africa.

WALTER KLEPETKO  
VIENNA MEDICAL UNIVERSITY, AUSTRIA  
Prof. Dr. Walter Klepetko Head of the Department of Thoracic Surgery of the Medical University of Vienna and Vienna General Hospital (AKH). President of the European Association of Cardio-Thoracic Surgery (EACTS), leads the world-renowned lung transplantation research programs at the University Clinic in Vienna.

WILLIE KOEN  
CHRISTIAAN BARNARD MEMORIAL AND VINCENT PALLOTTI HOSPITALS, SOUTH AFRICA  
Dr Koen qualified as a cardiothoracic surgeon from the University of Cape Town and Groote Schuur Hospital in 1994 with a specific interest in cardiac transplantation and mechanical cardiac support. He completed a masters degree thesis on ‘the biosynthetic heart valve’ which was awarded cum laude. While heading the heart transplant program he started the first bridge to transplant mechanical heart program on the African continent at the Christiaan Barnard Memorial Hospital, Cape Town in 2000 using the Berlin Heart. He is also the vice-president of the Pan African Society of Cardiothoracic Surgeons. Currently he is in practice at Christiaan Barnard Memorial and Vincent Pallotti Hospitals in Cape Town and runs the largest cardiac transplantation program in Cape Town which includes the only long-term mechanical heart program in South Africa. His other interests include transcatheter valve implantation, mechanical pulmonary support (ECMO) as well as minimally invasive cardiac surgery.

THEODOROS KOFIDIS  
NATIONAL UNIVERSITY OF SINGAPORE, SINGAPORE  
Associate Professor Theodoros Kofidis is a minimally invasive heart surgeon. He promotes and offers a wide range of less invasive, small-incision and keyhole access procedures for blocked coronary arteries and heart valves. He specifically avoids opening the chest bone, whenever indicated. He also provides expertise in off-pump bypass surgery, i.e. without the use of heart lung machine and stopping the heart. A/Prof Kofidis’ specialties are minimally invasive procedures for the repair/replacement of the heart valves, which he has introduced into the robotic cardiac surgery programme he started at the NUHS. These procedures are his preferred approach to minimize trauma and stress to the patient, shorten length of stay and to achieve better cosmetic result. He also carries out surgeries in off-pump technique,
without necessitating the heart lung machine or stopping the heart. He is the first to have implanted and helped children survive and recover (bridge-to-recover) from an artificial heart device in Singapore and the region, and the first to have successfully treated patients with heart failure due to H1N1 using artificial circulation support. He has introduced novel heart-re-shaping surgery for advanced state of disease. A/Prof Kofidis has a considerable contribution to heart-related research. His innovations, discoveries and his patents in Heart Surgery, published in more than 100 articles in international journals, have earned him prestigious international awards, and the honor of invited lecturer at Bill Gates Research Centre, the American Medical Association, and the FDA in the USA. He and Prof Lee Chuen Neng have founded a new initiative to promote research and innovative technology in surgery (l.R.I.S.). In April 2012, A/Prof Kofidis was part of the pioneering group of surgeons to perform Robotic Cardiac Surgery in NUHCS. He is a Cardiothoracic Surgeon and Associate Professor with the Dept of Surgery, Yong Loo Lin School of Medicine. His vision is to strengthen Singapore’s role as a surgical hub by cutting edge, less traumatic heart surgery.

JACQUES KPODONU
HARVARD MEDICAL SCHOOL, USA
Dr. Kpodonu is a cardiovascular surgeon, visionary clinician /scientist and lead author/editor of 4 medical textbook . Dr. Kpodonu’s current interests include innovations in cardiac surgery , global health innovation, precision medicine ,digital health technology,biomedical innovation ,hybrid operating room design and constructions and global surgical capacity building. Dr. Kpodonu has held various leadership positions including recently as surgical director of Hybrid cardiac surgery program at the Jeffrey Milton Heart and Vascular Institute of Hoag Hospital Newport Beach, CA and clinical associate professorship of surgery at the University of California Irvine (UCI). Dr. Kpodonu was involved in fund raising activities with over$40million raised during his tenure including being the lead in development and construction of a $6.7 million advanced cardiac hybrid operating room currently touted as one of the most complex and advanced robotic hybrid operating rooms in the world. Dr. Kpodonu is an active member of the American Society of cardio-thoracic Surgeons and the Society of Vascular Surgeons .He is a member of the division of cardiac surgery at the Beth Israel Deaconess Medical Center and holds a faculty position at the Harvard Medical School.

HELENA KUIVANIEMI
WAYNE STATE UNIVERSITY SCHOOL OF MEDICINE, USA
Prof. Helena Kuivaniemi was born and raised in Finland and graduated from the University of Oulu with MD and PhD degrees. She received postdoctoral training at Rutgers Medical School, New Jersey, USA, and then held faculty positions at Thomas Jefferson University in Philadelphia, Wayne State University School of Medicine in Detroit, and at Geisinger Health System in Danville, USA. Prof. Kuivaniemi is a human geneticist with experience in studying both rare and common human diseases. She has worked on abdominal aortic aneurysms for nearly 30 years focusing on genetic studies to identify susceptibility loci. In 2016, she joined the Faculty of Medicine and Health Sciences at Stellenbosch University, South Africa. Prof. Kuivaniemi has over 200 publications and has an h-index of 58 in GoogleScholar.

GUNTHER LAUFER
MEDICAL UNIVERSITY OF VIENNA, AUSTRIA
Prof. Gunther Laufer serves as a Member of The Scientific Committee of CARMAT SAS and served its Member of Scientific Advisory Board. Prof. Laufer is Professor and Head of the Department of Cardiac Surgery at the Vienna Medical University (Austria). He specializes in the area of minimvasive coronary surgery and is currently Chairman of the Austrian Society for Cardiothoracic Surgery. He is also a member of the European Society for Cardiothoracic Surgery.

CHUEN NENG LEE
NATIONAL UNIVERSITY OF SINGAPORE, SINGAPORE
NICOLAS L’HEUREUX
UNIVERSITY OF BORDEAUX, FRANCE
In the early 90’s, he invented the Tissue Engineering by Self-Assembly (TESA) approach, a radically new method that allows the production of mechanically strong tissues without the need for synthetic biomaterials. Out of all the possible applications for TESA, he focused on developing a tissue-engineered human blood vessel. From in vitro feasibility to first-in-man study, this research has led to a string of high-impact publications (FASEB J., Nature Med., NEJM, The Lancet) and have had a marked impact on the field by promoting more biological approaches for tissue repair. This work is a rare example of combining basic and applied vascular biology principle to generate an actual clinical application. He will continue to use TESA to develop new tissues and organs. Specialties: Tissue engineering, cell culture, cell banking, extracellular matrix, in vitro models, human cells, regenerative medicine, cell-based therapies, bioreactor, animal studies, clinical trials.

GEORGE LUTTER
KIEL UNIVERSITY, GERMANY
Since October 2009 professor for Experimental Cardiac Surgery and Valve Replacement at Kiel University. Before that senior physician and research director at the clinic for cardiac and vascular surgery at the University Medical Center Schleswig-Holstein. Born in Hamburg. 1993 PhD at Hamburg University, 2004 habilitation at CAU.

SALAH MALEK
GETINGE GROUP, UNITED ARAB EMIRATES
President at Getinge Group

SIMON MALTAIS
MAYO CLINIC ROCHESTER, USA
Simon Maltais, M.D., Ph.D., conducts research in heart transplantation, durable mechanical circulatory support, acute and temporary circulatory support measures, and translational-based heart failure research (stem cell therapy). Dr. Maltais specializes in minimally invasive cardiac interventions (robotic surgery) and has performed several surgeries on various conditions with these approaches. Dr. Maltais is interested in how less invasive approaches apply to the implantation of durable devices in patients with heart disease and hopes to investigate the application of stem cell based therapy for myocardial recovery.

PATRICE MATCHABA
NOVARTIS, USA
Patrice Matchaba, M.D., has been Global Head of Corporate Responsibility since 2017. Prior to his current appointment, Mr. Matchaba served as the Global Head of the Cardio-Metabolic Development unit since May 2014, where he led the global clinical development of the cardio-metabolic portfolio. Mr. Matchaba joined Novartis South Africa in 2000 as the Country Pharma Organization Chief Scientific Officer. Since moving to Novartis Pharmaceuticals Corporation in the US in 2002, he has held several roles of increasing responsibility including Therapeutic Area Head for Immunology and Infectious Diseases (IID), Global Head of Drug Safety and Epidemiology and Global Head of the Integrated Development Functions and Regions (IDFR), which include Global Clinical Operations, Global Clinical Submissions, Integrated Information Sciences, Development Informatics, and Development Diversity & Inclusion (D&I) and all Medical Country Pharma Organization (CPO) in the regions. Mr. Matchaba completed his medical training (MD) at the University of Zimbabwe and is a Fellow of the Obstetrics and Gynecology College of South Africa. In addition, he is a graduate of Harvard Business School’s Program for Management Development in 2001.

