Saturday 2\textsuperscript{nd} December

\textbf{South-North Dialogue}

Parallel Lecture Theatres 1 & 2, Groote Schuur Hospital

SOUTH-NORTHERN DIALOGUE

Host-Societies: STS; AATS; EACTS; ASCVTS; Brazilian Soc. CTS; PASCAR; PASCaTS; ANZCTS

\begin{tabular}{|l|}
\hline
08:00 – 10:45  \\
\hline
Welcome (7min)  \\
Procedural Introduction to the day  \\
The Forgotten Millions (7min)  \\
The Ethic Questions (20min)  \\
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Cardiac Surgical needs of the many  
(5min Intro and 4min ‘Blitzes’ followed by 20min Roundtable)

- Mozambique
- Brazil
- China
- India
- Equator: Contrast and Diversity
- The Magreb Countries
- Iran
- Russia
- Namibia
- South Africa

\begin{tabular}{|l|}
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10:45 – 11:10  \\
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11:10 – 12:45  \\
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\textbf{Humanitarian missions / NGOs: Critical Appraisal}  &  \\
(5min Intro and 4min ‘Blitzes’ followed by 20min Roundtable)  &  \\
\hline
Kalangos Foundation  &  \\
Chain of Hope  &  \\
Alain Carpentier Foundation  &  \\
La Chaîne de l’Espoir  &  \\
Namibian ex-Minister of Health  &  \\
Le Petit Coeur  &  \\
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Coffee Break  \\
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The potential role of CTS Societies  \\
(10 min Intros plus 40min Roundtable)  \\
Brief on "World Federation for Medical Education": An Example SAMI)  \\
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MC Morning Sessions: Johan Brink / Dan Corder (Cape Town)
Max Price (President/Rector University of Cape Town)
Peter Zilla (Cape Town)
Liesl Zühlke (Cape Town)
Sally Benatar (Toronto / Cape Town)

Moderator: Francis Smit (Bloemfontein, South Africa)

Ana Olga Mocumbi (Maputo)
Juan Meija (Fortaleza)
Wen Wang (Beijing)
Devagourou Velayadamu (Delhi)
Theodoros Kofidis (Singapore)
Abdelmalek Bouzid (Constantine Algeria)
Saeid Hosseini (Tehran)
Gennadiy Khubulava (St.Petersburg)
Richard Kamwi (Ex-Minister Health Namibia)
Darshan Reddy (Durban)

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

Afksendiyos Kalangos (Athens)
Sir Magdi Yacoub (London / Aswan)
Alain Carpentier (Paris)
Sylvain Chauvaud (Paris)
Richard Kamwi (Windhoek/Namibia)
Nicole Sekarski (Geneva-Lausanne)

Moderator: Joseph Bavaria (Philadelphia) (7min Introduction)

J.P. van Niewerk (3min)(Ex Dean of Medicine; Prev Editor in Chief

David Wood (President/ London)
Jose Pomar (ex-President / Barcelona)
R. Morton Bolman, III (Burlington/ UVMMC)
James Kirklin (AATS Ambassador/ Birmingham Alabama)
Robert S.D.Higgins (President-Elect / Baltimore)
Shinichi Takamoto (President / Tokyo)
Bongani Mayosi (Ex-President/ Cape Town)
Charles Yankah (President / Accra – Berlin)
The Publication Hurdle
(8min Intro plus 20min Roundtable)
Dan Ncayiyana  
Friedhelm Beyersdorf  
JP van Niekerk  
Alec Patterson  
Sampath Kumar  
David F. Williams  
Marika Sboros

Moderator: Marko Turina (8 min Introduction) (Zurich)

South African Medical Journal (Cape Town)  
Eur J Cardiothoracic Surg (Freiburg)  
South African Medical Journal (Cape Town)  
Ann Thorac Surg (St.Louis)  
Asian Cardiovasc Thorac Annals (Delhi)  
Biomaterials (Winston Salem)  
Journalist, Writer, Editor (London/Johannesburg)

Finger fork lunch

Overcoming the Divide through Innovation
8min Intro and 5min ‘Blitzes’ followed by 20min Roundtable

Health-economic frameworks for Innovation  
Affordable Heart Surgery  
Innovative health-economic models  
Affordable Medication  
Overcoming diagnostic hurdles  
Digital Health Eco-Systems for Africa  
Social Innovation

