



 Event
Programme

Courage and
Innovation

50th 
Anniversary
of the **1st Heart
Transplant**

2nd - 4th December 2017 | Groote Schuur Hospital, University of Cape Town

Saturday 2nd December

South-North Dialogue

Parallel Lecture Theatres 1 & 2, Grootte Schuur Hospital

SOUTH-NORTH DIALOGUE

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

08:00 – 10:30

Welcome (7min)
Bridging the Gap (7min)
The Forgotten Millions (7min)
The Ethic Questions (20min)

Cardiac Surgical needs of the many

(5min Intro and 4min 'Blitzes' followed by 15min Roundtable)

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

Humanitarian missions / NGOs: Critical Appraisal

(5min Intro and 4min 'Blitzes' followed by 15min Roundtable)

Kalangos Foundation
Chain of Hope
Alain Carpentier Foundation
La Chaîne de l'Espoir
Namibian ex-Minister of Health
Le Petit Coeur

10:30 – 10:50

10:50 – 12:30

The potential role of CTS Societies

(8min Intro plus 40min Roundtable)

World Heart Federation
EACTS
AATS
AATS
STS
Asian Society
PASCAR
PASCATS

The Publication Hurdle

(8min Intro plus 40min Roundtable)

MC Morning Sessions: Johan Brink / Dan Corder (Cape Town)

Max Price (President/Rector University of Cape Town)
Bongani Mayosi (Dean of Health Sciences: University of Cape Town)
Liesl Zühlke (Cape Town)
Solly Benatar (Toronto / Cape Town)

Moderator: *Francis Smit* (Bloemfontein, South Africa)

Ana Olga Mocumbi (Maputo)
Juan Meija (Fortaleza)
Wen Wang (Beijing)
Devagourou Velayodamu (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/ UVMCMC)

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

Coffee Break

Moderator: *Joseph Bavaria* (Philadelphia)

David Wood (President/ London)
Jose Pomar (ex-President / Barcelona)
R. Morton Bolman, III (Burlington/ UVMCMC)
James Kirklin (AATS Ambassador/ Birmingham Alabama)
Robert SD Higgins (Pres. Elect / Baltimore)
Shinichi Takamoto (President / Tokyo)
Bongani Mayosi (President/ Cape Town)
Charles Yankah (President / Accra – Berlin)

Moderator: *Marko Turina* (Zurich)

Marko Turina

Dan Ncayiyana
Friedhelm Beyersdorf
JP van Niekerk
Alec Patterson
Sampath Kumar
David F. Williams
Marika Sboros

12:30 – 13:15

13:15 – 14:10

Overcoming the Divide through Innovation

8min Intro and 5min 'Blitzes' followed by 30min 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

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

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

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)

14:15 – 16:00

MEETING CARDIOVASCULAR MEDICAL NEEDS OF DEVELOPING NATIONS

WHO Focus Rheumatic Heart Disease: The Plea of the Millions

Host Society: World Heart Federation

Preparing 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
Jacques Essinger CEO Symetis
Sidhant Jena (CEO Jana Care)
Thomas Vassiliades VP Clin. And Med Affairs Medtronic
Pieter Kappetein (Medtronic)

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

Michael P. Phalen, Executive President Med Surg ; Boston Scientific
Markus Stirner-Schilling VP Marketing&Academy Getinge
Helmut Straubinger (CEO Tricare)
Lenias Hwenda CEO Medicines for Africa
Patrice Matchaba Global Head Cardiac; Novartis
Salah Malek (Getinge)
Jan Kimpen (Chief Med.Off. Royal Philips)

16:00 16:20

16:20 18:00

Round Table "Consensus"
Cape Town Declaration
Moderators:

Coffee break

Procedural Introduction: *Robert Kleinloog* (Durban) 3min

Proposal for Consensus Declaration:

Joseph Bavaria (Philadelphia)
Friedhelm Beyersdorf (Freiburg)

Moderators:

Robert S.D Higgins (Baltimore)
Sir Magdi Yacoub (London / Aswan)
Joseph Bavaria (Philadelphia)
Friedhelm Beyersdorf (Freiburg)

“South Panel”: Ahmed El Sayed (Khartoum)

Sampath Kumar (Delh/Indiai)
Karen Sliwa (Cape Town/Sourth Africa)
Bongani Mayosi (Cape Town/South Africa)
Charles Yankah (Berlin / Accra Ghana)
Theodoros Koffidis (Singapore)
Juan Mejia (Fortaleza/Brazil)
Devi Prasad Shetty (Bangalore/India)
W Wang (Beijing/China)
Ana Olga Mocumbi (Maputo/Mozambique)
Fábio Jatene (Sao Paolo/Brazil)
Devagourou Velayoudam (Delhi)
Manuel Antunes (Coimbra, ex Johannesburg)
Lenias Hwenda (Zimbabwe / Switzerland)
Abdelmalek Bouzid (Constantine; Algeria)
Liesl Zühlke (Cape Town/South Africa)
Saeid Hosseini (Teheran/Iran)
Solly Benatar (Toronto/Cape Town)

“North Panel” Jose Pomar (Barcelona/Spain)