SIMON MATSKEPLISHVILI
LOMONOSOV MOSCOW STATE UNIVERSITY, RUSSIA
Simon Matskeplishvili is a professor of cardiology and a member of the Russian Academy of Sciences. He is a Deputy-Director for science and research of the Lomonosov Moscow State University Clinic. He graduated with honours from the Moscow Medical Academy in 1994 and had his postgraduate training and fellowship in cardiology at the Clinico-Diagnostic Department of the Bakoulev Scientific Center for Cardiovascular Surgery in Moscow, the largest centre in Russia, performing >6000 open-heart paediatric and adult interventions a year. Cardiology was not Simon’s first choice of career, however when he accidentally walked in on a cardiology seminar, he was absolutely amazed by the
subject. He believes to be a cardiologist, one has to be an artist and a philosopher. In 1997–98, he received the degree of International Master in cardiology from the Institute of Clinical Physiology of the National Research Council of Italy in Pisa, followed by a fellowship in invasive cardiology and electrophysiology. He received his PhD degree in 1999 and the Doctor of sciences degree in 2002. In 2001, he was awarded a diploma of European cardiologist, in 2003 became a Fellow of the European Society of Cardiology and in 2005 – a Fellow of the American College of Cardiology. In 2007, he received a degree of the full professor in cardiology. Simon Matskeplishvili authored and co-authored 15 books in cardiology, cardiovascular imaging, cardiac, and vascular surgery. In 2012, he was awarded the Prize of the Government of Russian Federation in science and technology, for the development of a new non-invasive method of intracardiac blood flow evaluation. In 2013, 2015 and 2016 he was leading the team of cardiologists to win the European Society of Cardiology ‘Primus inter pares’ quiz at the ESC Congresses. In 2012 Prof. Simon Matskeplishvili had organized and implemented the Educational Programme for cardiologists and internal medicine physicians in Moscow. He also conducts an English-language elective course ‘Amazing Cardiology’ in cardiology, cardiac surgery, and cardiovascular imaging at the Lomonosov Moscow University Faculty of Medicine. His interests include general cardiology, basic

BONGANI MAYOSI
UNIVERSITY OF CAPE TOWN, SOUTH AFRICA
Bongani Mawethu Mayosi (born 28 January 1967) is a South African cardiology professor who was awarded his country’s highest honour, the Order of Mapungubwe (Silver) in 2009. He is the Dean of the Faculty of Health Sciences at the University of Cape Town and is an A-rated National Research Foundation researcher. Prior to this, he was head of the Department of Medicine at the University of Cape Town and Groote Schuur Hospital. His father was a medical doctor and so is his wife; his research interests include Rheumatic fever, Tuberculous pericarditis and Cardiomyopathy. He is a member of the Academy of Science of South Africa and a former President of the College of Physicians of South Africa.

JO MEINHART
HEITZING HOSPITAL, AUSTRIA
Dr. Meinhart is a cell biologist and is the responsible person for the cell and tissue culture laboratory at the Hietzing Hospital in Vienna. He is serving as a specialist for the regulation of cell therapy (ATMP) in the European Union.

JUAN C. MEJIA
MESSEJANA HOSPITAL, BRAZIL
Dr. Juan is surgical director of the programme of heart transplant and MCS at Messejana Hospital, Fortaleza, Brazil. Over 30 publications to date. From 2001-2012, he has organized 6 Brazilian Heart Transplant and MCS Workshops, in Fortaleza, Brazil, and two Pan-American Workshop of HTx & MCS Workshop in CAMLS, Tampa, Florida, USA (2012 & 15). He is the elected President (2014-2015) of the department of Cardiopulmonary bypass and MCS of The Brazilian Society of Cardiovascular Surgery. He is delegate of the Technical Council of National System of Organ Transplant of the Brazilian Ministry of Health. Surgical Director of Heart Transplant and MCS program at the Messejana Hospital, Fortaleza, Brazil. Coordinator of MCS group study of the Brazilian Society of Cardiology (Heart Failure Dept.). Chairman of the Brazilian Federal Program of Tutorial Centers of Heart Transplant & MCS (not only for Brazil also for all Latin America and all Portuguese speaking nations outside Latin America). MCS training at Ohio State University with Dr. Benjamin Sun, in 2006. MCS training in 2010 in German Heart Institute Berlin (DHZB) By Dr. Roland Hetzer and Dr. Thomas Krabatsch. MCS training in Pittsburgh at UPMC by Dr. Christian Bermudez, 2010.

ANA OLGA MOCUMBII
MOZAMBIQUE, AFRICA
Dr. Mocumbi received her M.D. from Eduardo Mondlane University (Mozambique) and her Ph.D. from the Imperial College London (United Kingdom). She has been linked to training activities since her initial years at the Faculty of Medicine, where she was Assistant in Practical Lectures in Anatomy. After her initial medical training Dr Mocumbi went to a remote area to work as a general practitioner for four years, and afterwards got her specialization in Cardiology at the Heart Institute in Mozambique and a Diploma in Pediatric Cardiology from René Descartes University in Paris, France. She has been actively involved in the training of medical doctors and other health staff (general and pediatric nurses, laboratory technicians, medical technicians) during her career, through working at the University Eduardo Mondlane (UEM), the High School of Medicine and Technology (ISCTEM), the Higher Institute for Health Professionals (ISCISA) and the Institutes of Health Sciences in Mozambique. Dr Mocumbi is currently the Editor-in-Chief of the scientific journal of
the National Health Institute in Mozambique (Revista Moc Ciencias de Saúde). She has been working as a clinician and lecturer since her graduation. Substantial administration and management skills/expertise was gained while serving as General Practitioner and Provincial Manager of Health Resources and Training in a Mozambique Province between 1993 and 1997, and Deputy Director and Head of Research Department at the Heart Institute in Mozambique from 1999 to 2011. During and after that period she has participated in several national and international courses on endemic disease, medical education, leadership and management. Additional relevant experience was gained as a temporary consultant to the Ministry of Health where she participated in designing curricula, as well as writing and reviewing manuals for use by health workers in Mozambique. Dr Mocumbi’s main research interests are neglected cardiovascular diseases. She is currently head of the Division of Non-Communicable Diseases at the National Institute of Health in Mozambique and co-Chair of the LANCET Non-Communicable Diseases and Injuries Poverty Commission.

ELMI MULLER
CAPE TOWN, SOUTH AFRICA
Dr Muller qualified in general surgery in 2004. Since this time she had been working in the field of transplantation and is the head of the transplantation service at Groote Schuur Hospital. Her research is in HIV positive transplantation: the “HIV positive to positive” transplant programme she started at in 2008 changed the life of many socioeconomically disadvantaged people. Currently she is president of the South African Transplantation Society and councillor for Middle East/Africa for the international Transplantation Society (TTS). She received the Checkers-Shoprite Women of the Year award in 2011 and was featured in The Lancet in 2012 under the title: ‘Elmi Muller; bending rules, changing guidelines, making history. Dr Muller has experience in both tertiary academic medicine as well as private practice and has been organizing projects both locally in South Africa as well as internationally. She had been a faculty member/advisor for several World Health Organization workshops and has significant experience in health management in the field of transplantation. She has collaborated with many international leaders and is currently involved in research collaboration projects at the University of Cape Town, Hopkins University (USA) and Lund University (Sweden). Dr Muller does clinical work in the field of transplantation and vascular access.

MIKE MUSSALLEM
CEO, EDWARDS
Michael A. Mussallem was appointed chairman and chief executive officer of Edwards Lifesciences in 2000, when it became an independent, publicly traded company. Under his leadership, Edwards has established its position as a global leader in patient-focused medical innovations with the introduction of lifesaving and life-sustaining therapies such as transcatheter aortic valve replacement, rapid-deployment surgical heart valve replacement and non-invasive hemodynamic monitoring. Driven by a passion to help patients, the company collaborates with the world’s leading clinicians and researchers to address unmet healthcare needs, working to improve patient outcomes and enhance lives while delivering value to the healthcare system. As Edwards’ CEO since becoming an independent public company, Mussallem has not only led the development and successful implementation of the company’s patient-focused innovation strategy, but also established Edwards’ commitment to philanthropy and corporate social responsibility. Over the last 12 years, Edwards Lifesciences Foundation has supported communities and causes around the world with more than $47 million in charitable giving, as well as volunteer support from Edwards’ employees. In 2014, Edwards Lifesciences Foundation launched Every Heartbeat Matters with the goal that Edwards’ philanthropy will support the education, screening and treatment of 1 million underserved people by 2020. During Mussallem’s tenure, Edwards was recognized among the World’s Most Ethical Companies by the Ethisphere Institute, an organization that defines and advances standards of ethical business practices. Mussallem has been included in the Forum for Corporate Directors Hall of Fame and received a number of honors including the UC Irvine Medal, a lifetime achievement award from The Phoenix Conference and the Wenger Award for Excellence in Corporate Leadership by WomenHeart. Prior to his current position, Mussallem held a variety of positions at Baxter International from 1979 until 2000, when Edwards was spun off from Baxter. Currently, Mussallem serves on the board of the Advanced Medical Technology Association (AdvaMed) and is an advisory board member for the Leonard D. Schaeffer Center for Health Policy & Economics at the University of Southern California. He is a trustee of the University of California, Irvine Foundation and the Rose-Hulman Institute of Technology in Terre Haute, Indiana. Mussallem has served as board chairman of both AdvaMed and the California Healthcare Institute (CHI). He received a bachelor’s degree in chemical engineering and an honorary doctorate degree from the Rose-Hulman Institute of Technology.
DAN NCAYIYANA
SOUTH AFRICA
Dan Ncayiyana is emeritus professor at the University of Cape Town, and was editor of the South African Medical Journal for twenty years. He was born and raised in KZN, South Africa, obtained his primary medical degree in the Netherlands and postgraduate qualifications in Obstetrics and Gynaecology at New York University. He was editor of the South African Medical Journal for 20 years from 1993 to 2013, was a member of international medical editor associations and served on the editorial boards of international medical journals such as the BMJ. He has been professor in obstetrics and gynaecology, medical school dean and vice chancellor at two South African universities. He is honorary Fellow of the Colleges of Medicine of South Africa, and Member of the Academy of Sciences of South Africa. He was until recently a research associate at the Human Sciences Research Council.