Moderator: Francois Bonnici (Cape Town/South Africa)

Javier D.Maldonado Escalante (Bogota / Colombia)  
Devi Prasad Shetty (Bangalore / India)  
Lee Chuen Neng (Singapore)  
Lenias Hwenda (Zimbabwe and Switzerland)  
Sidhant Jena (CEO Jana Care Boston / USA)  
Jacques Kpodonu (Ghana and USA)  
Solly Benatar (Toronto, Canada and Cape Town South Africa)

MEETING CARDIOVASCULAR MEDICAL NEEDS OF DEVELOPING NATIONS
WHO Focus Rheumatic Heart Disease: The Plea of the Millions
Host Society: World Heart Federation

Preventing the Stage  Bernard Gersh (Mayo Clinic) The epidemic of CVD in the Developing World: Global Implications (7min)
Karen Sliwa (President-Elect World Heart Federation) New WHO focus RHD (5min)
Francois Bonnici (Director: Bertha Centre for Social Innovation and Entrepreneurship) The Hurdles (7min)

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)

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

Michael P. Phalen, (Executive President MedSurg; Boston Scientific)  
Markus Striner-Schilling (VP Marketing&Academy Getinge)  
Helmut Straubinger (CEO Tricares)  
Lenias Hwenda (CEO Medicines for Africa)  
Patrice Matchaba (Global Head Heart Cardiac; Novartis)  
Salah Malek (Getinge)

Coffee break

Round Table “Consensus”  
Cape Town Declaration  

Moderators:
“South Panel”: Ahmed El Sayed (Khartoum)
Sampath Kumar (Delh/India)
Karen Siwa (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)
Sally Benatar (Toronto/Cape Town)
Kumud Dhital (Sydney/Australia)

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

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)

08:00 – 10:10

08:02 Welcome
Peter Zilla

History Revisited

08:10 Tribute to a famous father
Christiaan Barnard Jr. (Cape Town)

08:20 Christiaan Barnard – One life
David Cooper (Pittsburgh/ ex Cape Town)

08:35 Christiaan Barnard: The Minnesota Years
Richard Bianco (Minneapolis USA)

08:43 Cardiology and Christiaan Barnard: Partners and Drivers
Mervyn Gotsman (Jerusalem, Israel)

08:51 The Operation - The Anaesthetic Side
Pete Gordon (Cape Town, SA)

08:59 Upholding the Legacy
Peter Zilla (Cape Town, SA)

09:07 Norman Shumway: a visionary and his dream
Paul Mohacsi via Skype  (Ex-Stanford / Zurich, CH)

08:50 – 10:10

09:19 Vladimir Demikhov: The under-appreciated forefather
Simon Matskepilshvili (Moscow, Russia)

09:31 Reflections on making heart transplantation a reality
Sir Magdi Yacoub (London, UK)

09:43 Heart-Lung Transplantation: Paving the Way
Robert S.D.Higgins (Baltimore, USA)

09:55 Lung Transplantation: standing at the cradle
Alexander Patterson (St.Louis, USA)

10:07 Heart Transplantation in Italy: The early days
Giuseppe Faggian (Verona, Italy)

10:19 Xenotransplantation: Leonard Bailey and Baby Fae
Beat Walpoch (Geneva, Switzerland)

Coffee Break
Session MC: Alec Patterson (St. Louis, USA) / Dan Corder (Cape Town)

10:45 – 12:00

10:45 Willem Kolff, Robert Jarvik, Denton Cooley and beyond: The Artificial Heart of Barney Clark
Georg Wiesethaler (San Francisco, USA)

10:57 Heart Transplantation vs. Mechanical Circulatory Support – is the Gold Standard Changing?
Hermann Reichenspurner (Hamburg, GER)

11:09 The Return of DCD Hearts: Back to the Future
Kumud Dhital (Sydney, AUS)

11:21 The era of Transgenic Xenotransplantation
Bruno Reichart (Munich, GER)

11:33 The bumpy road of immune-suppression
Howard L. Eisen (Philadelphia, USA)

11:45 HIV-positive donors, multi-organ recipients and beyond
Elmi Muller (Cape Town, SA)

Finger Fork Lunch

Session MC: Friedhelm Beyersdorf (Freiburg GER)/
Dan Corder (Cape Town)

12:00 – 12:45

12:45 Robotic Heart Surgery: Has the Future begun (too early)?
Volkmar Falk (Berlin, GER)