MINORU ONO
UNIVERSITY OF TOKYO, TOKYO
Department of Cardiovascular Surgery & Department of Cooperative Unit of Medicine and Engineering Research Expertise/Specialties: Adult Cardiac Surgery, Minimally Invasive Cardiac Surgery, Robotic Cardiac Surgery, Mitral Valve Plasty, Off-pump Coronary Artery Bypass Surgery, Ventricular Assist Device, Heart Transplantation Research Interests: Surgical Treatment of End-stage Heart Failure (Ventricular assist device, Heart transplantation, Mitral complex plasty), Device Development for Minimally Invasive Surgery, Regenerative Medicine

ALEXANDER G. PATTERSON
JACQUELINE MARITZ LUNG CENTER, USA
Dr. Patterson has completed residencies in general surgery, thoracic surgery and vascular surgery at Queen’s University, Kingston and the University of Toronto. He did post fellowship training at Johns Hopkins University. He joined the Thoracic surgery faculty at the University of Toronto in 1982. In 1987, he was awarded the Royal College of Surgeons Gold Medal for his research in lung transplantation. Dr. Patterson was Director of the Lung Transplant Program while at the University of Toronto and served in that capacity at Washington University from 1992-2014. He was Evarts A Graham Professor and Chief of the Division of Cardiothoracic Surgery at Washington University from 2005 to 2014. He is Past President of the International Society for Heart and Lung Transplantation, the American Association for Thoracic Surgery and the Thoracic Surgery Foundation for Research and Education. He has served as associate editor of the Journal of Thoracic and Cardiovascular Surgery, the American Journal of Transplantation and the Journal of Heart and Lung Transplantation. He is currently Editor in Chief of the Annals of Thoracic Surgery.

TIM PENNEL
SOUTH AFRICA
qualified in medicine at the University of Stellenbosch, South Africa in 2003. Following two years of general surgery, he joined the University of Cape Town (UCT) as a resident in Cardiothoracic Surgery. During this time Dr Pennel simultaneously completed his master’s degree (MMED) and PhD, and subsequently qualified as Cardiothoracic surgeon in 2014. Under the guidance of Prof Peter Zilla at the Cardiovascular Research Unit in Cape Town, Dr Pennel developed a small animal model to investigate the mechanism of vascular graft healing in high-porosity polymers and decellularized xenografts. His clinical interest is surgery for heart and lung failure and the expansion of the mechanical assist program at the Groote Schuur hospital and the Chris Barnard Division of Cardiothoracic surgery at the University of Cape Town

MICHAEL P. PHALEN
EXECUTIVE VICE PRESIDENT AND PRESIDENT, MEDSURG
Michael Phalen is Executive Vice President and President, Medical Surgery (MedSurg) for Boston Scientific and a member of its Executive Committee. In this role, he plans and executes Boston Scientific’s growth strategies for the Company’s Endoscopy, Urology/Pelvic Health and Neuromodulation businesses. Phalen also oversees Boston Scientific operations in Canada and Latin America. He is also responsible for Boston Scientific’s Government Affairs. Prior to assuming his current position in January 2012, Mike was President of Boston Scientific International. He was responsible for planning and executing Boston Scientific’s international growth strategy. Mike is the past Chairman of the Massachusetts Medical Device Industry Council (MassMEDIC) and serves on the Board of Directors for Advanced Medical Technology Association (AdvaMed). Mike joined Boston Scientific in 1988 and held various management positions
of increasing responsibilities including Territory Manager, Product Manager, Regional Sales Manager, Group Product Manager, Director of Marketing, Vice President of Global Marketing and Senior Vice President and President of the company’s Endoscopy division. Before joining Boston Scientific, he held management positions with MD Technology, Kendall Healthcare and Pennwalt Pharmaceuticals. He earned a B.S. in General Science from Villanova University and an M.B.A. from Fairleigh Dickinson University.

BRUNO PODESSER
MEDICAL UNIVERSITY OF VIENNA, AUSTRIA
After receiving his medical degree from the University of Vienna, Bruno Podesser trained in general surgery and cardiac surgery at the II. Department of Surgery at the AKH, Medical University of Vienna. With a Max Kade fellowship he went to Boston University and later, in 2001, habilitated in surgery with a special focus on cardiac surgery. Until today, he is attending surgeon at the Department of Cardiac Surgery, Karl Landsteiner Private University, St. Pölten, Austria. Between 2006 and 2009 he was founding co-ordinator of the Ludwig Boltzmann Cluster for Cardiovascular Research at the Medical University of Vienna and is until today member of the board of directors. In 2014 he was appointed Head of the Center for Biomedical Research at the Medical University of Vienna. Since 2015 he is chairing also the Ethical Commission for Animal Affairs at the Medical University of Vienna. The main areas of research are translational cardiovascular research focusing on myocardial protection and remodeling following pressure or volume overload.

JOSE POMAR
BARCELONA, SPAIN
Born in Palma de Mallorca, Spain in 1947. He obtained the MD degree at the University of Navarra in Pamplona. Since the 4th year, he was already living at the University Clinic, engaged in the Cardiothoracic Department under the tutorship of Carlos Durán. José was widely involved in the clinical and the experimental fields. He did his housemanship at the Nuffield Dpt. of Surgery at the Radcliffe Infirmary of the University of Oxford, UK. After completing his residency training in Pamplona he went to Santander where he was also able to start and run a new Experimental Surgical Laboratory and did the PhD on a New Totally Flexible Ring for Mitral & Tricuspid Annuloplasty, today world wide known as the Duran Flexible Ring and distributed by Medtronic, Inc. For three years he joined as resident the team of the Montreal Heart Institute in Canada and visited a few Cardio-Thoracic Units in the US and Canada. In 1983, he went back to Spain and appointed at the Surgical Unit of the Hospital Clinic of the University of Barcelona. In 1987 he got the position of Professor of the University of Barcelona. In1999 he got the European Board of Cardiothoracic Surgery. Prof. Pomar is member of the Board of Advisors of many scientific Journals, has published more than 200 articles and presented more than 500 papers and lectures in the most prestigious meetings all over the world. He has been president or councillor in many societies like EACTS, ESCVS, SHVD, AATS. He is currently Past President of the European Association for Cardio Thoracic Surgery and Chairman of the International Cooperation Committee.

MAX PRICE
UNIVERSITY OF CAPE TOWN, SOUTH AFRICA
Max Price is the vice-chancellor and principal of the University of Cape Town in South Africa. He was installed as vice-chancellor on 19 August 2008, replacing Njabulo Ndebele. He is a qualified medical doctor and was previously Dean of the Faculty of Health Sciences at the University of the Witwatersrand. Price has an MBCh degree from the University of the Witwatersrand which he obtained in 1979; a BA (Hons) PPE (Oxon 1983); an M.Sc in Community Health from the London School of Hygiene and Tropical Medicine; and a Diploma in Occupational Health from the University of the Witwatersrand.

DARSHAN REDDY
LENMED ETHEKWINI HOSPITAL & HEART CENTRE, SOUTH AFRICA
Dr Darshan Reddy completed his medical school training at the University of Cape Town in 2003 and went on to specialize in cardiothoracic surgery at the Nelson R Mandela School of Medicine in Durban, completing his Fellowship in Cardiothoracic Surgery in 2008 and his Masters in Cardiothoracic Surgery thereafter. Dr Reddy was appointed as a consultant surgeon in the Department of Cardiothoracic Surgery at the University of KwaZulu Natal in 2011 and embarked on a Fellowship in Paediatric Cardiac Surgery at the University of Michigan, Ann Arbor USA from 2013 to 2014. Dr Reddy established the first Paediatric Heart Centre in KwaZulu Natal at the Lenmed Ethekwini Hospital and Heart Centre in Durban in March 2017, and his interests include complex neonatal cardiac surgery. He is an active member
and participant of the World Society for Pediatric and Congenital Heart Surgery and his practice subscribes to the World Society international database. In addition, Dr Reddy has an interest in rheumatic mitral valve repair, and he received an AATS Every Heartbeat Matter Valve Fellowship at the Central Chest Institute of Thailand in 2015. Dr Reddy believes in the ethical practice of cardiothoracic surgery and clinical research on the African continent and he was awarded the STS/AATS Ethics forum scholarship to the Georgetown University Intensive Bioethics Course in 2016. He presently serves as a reviewer and subject editor for the Cardiovascular Journal of Africa, and is on the International Workforce Committee of the Society of Thoracic Surgeons, as well serving as a reviewer for the Annals of Thoracic Surgery.

**BRUNO REICHART**

**UNIVERSITY OF MUNICH, MEDICAL CENTER, GERMANY**

Bruno Reichart (born January 18, 1943 in Vienna) is a German cardiac surgeon and university professor. In 1983 he succeeded the first heart lung transplant in Germany. From 1984 to 1990 he was the first Chris Barnard for cardiothoracic surgery professor at the University of Cape Town. Subsequently, he was professor of cardiac surgery at the Ludwig-Maximilians-Universität. Scientifically, Reichart has been involved in xenotransplantation since 1992 and worked on its development for the Bavarian Research Foundation from 1998 to 2004. Subsequently, Reichart was from 2004 to 2012 director of the Collaborative Research Center for Xenotransplantation of the German Research Foundation (DFG). In addition, he devoted himself to the improvement of thoracic transplantations with new immunosuppressants like FK506 and MMF. He was responsible for the introduction of the clinical lung transplantation. He is currently researching the transplantation of tissues and organs derived from pigs, where he and his coworkers see an opportunity for the future to counteract the serious lack of donor organs. Since 2012 Reichart acts as speaker of the transregional DFG Collaborative Research Center for “Biology of xenogenic cell and organ transplantation”. From 1989 to 1990 Reichart was President of the International Society for Heart Transplantation, from 2000 to 2012 treasurer of the German Transplantation Society and member of the Standing Committee on Organ Transplantation of the German Medical Association.

**HERMANN REICHENSPURNER**

**UNIVERSITY HEART CENTRE HAMBURG, GERMANY**

Hermann Reichenspurner was born in Munich, Germany on April 20th, 1959. After his school in Munich, he went to the University of Munich to study medicine. He graduated in 1985 and finished his MD thesis with “summa cum laude”. The same year, he started his residence in the Department of Cardiac Surgery, University of Munich. In 1987, he went to the Department of Cardiothoracic Surgery, Grote Schuur Hospital and Red Cross Children’s Hospital at the University of Cape Town for a two-year-training in pediatric cardiac surgery and thoracic surgery. In 1989, he went back to the University of Munich to finish his training in general surgery and later in cardiothoracic surgery. In 1992, he received his degree as Doctor of Philosophy (Ph.D.) at the University of Cape Town, South Africa. In 1994, he went to Stanford University for a fellowship in cardiopulmonary transplantation. In addition, he worked in the transplantation laboratory on pathomechanisms and therapy of chronic rejection after lung transplantation. In 1996, he went to the University of Dresden as senior surgeon in cardiac surgery, where he finished his German Ph.D. (Dr. med. habil.) in March 1997. Later that year, he went back to the University of Munich as Associate Professor of Cardiac Surgery, focusing on minimally-invasive and robotically-assisted heart surgery in addition to heart and lung transplantation. In 2001, he became Chairman and full Professor, Department of Cardiovascular Surgery, University of Hamburg and in 2005 Medical Director of the newly founded University Heart Center Hamburg. He served as President of the International Society for Minimally Invasive Cardiothoracic Surgery as well as the International Society for Heart and Lung Transplantation. Since 2016, he has an affiliated Professorship in Adult Cardiothoracic Surgery at the University of San Francisco, CA.

**TIM RING**

Tim Ring, along with his wife, Kathryn Gleason, have co-founded a nonprofit and related for-profit impact fund called TEAMFund, whose mission is to expand access to medical technologies for the world’s poorest and most resource-constrained populations. www.teamfundhealth.org. They will start first with India and Sub-Saharan Africa. TEAMFund’s thesis/business model is that by taking a MedTech sector-focused approach that brings together private sector domain advisory expertise and financial support, and leverages collaborations across the global health community, they may be able to help achieve access to medical innovations for the world’s lowest resource settings. Timothy M. Ring was named Chairman and Chief Executive Officer for C. R. Bard, Inc. on August 8, 2003. He joined Bard in June 1992 as Corporate Vice President - Human Resources and was promoted to Group Vice President - International in December 1993. In November 1995, was given additional responsibility for Interventional Cardiology and Electrophysiology. In January
1997, he also resumed additional responsibility for the Cardiac Assist and Cardiopulmonary divisions and in April 1997 was promoted to Group President for Coronary Vascular Products. In 1999, he was named Group President for Bard Electrophysiology and Peripheral Vascular Products and in 2002 was given additional responsibility for Bard Access Systems, Bard Europe, and Corporate Healthcare Services. Prior to joining Bard, he worked for Abbott Laboratories for nearly 10 years, most recently as Director of Personnel for the Hospital Products Division. During 1990, he was General Manager for Abbott’s Australian, New Zealand, and Indonesian operations, residing in Sydney. From 1987 to 1989, he was Director of Personnel for Pacific/Asia/Africa and Europe. In 1984 to 1986, he was also Director of Personnel for Latin America & South East Asia. He started at Abbott in 1983 as Assistant Personnel Manager for the Pharmaceutical Division. Prior to joining Abbott, Tim was employed by The General Motors Corporation and holds a B.S. in Industrial and Labor Relations from Cornell University. Mr. Ring is a member of the Executive Committee. He is also a director of Quest Diagnostics Incorporated, a trustee for the New Jersey Health Foundation (NJHF) and the former Chairman of the Board of Trustees of the HealthCare Institute of New Jersey (HINJ). Mr. Ring also currently serves on the Cornell University Council and is a member of the Board of Directors for C. R. Bard, Inc., AdvaMed (the medical device industry association), National Association of Manufacturers (NAM) and the Healthcare Leadership Council. He is also a member of the Business Roundtable.

ARKALGUD SAMPATHKUMAR

India

Retd. prof and head, chief of centre, Cardiothoracic centre, All India Institute of medical Sciences, New delhi, India, 1969 to 2009 Currently in private practice at Max super speciality hospital, Vaishali, Ghaziabad, NCR, since 2009

Editor in chief, Asian Cardiovascular and Thoracic Annals 50 years experience, trained over 100 cardiac surgeons. Main interest: Adult and pediatric cardiac surgery; Surgery for RHD, Valve repairs, Ross Procedures, Homografts, Surgical videos, E learning Modules

MARIA SBOROS

South Africa

Marika Sboros is one of South Africa’s leading health journalists, with over 30 years’ experience in the newspaper industry. She is founder, publisher and editor of Foodmed.net. She started her career at the Rand Daily Mail and has worked for major newspapers, including Business Day (owned by Times Media Group). She currently writes a regular fitness column and commissioned health and medical features for Business Day. Marika Sboros is one of South Africa’s leading health journalists, with over 30 years’ experience in the newspaper industry. She is founder, publisher and editor of Foodmed.net. She started her career at the Rand Daily Mail and has worked for major newspapers, including Business Day (owned by Times Media Group). She currently writes a regular fitness column and commissioned health and medical features for Business Day. She is co-author with UCT emeritus professor Tim Noakes of Lore of Nutrition, Challenging Conventional Dietary Beliefs (Penguin).

JACQUES SHERMAN

UCT, South Africa

Dr Scherman obtained his MBChB degree (“Doctor of Medicine”) from the University of Pretoria in 1998, followed by a Diploma in Occupational Medicine (cum laude) from the University of Stellenbosch. After being awarded the Fellowship in Cardiothoracic Surgery from the Colleges of Medicine of South Africa (FC Cardio (SA)) in 2008, he was registered as a specialist cardiothoracic surgeon in South Africa. He further completed a Masters degree in Cardiothoracic Surgery (thesis awarded cum laude) at the University of Cape Town. After completing his general surgical training whilst serving in the South African Military Services, Dr Scherman joined the Chris Barnard Division of Cardiothoracic Surgery in Cape Town in 2003 as a registrar. In 2007 he was appointed as Senior Registrar in the department and as Consultant from 2009 onwards. He then proceeded to further his training in minimally invasive cardiac surgery and catheter based heart valve interventions, being appointed as full time staff surgeon at the University Hospital of Zurich in Switzerland, between 2011 and 2012. Dr Scherman’s interests and current research focuses on minimally invasive cardiac surgery and catheter based heart valve interventions. He established and heads the largest university hospital based minimally invasive cardiac surgical program in South Africa and also the first university based transcatheter
aortic valve insertion (TAVI) program in the country, serving as co-PI for the national South African TAVI registry. He is a consultant for a University of Cape Town Start-Up Company under the name ‘Strait Access Technologies’ (SAT), pursuing transcatheter heart valve devices tailor made for the developing world.

**STEPHAN SCHUELER**
NEWCASTLE UPON TYNE, UK
Professor Stephan Schueler is Consultant Cardiothoracic Surgeon at Newcastle upon Tyne Hospitals Trust, UK. He completed his training in general surgery, traumatology, thoracic and cardiovascular surgery at Hannover Medical School, Germany in 1986. As a senior surgeon he was part of the team at the German Heart Centre in Berlin from 1986 to 1994. He was appointed as Chairman of the Department of Cardiovascular Surgery, and Medical Director of the new Cardiovascular Institute, Dresden, Germany in 1994 until 2001. Professor Schueler also became Professor for Cardiac Surgery at Medical Faculty, Carl Gustav Carus University Hospital Dresden, Germany in 1994 until to date. He currently holds numerous editorial positions including Associate Editor of the Journal of Heart and Lung Transplantation and member of the editorial board of the Journal Interactive Cardiovascular and Thoracic Surgery. Professor Schueler has authored and co-authored more than 40 book chapters and commissioned articles, 150 reviewed scientific articles and 200 published abstracts. He was also president of The International Society for Heart and Lung Transplantation (ISHLT) 2002-2003, President of the European Society for Cardiovascular Surgery (ESCVS) and Examiner on the European Board for Thoracic- and Cardiovascular Surgery. He is a member of numerous national and international scientific societies.

**JIM SCHURMAN**
MEDTRONIC, USA
Jim is Vice President and General Manager at Medtronic, the global leader in medical technology, services and solutions. In his role, he is responsible for leading the mechanical circulatory support (MCS) therapy unit which develops miniaturized left ventricular assist devices (LVAD) including the HVAD, MVAD, and CircuLite systems. Jim leads all strategic plans, the product and services portfolio, and financial business metrics. The MCS business is based in Framingham, MA with locations in Mounds View, MN and Miami Lakes, FL. Jim joined Medtronic after the acquisition of HeartWare, Inc., a leader in the LVAD technologies and solutions where he served for 9 years as an executive until the company was acquired by Medtronic in August of 2016 for $1.1B. Prior to joining HeartWare, he held various leadership positions at Boston Scientific and began his medical device career at Sherwood Medical which was acquired by Covidien, Inc. in 1998. He received his MBA from the Ageno School of Business in San Francisco, CA and a BS in Marketing from Indiana University.