12:57 Does one really need a Robot for Endoscopic Mitral Valve Repair?
Hermann Reichenspurner (Hamburg, GER)

13:09 Andreas Grünzig: It started in Zurich...
Marko Turina (Zurich, CH)

13:21 The Idea of Heart Valve Replacement on a Wire
Henning-Rud Andersson (Aarhus, Denmark)

13:33 The Odyssey of Trans-catheter Aortic Valve Replacement: from Concept to Clinical Reality
Joseph Bavaria (Philadelphia/USA)

13:45 Against the Odds
Mike Mussallem (CEO Edwards, Irvine USA)

13:57 Breaking through Ceilings:
Challenging the gold standard
Hendrik Treede (Halle, GER)

14:09 A Clip on the Mitral Valve: an unlikely beginning to the rapid rise of transcatheter mitral therapy
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)

14:57 The Developing World: The next frontline for Trans-Catheter Solutions
Peter Zilla (Cape Town, SA)

15:09 Non-occlusive, self-homing TAVI insertion for young patients with RHD and non-calcified roots (Live in a Box Surgery)
Jacques Scherman (Groote Schuur Hospital, Cape Town)

Coffee Break

Session MC: Bruno Reichart (Munich, GER) / Dan Corder (Cape Town)

15:30 – 16:00

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)

16:48 The beginnings of open heart surgery in India
Sampath Kumar (Delhi, India)

17:00 The rapid rise of Heart Surgery in China
Wen Wang (NCCD and Fuwai Hospital, Beijing, PRC)

17:12 Capacity Building on the Ground: Chain of Hope In Africa and beyond
Sir Magdi Yacoub (London, UK)
Celebration Dinner: Jameson Hall, University of Cape Town
MC: Dr. Max Price (Vice Chancellor/Rector University of Cape Town)
Gala Speaker: Sir Magdi Yacoub (London)

Monday 4th December
Transplantation: 50 years on
Lecture Theatre 1, Groote Schuur Hospital

TRANSPLANTATION: 50 YEARS ON
Host Society: European Society for Heart Lung Transplantation (ESHLT)

08:30 – 10:40

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

10:40 – 11:00

Coffee Break

11:00 – 12:20

11:00 Heart Transplantation in patients with Chagas Disease Transplantation Juan Mejia (Fortaleza, BR)
11:20 Immunosuppression: what have we learned? Howard J Eisen (Philadelphia, USA)

12:20 – 13:10

Finger fork Lunch

13:10 – 14:55

ASSISTED CIRCULATION: The Past, the Present and the Future
Host Society: International Society for Mechanical Circulatory Support, (ISMCS)

Chair: Georg M. Wiesethaler UCSF, USA

13:10 Cardiopulmonary Resuscitation: Light at the end of the tunnel? Friedhelm Beyersdorf (Freiburg / Germany)
13:25 There is no Future without the Past – 50 years of Innovation at the THI O. Howard Frazier (Texas Heart Institute, Houston, USA)
13:40 Development of MCS Programs under the Pressure of the NHS Stephan Schueler (Newcastle upon Thyne, UK)
14:10 MCS Development in Japan the Future Minoru Ono (Tokyo Medical University, JP)
14:25 Miniaturized Pumps for Minimal Invasive Implantation Simon Maltais (Mayo Clinic Rochester, USA)
14:40 Assisted Circulation at the Tip of Africa Willie Koen (Cape Town, SA)
13:55 Mechanical Circulatory Support – Down Under
Kumud Dhital (St Vincent Hosp, Darlinghurst, AUS)

14:55-15:20 Coffee Break
Chair: Georg M. Wieselthaler UCSF, USA
15:20-16:50
15:20 Neo-Angiogenesis for LVAD patients
Nir Uriel (Univ. of Chicago, USA)
16:20 Boon and Bane of Extra-corporeal Life Support (ECLS) in Cardiogenic Shock and Resuscitation
Christian M. Hagl (LMU Munich, GER)
15:35 Current Trends and Concepts in Haemocompatibility
Advancements in LVADs
Ivan Netuka (Prague, Czech Republic)
16:35 Achievements and Limits of “Temporary MCS: Lessons learned from the Croatian National ECLS Network
Bojan Biocina (University of Zagreb, Croatia)
15:50 The PerfecT Pump: State of the Art and Future Trends in
VAD Technologies
Ulrich Steinseifer (RTWH Aachen, Germany)
16:50 Mechanical circulatory support: strategies and outcomes in pediatric congenital heart disease
James Kirklin (Univ. of Alabama, Birmingham, USA)
16:05 Future Developments in LVAD Technology –
The Industry Perspective
Jim Schurmann (Medtronic Inc USA)