**RAINALD SEITELBERGER**
PRIVATE MEDICAL UNIVERSITY SALZBURG, UNIVERSITY HOSPITAL SALZBURG, GERMANY
University Vienna Medical School (1976-1981)
Department of Pharmacology, University Vienna (1981-1983)
Seaweed Canyon Laboratory for Cardiovascular Physiology, University California, San Diego
Department of Surgery II, University Vienna, General Surgery and Cardiothoracic Surgery Residency
Department Cardiovascular Surgery, University Freiburg, Germany (Consultant Cardiovascular Surgeon),
Department Cardiothoracic Surgery, University Vienna, Consultant Cardiothoracic Surgeon, 1993 -
Consultant Cardiac Surgeon, Jeddah, Saudi Arabia
Consultant Cardiac Surgeon, Erbil, Iraq
Chairman, Department Cardiac Surgery, University Hospital Salzburg (since 2011)
Cardio-Thoracic and Vascular surgeon from Salzburg.
2009 First minimalinvasive MAZE-Operation with the Medtronic Gemini-Ablation System in Austria
2006 First minimalinvasive aortic valve replacement via a re-lat thoracotomy in Austria
2003 World wide first clinical use of the Epicor Ultra-MAZE device for the treatment of patients with chronic atrial fibrillation
2002 First European implantation of the newly designed Edwards MC3 Tricuspid Annuloplasty System
2001 First combined MAZE–surgery for treatment of atrial fibrillation in Austria using the Microwave ablation device
1999 Development and first clinical experience of a new surgical technique for mitral valve reconstruction: triangular plication of the anterior mitral
Nicole Sekarski
UNIVERSITY HOSPITAL OF LAUSANNE, SWITZERLAND
Nicole Sekarski received her MD at the University of Geneva (Switzerland). She completed her training in pediatrics and pediatric cardiology at Washington University, St- Louis (USA). She is associate professor and Head of Pediatric Cardiology at the University Hospital of Lausanne (Switzerland). She has an extensive experience in all aspects of pediatric cardiology and is specialized in cardiac echocardiography. She is very involved in training intensivists and neonatalogist in targeted echocardiography and organizes annual echo training courses. She is the 2010 recipient of the Clinical Practice Award of the Faculty of Biology and Medicine of the Lausanne University. Her research has focused on development of medical technologies such as an adaptable pulmonary artery band (FloWatch-PAB®) and more recently on fetal programming of heart disease and she is the author of multiple peer-reviewed publications. Prof. Sekarski is highly committed to humanitarian work within the University Hospital of Lausanne through a variety of NGO’s (Terre des Hommes, Foundation “Le petit Coeur”, Foundation “Une chance, Un Coeur”) as well as through regular cardiosurgical humanitarian missions in Sénégal and Tunisia.

Devi Prasad Shetty
BANGALORE, INDIA
Devi Prasad Shetty (born 8 May 1953) is an Indian cardiac surgeon. He is chairman and Founder of Narayana Health, a chain of 21 medical centers in India. He has performed over 15,000 heart operations. In 2004 he was awarded the Padma Shri, the fourth highest civilian award followed by the Padma Bhushan in 2012, the third highest civilian award by the Government of India for his contribution to the field of affordable healthcare

Toshiharu Shinoka, MD, PhD, is a Co-Director of the Tissue Engineering Program at Nationwide Children’s Hospital. His clinical and research interests center on bioengineered tissue for use in surgery. Working with Dr. Christopher K. Breuer, he was the first in the world to tissue engineer blood vessels and implant them in human infants. Dr. Shinoka has many honors recognizing his contributions, including the Blue Ribbon 1st Place Poster from the Society of Thoracic Surgeons Meeting.

Agneta Simionescu
Clemson University, USA
Dr. Agneta Simionescu is an Assistant Professor of Bioengineering at Clemson University. She earned her Ph.D. in Cell Biology and Biochemistry, from the Romanian Academy of Science, Bucharest, in 2001. For her dissertation, she examined the role of matrix metalloproteases (MMPs) in cardiovascular diseases. In Targu Mureș, Romania, she functioned as a Research Scientist at the Institute for Cardiovascular Diseases and Transplantation, and at the University of Medicine and Pharmacy. Working under the direction of the distinguished cardiovascular surgeon, Professor Radu Deac, and collaborating with her husband, Dr. Dan Simionescu, as well as other scientists and surgeons from the institute, her research was concentrated on the pathology of human heart valves, dilated cardiomyopathy, and cardiac transplantation immunology. After coming to the US in 2003, she started her faculty position at Clemson University, in July 2006, as a research assistant professor and then as an assistant professor, in 2012. Her primary research interests are in the area of tissue engineering with projects that address the regeneration of cardiovascular structures able to substitute damaged blood vessels and mitral valves, and contribute to the endogenous regeneration and healing of the injured cardiac muscle.
DAN SIMIONESCU
CLEMSON UNIVERSITY, USA
Dan is the Harriet and Jerry Dempsey Endowed Professor of Bioengineering at Clemson University, an AIMBE Fellow, Director of Biocompatibility and Tissue Regeneration Laboratories and Deputy Director of Clinical Research Programs and Operations, Department of Bioengineering, Clemson University, Clemson SC, USA and Director of the Tissue Engineering and Regenerative Medicine Lab within the University of Medicine and Pharmacy, Targu Mures, Romania. Dan started his career in Romania where he got his degree in Biochemistry from the University of Bucharest. In the early years, he got his PhD in Cell Biology and worked in cardiovascular research at the Mures Heart Center in Targu Mures, Romania. In 2001, he moved to the US and continued with tissue engineering projects with commitments towards translational regenerative medicine and novel treatments for degenerative diseases of the cardiovascular, orthopedic and nervous systems. His activities include scaffold development and preclinical testing of stem cell based tissue engineered grafts in purpose-designed bioreactors, animal models and cell therapy. Dan directs a very strong suite of laboratories in the USA and Romania which cover basic science and applied translational regenerative medicine. Dan is a productive NIH-funded scientist and Project Manager for national and international multidisciplinary and translational projects.

ALISTAIR SIMPSON
LIVANOVA, UK
Alistair Simpson is the General Manager for the Cardiac Surgery Franchise at LivaNova. In his role he is responsible for the growth strategies and product development for the Cardio-Pulmonary and Heart Valve businesses. Alistair has 25 years of medical device experience. Before joining LivaNova, Alistair spent 16 years in positions of increasing commercial responsibility at Johnson & Johnson and five years in commercial management at Danaher. Alistair has an MBA from the University of Pittsburgh, and a Bachelor of Science from the University of Glasgow, Scotland.

KAREN SLIWA
UNIVERSITY OF CAPE TOWN, SOUTH AFRICA
Prof. Karen Sliwa has been appointed as the new Deputy Dean for Research until the end of the year. Prof. Karen Sliwa, MD, PhD, FESC, FACC, DTM & H- is the Director of the Hatter Institute for Cardiovascular Research in Africa, University of Cape Town, South Africa. Born in Germany, studying Medicine, undergoing training as a physician and cardiologist in a number of countries, she lives in South Africa since 1992. In recognition of her work Prof Sliwa has received several awards, including the South Africa/Germany Year of Science Celebrations Award (2012), German Cardiac Society Paul Morawitz Award for Exceptional Cardiovascular Research (2013) and the CPP award (2014) and the Africa’s most influential women in Business & Government life-time award (2015 and 2016). Karen Sliwa serves on a number of editorial boards and is also an editorial consultant to ‘The Lancet’. Furthermore, she is former president of the South African Heart Association and on the board of the South African Heart Failure Society (http://www.hefssa.org), which was established under her leadership in 2005. She is president-elect of the World Heart Federation (2017-2019), serves on the European Cardiac Society International Affairs Committee and is board member of the Pan African Society of Cardiology.

FRANCIS SMIT
UNIVERSITY OF THE FREE STATE, SOUTH AFRICA
Prof Francis E Smit is the current Head of the Department of Cardiothoracic Surgery at the University of the Free State in Bloemfontein, South Africa. He trained and qualified as a cardiac surgeon in Bloemfontein (1991) and did post graduate training in London UK with Marc De Leval and Donald Ross. His clinical interests are paediatric and adult cardiac surgery. Clinical Research interests include rheumatic heart disease, infective endocarditis, CABG in acute coronary syndrome and advanced pulmonary artery disease in congenital cardiac surgery. Active basic sciences research programs focus on the development valve substitutes for the developing world. This includes cryopreservation and decellularization of allografts and polyurethane valve substitutes. Prof Smit is also active in population and surveillance studies and the development of cardiac services in Africa.
CYNTHIA ST. HILAIRE  
UNIVERSITY OF PITTSBURGH SCHOOL OF MEDICINE, USA  
Dr. St. Hilaire’s research focuses on characterizing the underlying biology of vascular disease, concentrating on mechanisms that drive vascular and valvular calcification and remodeling. Her lab’s long-term goal is to dissect the mechanisms that drive the transformation of a healthy vascular cell into a calcifying cell, in order to identify targets for the development of pharmacological therapies. Dr. St. Hilaire completed her PhD training in Biochemistry at Boston University School of Medicine and shortly thereafter joined the Center for Molecular Medicine at the National Heart, Lung, and Blood Institute at the NIH, under the mentorship of Dr. Manfred Boehm. At the NHLBI Dr. St. Hilaire and colleagues discovered the genetic cause of the rare disease, Arterial Calcification due to Deficiency of CD73, which identified the novel role for the enzyme CD73 and adenosine signaling in vascular calcification. In 2015 she established her own research group at the University of Pittsburgh in the Department of Medicine and the Pittsburgh Heart, Lung, and Blood Vascular Medicine Institute. She is an Editorial Board Member of the Journal of the American Heart Association, co-Chair of the Early Career Committee of the AHA Council on Arteriosclerosis, Thrombosis, and Vascular Biology, and co-Chair of the Women’s Leadership Committee of the International Society of Applied Cardiovascular Biology.

ULRICH STEINSEIFER  
RWTH UNIVERSITY, AACHEN GERMANY  
MONASH UNIVERSITY, MELBOURNE, AUSTRALIA  
Professor Steinseifer received his doctorate in biomedical engineering from the RWTH University of Technology in Aachen, Germany. He held various positions in the medical device industry, mainly in the heart valve business, ranging from Project Manager at the largest German hospital supplier B. Braun to Director and CEO of the German, French and US based startup enterprise Triflo Medical Inc. In addition, he made successful use of his industrial experience as a freelance consultant and cofounded seven startup companies in the field of medical devices and engineering services. In 2003, he returned to academia and is now heading the Cardiovascular Engineering department at the Helmholtz Institute of the RWTH Aachen University, as a full Professor. The department currently employs more than 40 post docs, graduates and technicians, plus more than 60 undergraduate students. In September 2017, he additionally took over the position as Professor of Medical Engineering and Co-Director of the Monash Institute of Medical Engineering MIME at Monash University in Melbourne, Australia. His primary research focuses on artificial organs, particularly heart and lung assist and replacement as well as heart valve repair and replacement. He has written more than 150 journal articles and holds 14 patent families, and held various positions in scientific societies, such as Secretary General and President of the International Society for Rotary Blood Pumps ISRPBP (today: International Society for Mechanical Circulatory Support ISMCS) and Governor of the European Society for Artificial Organs ESAO.

MARKUS STIRNER-SCHILLING  
GETINGE, GERMANY  
VP Marketing & Academy, Europe, Middle East & Africa since 2013. He joined Getinge Group in 2009 via the Datascope Integration. He is in charge for the Getinge Acute Care therapies and Surgical Workflows lines.

HELMUT STRAUBINGER  
GMBH, GERMANY  
Experienced Chief Executive Officer with a demonstrated history of working in the medical device industry. Skilled and experienced in building companies, fundraising, leadership, product development, sales and marketing. Strong business development professional with a Diploma in Business Economics from University of Applied Sciences Munich.

SHINICHI TAKAMOTO  
CEO, MITSUI MEMORIAL HOSPITAL TOKYO, JAPAN  
Shinichi Takamoto was Professor of Cardio-Thoracic Surgery at the University of Tokyo in 1997 and retired in 2011. Then he became CEO, Mitsu Memorial Hospital, Tokyo. He has been President of the Japanese Society for Cardiovascular Surgery in 2006-2012 and has been President of the Asian Society for Cardiovascular and Thoracic Surgery (ASCVTS) since 2015. His research works were development of color Doppler imaging in transthoracic and transesophageal echo, retrograde cerebral circulation in aortic arch surgery and development of the Japanese cardiovascular surgery database. He recently stressed mission of the medical professions for patients.
RAENETTE TALJAARD
EXECUTIVE DIRECTOR OF ERSA
She holds a BA (Law), Hons. (IR) cum laude and an MA (International Relations) cum laude from the University of Johannesburg and an MSc (Public Policy and Administration) cum laude from the LSE. She was the Director of The Helen Suzman Foundation from 2006-2009. In 1999, at the age of 25, she became the youngest woman elected to the South African parliament under its new Constitutional order. As a former Democratic Alliance MP, she was the Shadow Minister of Finance and a member of the Portfolio Committee on Finance during her tenure. She also served on numerous other parliamentary committees, including the Standing Committee on Public Accounts during the arms deal investigation. Raenette is a Young Global Leader of the World Economic Forum, Fellow of the Emerging Leaders Program of the Centre for Leadership and Public Values and an ALI Aspen Institute Fellow. She has served on the board of LoveLife, South Africa’s largest HIV/AIDS NGO, on the Board of Stias at Stellenbosch University and was a member of the Regional Agenda Council on Africa of the World Economic Forum where she is still engaged in its Expert Network on Africa. From 2011-2015, Raenette served as a member of the Electoral Commission of the Republic of South Africa, a constitutional office bearer position, and was responsible for overseeing the country’s 5th democratic elections in its 20th year as a democracy. In addition to having taught public policy and international relations at the University of Cape Town, she consults privately on politics and public policy as well as defense and foreign policy issues.

HENDRIK TREEDE
UNIVERSITY HEART CENTER HAMBURG, GERMANY
Prof. Dr. Hendrik Treede is a board certified cardiac surgeon and Director of the Cardiac Surgery Department at the Mid-German Heart Center at the University Hospital Halle (Saale). After finishing his medical studies at Hamburg University he underwent residency and attending positions at University Hospital Munich Grosshadern and University Heart Center Hamburg. Prof. Treede is member of numerous scientific societies and an active clinical and experimental researcher in structural heart disease. His main scientific focus lies in interventional and minimally-invasive heart valve surgery. Prof. Treede has published more than 160 manuscripts in peer-reviewed journals.

MARKO TURINA
UNIVERSITY OF ZURICH, SWITZERLAND
Marko Turina (Zagreb, 1937) is Croatian cardiac surgeon. He was the Director of Klinik für Herzgefasschirurgie, University Hospital of Zurich in Zurich, Switzerland. He was one of the first people to insert an artificial heart outside the chest and among the first people to operate on congenital heart defects. Marko Turina is considered as a surgeon of high international prestige.

NIR URIEL
UNIVERSITY OF CHICAGO, USA
Nir Uriel, MD, is a leader in the field of heart failure, mechanical circulatory support and heart transplantation. He specializes in caring for patients who require mechanical circulatory support, including ventricular assist devices (VADs). Dr. Uriel's research focuses on advanced heart failure physiology, heart transplant and mechanical circulatory support. Dr Uriel specialized and reported physiological changes and developed treatment algorithms for patients supported with Mechanical Circulatory Support that are being used worldwide. These findings were published in the Journal of American College of Cardiology. He has a strong interest in high-risk transplant populations, including HIV-positive patients and patients who have received mediastinal radiation due to tumors or prior transplants. Through his research, Dr. Uriel has improved treatment protocols and patient care for these high-risk groups.

JP VAN NIEKERK
UNIVERSITY OF CAPE TOWN, SA MEDICAL JOURNAL, SOUTH AFRICA
‘JP’ is Emeritus Professor of the University of Cape Town where he was Dean of the Faculty of Health Sciences. He is an Emeritus Editor of the South African Medical Journal and started three new journals including the South African Journal of Bioethics and Law. He has written widely on medical related topics with a special interest in medical education. Other activities included: President of the South African Medical Association; Health Professions Council (1990-2004); President of the Association of Medical Schools of Africa; and Executive Council member of the World Federation for Medical Education. Since its inception he has been involved with the Hospice Palliative Care Association (HPCA), was
its chairman (1993-2006), and is currently a patron. Until well-earned artificial hips 28 years ago he was a keen squash player representing the Free State and Western Province for 15 years and South Africa as veteran; now enjoys hiking and exploring (including the mind).

THOMAS VASSILIADES
MEDTRONIC, USA
Dr. Thomas Vassiliades is a thoracic and cardiac surgeon in Atlanta, Georgia. He received his medical degree from University of North Carolina at Chapel Hill School of Medicine and has been in practice for more than 20 years.

DEVAGOUROU VELAYODAMU
AIIMS NEW DELHI, INDIA

DAVID VORP
UNIVERSITY OF PITTSBURGH, USA
Dr. David Vorp is the Associate Dean for Research at the University of Pittsburgh Swanson School of Engineering and John A. Swanson Professor of Bioengineering. He is also Professor of Cardiothoracic Surgery, Surgery, Chemical and Petroleum Engineering, and the Clinical and Translational Sciences Institute. He also serves as a Director of the Center for Vascular Remodeling and Regeneration, the Co-Director of the Center for Medical Innovation, and the Director of the Vascular Bioengineering Laboratory at the University of Pittsburgh. Dr. Vorp co-founded Neograft Technologies, Inc., which focuses on the commercialization of AngioshieldTM, a vein graft modification technology developed in his laboratory which underwent “first-in-man” studies beginning in 2014. He currently holds five patents in this and other technologies. Dr. Vorp has held numerous leadership positions in professional societies, including serving as two terms as the first non-MD President of the International Society for Applied Cardiovascular Biology (ISACB), a partner in this conference. He also served as Chair of the Bioengineering Division of the American Society of Mechanical Engineers (ASME) and two terms as Secretary of the Executive Committee of the Biomedical Engineering Society (BMES). He was the Founding President of the SB3C Foundation and was recently nominated for President of BMES. Dr. Vorp was recognized with the Van C. Mow Medal from ASME, was twice awarded a Pitt Innovator Award, and was a recipient of the Carnegie Life Sciences Award. Dr. Vorp is a Fellow of ASME, BMES and the American Institute of Medical and Biological Engineering. His most recent honors include being elected to the World Council of Biomechanics.

BEAT WALPOTH
UNIVERSITY OF GENEVA, SWITZERLAND
Zuich University Medical School (M.D. 1972)
Harvard (PBBH) Surgery Residency (1973-75)
General Surgery Boards (Zurich; 1982)
Stanford Postgraduate Training (1982-84)
President Elect, European Society for Artificial Organs

WEI WANG
FUWAI HOSPITAL, CHINA
Dr Wei Wang, a cardiovascular surgeon, is chief of department of structural heart diseases at Fuwai Hospital, Chinese Academy of Medical Sciences. Fuwai hospital is the biggest heart center in the world. There are more than 14000 cases open heart surgeries annually. Dr. Wang has been performing more than 200 cases heart transplant himself. Beside of routine cardiovascular surgery, such as, CABG, valvular surgery, Bentall procedure and so on, he also perform TAVI. He spent one year in Japan and another five years in US to be trained. Dr. Wang is one of leading cardiovascular surgeons in mainland of China.
GEORG WIESELTALER
UNIVERSITY OF SAN FRANCISCO, USA
Dr. Georg M Wieselthaler, a cardiothoracic surgeon, is a full professor and Director and Surgical Chief of the Heart Transplant and Mechanical Circulatory Support Program at the University of California, San Francisco Medical Center. He is one of the world’s leading experts in mechanical circulatory support for end-stage heart failure patients and has performed and supervised more than 500 heart transplants. He also has gained over the last 25 years extensive expertise in implanting ventricular assist devices (VAD) that help failing hearts pump blood. Wieselthaler, a native of Austria, earned his medical degree at the University of Vienna where he completed a residency and surgical training. He also completed advanced training in transplantation at the Vienna Heart Transplant and Vienna Lung Transplant programs. Wieselthaler has been involved in the development of ventricular assist pumps and a total artificial heart at the Medical University of Vienna, as well as the development of a third generation heart pump in the US, the HeartWare HVAD. He has published over 100 articles in peer-reviewed journals and has trained surgeons worldwide in implantation techniques and the use of VADs. He is member of several national and international medical societies and served as President and member of the Board of Trustees for several international societies.