“ISACB 30 YEARS OLD: The era of Repair, Replacement and Regeneration”
Lecture Theatre 2, Groote Schuur Hospital
(Host Society: International Society for Applied Cardiovascular Biology (ISACB)

07:00 – 08:00
Introduction
7:00-7:30: Registration and Speaker Ready assistance
7:30-7:40: Introduction and welcome address by Elena Aikawa, ISACB President
7:40-8:00: Welcome Lecture: Peter Zilla MD. PhD "The Surgeon Scientist"

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

08:05 – 09:55
Pathologic Arterial Remodeling and Bioengineering Solutions
Chairs: Beat Walpoth, Toshi Shinoka, Tim Pennel
8:05-8:25: Plenary
Toshi Shinoka: History of Vascular Tissue Engineering Research and Long-term Clinical Results of Tissue Engineered Vascular Grafts
8:25-9:55: Invited Speakers and Abstracts
1. Masanori Aikawa: New Mechanisms for Macrophage Activation as Therapeutic Targets for Vascular Disease
2. Luke Brewster: Translational Models of PAD—a voyage or an important destination?
3. Mike Wolf: Novel Treatments for Cerebrovascular Aneurysms
4. Claudia Goettsch: Protein Sorting in Cardiovascular Calcification
6. Ulf Hedin: Molecular Remodeling Mechanisms in Carotid Atherosclerosis—lessons learned from carotid plaque biobanking
Aneurysmal degeneration: The interaction of Nature and Nurture

Chairs: David Vorp, John Curci

10:15-10:25: Plenary
Helena Kuivaniemi: Genetics of Aortic Aneurysms

10:35-10:50: Invited Speakers and Abstracts
1. John Curci: The Unique Challenges of Developing Novel Therapies for Abdominal Aortic Aneurysms
2. Fred DeBeer: Serum Amyloid A Exacerbates Acute Vascular Events by Activation of the NLRP3 Inflammasome
3. Giovanni Ferrari: Advanced Glycation End Products: Pathophysiologic Role and Therapeutic Target in Ascending Aortic Disease
4. Craig Goergen: Ultrasound Imaging and Hemodynamic Simulations of Murine Dissecting Aneurysms
5. David Vorp: Aortic Aneurysm Biomechanics

11:50-12:05: Round Table with Moderators and Speakers

Afternoon Session
Cardiac and valve repair, remodeling and regeneration

Valve replacement and repair

Chairs: Dan Simionescu, Magdi Yacoub

13:00-13:20: Plenary
Magdi Yacoub

13:20-15:05: Invited Speakers and Abstracts
1. Dan Simionescu: In Vitro Regeneration of Living Aortic and Pulmonary Valve Roots and Preclinical Testing
2. Elena Aikawa: Calcific Aortic Valve Disease: From calcifying Exosomes to Systems Biology
3. Teddy Fischlein: Aortic Valve Repair Using Geometric Ring Annuloplasty
4. Carlijn Bouten: Growing Heart Valves Inside the Heart: from immunomodulatory scaffolds to long-term follow-up
5. Cynthia St. Hilaire: A Role for Telomerase in Valvular Calcification
6. Max Emmert: Tissue-engineered Matrices to Regenerate the Heart
7. Joshua Hutcheson: Aortic Valve Melanocytic Cells Control Valvular Elastogenesis

Coffee Break

15:05 - 15:20

Tissue engineering and regeneration

Chairs: Simon Hoerstrup, Agneta Simionescu

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

15:40-17:00: Invited Speakers and Abstracts
1. Agneta Simionescu: Mitral Valve Tissue Engineering-a model for investigating valve degeneration
2. Jo Meinhart: 30 Years of Endothelial Cell Transplantation on Vascular Grafts
4. Glenn Gaudette: Spinach Leaves for Regenerating Function in the Heart
5. Bernard Gersh: Cardiac Cell Repair Therapy: current status
6. Tim Pennel: Wrong models, wrong questions, no healing and still no change

17:00-17:15: Round Table with Moderators and Speakers from Afternoon Session

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 M 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