DAVID WILLIAMS
UNIVERSITY OF LIVERPOOL, UK
Professor Williams has had 50 years experience in biomaterials, medical device and tissue engineering, mostly at the University of Liverpool, UK. During his career, he has published over 30 books and 400 papers: his latest book, Essential Biomaterials Science, was published by Cambridge University Press in June 2014. He was Editor-in-Chief of Biomaterials, the world’s leading journal in this field between 2000 and 2014. He has received major awards from the US and European societies of biomaterials including the Founders Award of the US Society for Biomaterials, and received the prestigious Acta Biomaterialia Gold Medal in 2012. Professor Williams left the University of Liverpool, UK, in 2007, where he had been Director of the UK Centre for Tissue Engineering and Pro Vice Chancellor of the University. He is currently Professor at Wake Forest Institute of Regenerative Medicine, North Carolina. In addition, he is a Visiting Professor at universities in Asia and Australia. In South Africa, he has formed a company that will produce low cost, high technology medical devices that can be used with minimally invasive procedures to treat young adults in sub-Saharan Africa, who are suffering from rheumatic heart disease but currently have no therapies available to them. It is intended that this technology will also be applicable in China and other Asian countries.

BARRY WILSON
MEDTRONIC, SWITZERLAND
Barry Wilson was appointed President of Medtronic International in 2001. He joined Medtronic as President Europe, Middle East and Africa in 1995 and in 1997 was elected a Senior Vice President of Medtronic, Inc. and joined the Executive Committee. He is a former President, International of the Lederle Division of the American Cyanamid Company, a research-based life sciences company that merged with American Home Products in 1995. Prior to this, he was President, Europe of the Bristol-Myers Squibb Company. In 2003, he was appointed to the Board of Directors of Bausch & Lomb. Since 2000, Mr. Wilson has been Chairman of Eucomed, the pan-European trade association that represents the manufacturers and distributors of medical technology products in Europe. Barry has an MA from Cambridge and an MBA from The Wharton School of Business. Barry is the current Chairman of Mindmaze, a board director of Anecova and NetScientific (a British public company) and on the Advisory Board of the Wyss Center for Bio and Neuroengineering. He has served on the boards of Mallinckrodt, Inc., Bausch & Lomb and Welch Allyn and been the Healthcare Partner for DLJ Credit Suisse Alternative Investments. He and his wife spend their time between their homes in Switzerland and Nevis.

MICHAEL F WOLF
MEDTRONIC, USA
Michael F. Wolf is a Senior Principal Scientist and Technical Fellow at Medtronic Inc. Mr. Wolf received B.S. degrees in Biochemistry and Chemical Engineering from the University of Wisconsin-Madison and an M.S. degree in Biomedical Engineering from the University of Minnesota. At the UWM and UMN his studies focused on biomaterials science, pathobiology, and endothelial cell seeding. Now approaching his 30th year at Medtronic, Mr. Wolf has worked heavily in the area of characterizing and improving how the blood- and vascular tissue-contacting devices/materials interact with the body. This work has covered device areas such as CPB equipment, mechanical heart valves, ventricular assist
devices, vascular grafts, cardiovascular and neurovascular stents, vascular catheters and cannula, and, cardiac pacing and hemodynamic sensors. For more than a decade, Mr. Wolf has also been active in development of standards for medical devices. He has served as subject matter expert, chairperson, and convenor (presently) to the ISO TC/194 working group focused on ISO 10993 Biological evaluation of medical devices - Part 4: selection of tests for interactions with blood. He also serves on the Executive Committee of the International Society for Applied Cardiovascular Biology. Mr. Wolf is an inventor on eight patents and author or co-author on more than twenty peer-reviewed publications and four book chapters.

DAVID WOOD
IMPERIAL COLLEGE, LONDON AND PRESIDENT OF WORLD HEART FEDERATION, UK
David Wood is the Garfield Weston Professor of Cardiovascular Medicine at the International Centre for Circulatory Health, National Heart and Lung Institute, Imperial College London, and Honorary Consultant Cardiologist to Imperial College Healthcare NHS Trust. He is the Course Director for the MSc in Preventive Cardiology – Cardiovascular Health and Disease Prevention – launched in 2008. The course provides multidisciplinary postgraduate training in the principles and practice of cardiovascular disease prevention. Short courses in preventive cardiology are also delivered elsewhere in the UK, Saudi Arabia and China. He founded the European Journal of Cardiovascular Prevention and Rehabilitation, now called The European Journal of Preventive Cardiology and was Joint Editor in Chief (2002-2008). He was a founding father and President (2006-2012) of the European Association for Cardiovascular Prevention and Rehabilitation, a sub-speciality Association of the European Society of Cardiology. In this capacity he served as an ESC Board member (2008-2010). He was then elected as Secretary/Treasurer of the Society (2010-2012) and served on the Management Group and the ESC Training and Research Grants Committee awarding annual grants to young cardiologists to further their clinical and academic careers. He is the Principal Investigator for Cardioscape (www.cardioscape.eu), a European Commission funded project through the European Society of Cardiology which is surveying and categorising cardiovascular research funding across Europe to inform investigators, funding bodies and the Commission. He is Chairman of the EACPR Reach Out Task Force of the European Association for Cardiovascular Prevention and Rehabilitation which is seeking to build a Global Alliance for Cardiovascular Disease Prevention in Clinical Practice in collaboration with the World Heart Federation and other professional organisations focussed on preventive and rehabilitative care. He is an advisor to WHO on new Guidelines for Screening for Cardiovascular Disease and Diabetes. In 2014 he was elected as President Elect of the World Heart Federation and takes up his appointment on January 1st 2015 for a six year term.

MAGDI YACOUB
IMPERIAL COLLEGE LONDON, UK
Sir Magdi Habib Yacoub OM FRS (born 16 November 1935) is an Egyptian-British cardiothoracic surgeon. He is Professor of Cardiothoracic Surgery at Imperial College London. He was involved in the restart of British heart transplantation in 1980 (there had been a moratorium following the series of three performed by Donald Ross in 1968), carried out the first British live lobe lung transplant and went on to perform more transplants than any other surgeon in the world. A 1980 patient, Derrick Morris, was Europe’s longest surviving heart transplant recipient until his death in July 2005. This record was superseded by John McCafferty who received a transplant at Harefield Hospital in Middlesex on 20 October 1982 and survived over 33 years, until 10 February 2016. He was recognised as the world’s longest surviving heart transplant patient by Guinness World Records in 2013. A March 1978 heart by-pass patient continues to live a very active and fruitful life (as of November 2016). He is also the head of Magdi Yacoub heart foundation, which launched Aswan Heart project.

CHARLES YANKAH
GERMAN HEART CENTRE BERLIN, GERMANY
President of PASCaTS. 1986-2012: Pioneer consultant cardiothoracic and vascular surgeon at the German Heart Centre Berlin (GHCB). 1998: Professor of surgery, Charité, Universitätsmedizin at the Humboldt University, Berlin. Major clinical work and research: inflammatory cardiomyopathy, heart transplantation, immunology of human heart valve surgery, HTx and tissue valve surgery. He received two awards for his experimental and clinical work in homograft surgery from the: Committee for the Advancement of Cardiac Bioprostheses (1988) and National Institute of Health (NIH-Bethesda USA (1990). He is a global player in his profession as a consultant, educationist, teacher and philanthropist. 1994: He led a GHCB/Charité transplant team to perform a successful long-term double organ (heart/kidney) transplantation.
ANDREAS ZUCKERMANN

MEDICAL UNIVERSITY OF VIENNA, AUSTRIA

Andreas Zuckermann, MD, is Director of Cardiac Transplantation at the Department of Cardiac Surgery/Medical University of Vienna in Austria. Dr. Zuckermann was a member of the board of Directors of the International Society for Heart and Lung Transplantation (ISHLT) and program chair of the 2015 ISHLT meeting and 2016 ECTTA meeting. Currently he is a member of the board of the Thoracic committee (ECTTA) of the European Society for Organ Transplantation (ESOT) and a member of the board of Eurotransplant. He holds positions in ET’s thoracic advisory committee as well as the organ procurement committee. He is the current president of the Austrian Society for Transplantation. He is a world-recognized leader in Thoracic transplantation and has been involved in over 1500 heart transplantations and

PETER ZILLA

UNIVERSITY OF CAPE TOWN, SOUTH AFRICA

Professor Zilla obtained his academic qualifications from the Universities of Vienna (Austria), Zurich (Switzerland) and Cape Town (South Africa) and his clinical qualifications from the Austrian Physician’s Board and the College of Medicine of South Africa. After graduating as “Doctor of Medicine” at the University of Vienna, Austria in 1980 he obtained a DMed. degree from the University of Zurich, Switzerland in 1983, a PD degree (PhD equivalent) from the University of Vienna and another PhD degree from the University of Cape Town in 1990. In 1987 he followed an invitation from the Chris Barnard Department in Cape Town to set up a tissue engineering laboratory and perform preclinical trials with his method of ‘in vitro endothelialization’. After successfully demonstrating its clinical feasibility he became part of the tissue engineering program at the University of Zurich from 1989. When new operating theatres incorporating cell culture laboratories were custom built for his method of in vitro endothelialization in Austria he commenced a clinical program there of which he remained the scientific advisor for almost two decades. With the undertaking of a major American corporation to fund his plans for a similar research program for developing countries, he established the Cardiovascular Research Unit at the University of Cape Town in 1992, director of which he continues to be. Uniting cardiology, lipidology and cardiac surgical research under one umbrella, he was instrumental in founding the ‘Cape Heart Centre’ at UCT and the ‘MRC Cape Heart Group’ in 1996 and became its director in 1999. His surgical positions were as Senior Registrar at the Department of Cardiovascular Surgery, University Hospital Zurich (1989-1990), Consultant in the Department of Cardiovascular and Thoracic Surgery, Hospital Wels (1990-1992) and Senior Consultant in Cardiothoracic Surgery at Groote Schuur Hospital from 1992. After his appointment as Associate Professor in 1994, Principal Specialist in 1996 and Full Professor in 1999, he became Head of the Chris Barnard Division in 2000, in charge of cardiothoracic surgery at Groote Schuur and Red Cross Children’s Hospital. Under his leadership the Department expanded both their staff and their operations after a steep decline in adult cardiac cases in the second half of the 1990s. Realising the need for ‘home grown’ solutions to the health debacle of up to 70 million largely untreated patients with rheumatic heart disease in the Developing World, Professor Zilla co-founded a University of Cape Town Start-Up Company in 2008 under the name of ‘Strait Access Technologies’ (SAT). For his research he has been awarded the Theodor Billroth Award (Austrian Surg Soc); Sigma Tau Award (Intern. Union of Angiology); Alexis Carrel Award (German Soc Vasc Surg); Goetz Award (SA Cardiac Soc); Eiselberg Award (Austrian Physicians Assoc) and Alain Carpenter Award (Int. Soc. Heart Valve Dis). He was the organizer of 5 major international conferences in 4 different countries; is a member and executive council member of 10 international societies; was president of ISACB from 1994-98; is a regular reviewer of the 18 top journals in his field and is on the editorial board of 3 major international journals and was Associate Editor of ‘Biomaterials’ (IF 8).
performed Austria’s first ‘ex vivo perfused’ heart transplant in 2007. He has received numerous awards for his contribution in transplantation and has over 170 publications in peer-reviewed journals. He is reviewer and member of several editorial boards in transplant journals. In addition, Dr. Zuckermann has been an invited speaker at many national and international meetings and has been involved in teaching and training of experts from many global transplant centers.

LIESL ZUHLKE
UNIVERSITY OF CAPE TOWN, SOUTH AFRICA
Associate Professor Liesl Zühlke, MBChB DCH FCPaeds Cert Card MPH FESC FACC PhD trained as a Paediatric Cardiologist in Cape Town and Dusseldorf, Germany. She has a MPH in clinical research methods, and her doctorate at the University of Cape Town provided new insights on outcomes of symptomatic and asymptomatic Rheumatic Heart Disease. Prof Zuhlke is widely regarded as an emerging leader in cardiovascular medicine on the African continent. Her major research interests lie in Rheumatic Heart Disease and congenital heart disease. She has received a number of awards including an academic excellence award from Discovery, NIH Fogarty Fellowship, Wellcome CIDRI and Thrasher awards and the Hamilton Naki Post-doctoral Clinical Scholarship, an award given to clinical scholars of excellence. She is the immediate past president of the pediatric cardiac society of South Africa, President of the South African Heart Association and the chairperson of the Pan African Society of Cardiology Paediatric Cardiology and Cardiac Surgery Task force. She was one of the organizers of the 6th World Congress of Paediatric Cardiology and Cardiac Surgery 2013, the World Congress of Cardiology and Cardiovascular Health 2016 and is on the organising committee for the World Congress of Paediatric Cardiology and Cardiac Surgery in 2017. A previous board member of the Heart and Stroke Foundation of South Africa, she is now on the board of the Hatter Institute for Cardiovascular Research and is co-director of Rheach (Rheumatic Heart Disease-Evidence, Advocacy, Communication and Hope), the recipient of one of the largest grants from Medtronic Philanthropy for work in Rheumatic heart disease. The initiative will be providing scientific and technical support for Global RHD programmes over the next five years. She has also recently established a research unit for paediatric and congenital heart disease, the Children’s Heart Disease Research Unit, which is based at the Red Cross War Memorial Children’s Hospital in Cape Town.
JOIN US FOR AN UNFORGETTABLE EVENING WITH ENTERTAINMENT BY SWING CITY

GREAT GATSBY GALA

Sunday, 3 December
19h00
Jameson Hall
Dress code: Smart-casual
**FULL REGISTRATION FEE INCLUDES**
- Admission to all scientific sessions for the duration of the event
- Luncheons and teas.

**CPD POINTS**
This event has been accredited with 22 clinical points and 1 ethic points.
Please sign the attendance register twice a day at the Londocor Information Desk for maximum CPD points.
CPD Certificates will be emailed to you 1-2 weeks after the event.

**TOURS & AIRPORT TRANSFERS**
Should you require any airport transfer or tour reservations, please contact:
Mr Ismael Orrie (African Travel & Tours) on:
Tel: +27 72 936 2271

**PERSONAL INSURANCE**
Please note that all delegates are responsible for their own travel insurance and medical insurance and cancellation fees.

**LANGUAGE**
The event will be conducted in English only.

**SOCIAL FUNCTIONS**

**Saturday, 2 December**
Cocktail function at Groote Schuur Hospital
*ZAR250 per delegate to attend - tickets sold out

**Sunday, 3 December**
Gala Dinner Jameson Hall, UCT Campus
*ZAR250 per delegate to attend - tickets sold out
Shuttles will leave from 19h00 and will return at 22:30 and 23:30

**Monday, 4 December**
Faculty Dinner The Westin Hotel
*By invitation only
Shuttles will leave from 19h00 and will return at 21:30 and 22:30
Talk like a “SAFFA”

**Ag**
In South Africa, ag [agh] is not short for aggressive or agriculture — it’s a filler word to express irritation or resignation. Eg. ‘Ag, no man!’, or ‘Ag, let’s go.’

**Skinner**
Skinner [skuhn-her] is Afrikaans slang for gossip. Eg. ‘Don’t skinner about me.’

**Lekker**
Lekker [lek-uh] is a widely used term indicating that something is ‘great’ or ‘nice’. For example, ‘The food was lekker’, or ‘We had a lekker day.’

**Kief**
Kief [kif], derived from Arabic (kayf), means cool, great, awesome or neat. Eg. ‘That’s a kief car!’

**Just Now/Now-now**
You’ll often hear South Africans mention that they will do something ‘just now’. This does not mean they’ll do it immediately, but rather a bit later. It may sound illogical but makes complete sense in South Africa!

**Braai**
Braai [br-eye] is a widely used noun and verb for an outdoor ‘barbecue’ where meat is cooked over a fire or coals. Eg. ‘We’re having a braai tomorrow.’ ‘We braaied the meat yesterday’. A braai is a popular social event in South Africa and even has its own dedicated public holiday, known as National Braai Day, which coincides with Heritage Day celebrated annually on September 24.

**Shame**
Shame is a typical South African expression for sympathy or admiration. Eg. ‘Ag, shame man, poor girl!’ ‘Shame, he’s so cute.’

**Eish**
Eish [aysh] is a colloquial exclamation of surprise, disapproval, exasperation or regret derived from Xhosa. Eg. ‘Eish, my cell phone broke’.

**Sharp**
Sharp [shahp] is often doubled up for effect (sharp sharp!) and means ‘goodbye’ or that everything is great.

**Is it?**
Is it? [izzit] is an expression frequently used in conversation meaning ‘Is that so?’ or ‘Really?’.

**Shebeen**
Shebeen [sha-bean] is an illegal tavern derived from Irish (sibín). It refers to unlicensed bars that were set up in townships during apartheid and frequented mainly by black South Africans. It has since become a mainstream word.

**Sho’t Left**
Sho’t left is derived from everyday South African ‘taxi lingo’. A commuter wanting a ride to a destination close by will say ‘Sho’t left, driver,’ meaning ‘I want to get off just around the corner.’

**Aikona**
Never in your life

**Bakkie**
Pick-up truck

**Bra**
Afrikaans word for male friend - “dude” in English
A complimentary daily shuttle service will be available from the following hotels to Groote Schuur Hospital (GSH):

V&A Hotel, Radisson Red Hotel, Radisson Blue Hotel, Commodore & Portswood Hotels, City Lodge (V&A Waterfront) and Double Tree by Hilton Upper Eastside Hotel

*The driver will collect you outside the entrance of your hotel and will depart promptly.

Shuttles

Please look out for the “50th Anniversary of the 1st Human Heart Transplant” logo on the vehicles.

**SHUTTLE TIMES:**

**Saturday, 2 December**
- 07:15: Hotels to GSH
- 10:15: Hotels to GSH
- 16:30: GSH to hotels
- 18:00: GSH to hotels
- 20:00: GSH to hotels (after Cocktail Function)

**Sunday, 3 December**
- 07:15: Hotels to GSH
- 10:15: Hotels to GSH
- 15:45: GSH to hotels
- 17:30: GSH to hotels
- 19:00: Hotels to Jameson Hall (Celebration Dinner)
- 22:30: Jameson Hall to hotels
- 23:30: Jameson Hall to hotels

**Monday, 4 December**
- 07:00: Hotels to GSH
- 07:45: Hotels to GSH
- 10:15: Hotels to GSH
- 13:00: GSH to hotels
- 15:30: GSH to hotels
- 17:00: GSH to hotels
- 18:45: GSH to hotels
On behalf of the Organising Committee, we would like to thank the following companies for their contribution toward the “50 Anniversary of the 1 Heart Transplant”:

**GOLD SPONSORS**

- Medtronic
- Investec Private Banking
- Neethlingshof Estate
- Aspen Pharmacare
- Distell

**SILVER SPONSORS**

- Pharma Dynamics
- Netcare
- SA Heart
- GL Events

**BRONZE SPONSORS**

- On-X
- Cipla
- Universiteit van Stellenbosch - Faculty of Health Sciences
- Getinge