Shinichi Takamoto (Tokyo/Japao)
Lee Chuen Neng (Singapore)
Afksendiyos Kalangos (Athens/Greece)
Alec Patterson (St. Loui/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/ UVMCMC USA)
Marko Turina (Zurich/Switzerland)
Axel Haverich (Hannover/Germany)
Bruno Podesser (Vienna/Austria)

18:00

Welcome Reception (Groote Schuur Hospital)

Sunday 3rd December

Courage and Innovation

Parallel Lecture Theatres 1 & 2, Groote Schuur Hospital

08:00 – 10:10

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

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 Christiaan Barnard: The early Cape Town Years
Robert Frater (New York USA)

08:51 Cardiology and Christiaan Barnard: Partners and Drivers
Mervyn Gotsman (Jerusalem, Israel)

08:59 The Operation - The Anaesthetic Side
Pete Gordon (Cape Town, SA)

09:07 Norman Shumway: a visionary and his dream
n.n.

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

09:31 From Pioneering to Success: The Harefield Story
Sir Magdi Yacoub (London, UK)

09:43 Heart-Lung Transplantation: Paving the Way
Robert Higgins (Johns Hopkins, Baltimore, USA)

09:55 Lung Transplantation in Central Europe: Thinking big
Walter Klepetko (Vienna, Austria)

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

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

10:30 – 10:45

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

11:21 Is the era of Transgenic Xenotransplantation dawning?

and beyond: The Artificial Heart of Barney Clark
Georg Wieselthaler (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)

12:00 – 12:45

12:45 – 15:35

- 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 Grüntzig: 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
Alain Cribier / Joseph Bavaria (Rouen / Philadelphia)
- 13:45 Yes, we Can
Mike Mussallem (CEO Edwards, Irvine USA)
- 13:57 Breaking through Celings:
Challenging the gold standard
Hendrik Treede (Halle, GER)

15:30 – 16:00

16:00 – 17:25

- 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)

19:30

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)**

- 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 Sherman (Groote Schuur Hospital, Cape Town SA)

Coffee Break

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

- 16:48 The beginnings of open heart surgery in India
Sampath Kumar (Delhi, India)
- 17:00 The rapid rise of Heart Surgery in China
W 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)

**Gala Dinner: Jameson Hall, University of Cape Town
Gala Speaker: Sir Magdi Yacoub**

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 – 10:30

- 08:30 Will there still be heart transplantation in 50 years? *Andreas Zuckermann* (Vienna, AT)
- 08:50 Donation after Cardiac Death
Kumud Dhital (Sydney, AUS)
- 09:10 Recent Changes in Organ allocation in Europe
Günther Laufer (Vienna, AT)

10:30 – 10:50

10:50– 12:40

- 10:50 Heart Transplantation in patients with Chagas Disease
Juan Mejia (Fortaleza, BR)
- 11:10 Immunosuppression: what have we learned?
Howard J Eisen (Philadelphia, USA)

12:00– 13:00

13:00– 14:50

- 13:00 Indications for MCS – Changing of the Landscape of End Stage Heart Failure
Jeff Teuteberg (Stanford University, Palo Alto, USA)
- 13:15 There is no Future without the Past – 50 years of Innovation at the THI
Howard O. Frazier (Texas Heart Institute, Houston, USA)
- 13:30 Development of MCS Programs under the Pressure of the NHS
Stephan Schueler (Newcastle upon Thyne, UK)

14:50-15:10

15:10-16:40

- 15:10 The Perfect Pump: State of the Art and Future

Chairs: **Hermann Reichenspurner (Hamburg)**
Andreas Zuckermann (Vienna)

- 09:30 Lung Transplantation: view of the surgeon
Alec Patterson (St.Louis, USA)
- 09:50 Lung Transplantation: view of the pulmonologist
Allan Glanville (Sydney, AUS)
- 10:10 Experience with Ex-Vivo Lung Perfusion
Walter Klepetko (Vienna/AT)

Coffee Break

Chairs: **Hermann Reichenspurner (Hamburg)**
Andreas Zuckermann (Vienna)

- 11:30 The future of heart transplantation
Bruno Reichart (Munich)

Finger fork Lunch

ASSISTED CIRCULATION: CENTER-PLAYER AT LAST Host Society: International Society for Mechanical Circulatory Support, (ISMCS)

Chair: **Georg M. Wieselthaler UCSF, USA**

- 13:45 Mechanical Circulatory Support – Down Under
Paul Jansz (St Vincent Hospital, Darlinghurst, AUS)
- 14:00 MCS Development in Japan the Future Projections
Minoru Ono (Tokyo Medical University, JP)
- 14:15 Miniaturized Pumps for Minimal Invasive Implantation
Simon Maltais (Mayo Clinic, Rochester, USA)
- 14:30 Assisted Circulation at the Tip of Africa
Willie Koen (Cape Town, SA)

Coffee Break

Chair: **Georg M. Wieselthaler UCSF, USA**

- 15:55 Boon and Bane of Exytracorporeal Life Support

Trends in VAD Technologies
Ulrich Steinseifer (RTWH Aachen, GER)

15:25 Future Developments in LVAD Technology –
The Industry Perspective
Jim Schurman (Medtronic Inc., USA)

15:40 Neo-Angiogenesis for LVAD patients
Nir Uriel (Univ. of Chicago, USA)

in Cardiac Shock and Resuscitation
Christian Hagl (LMU Munich, GER)

16:10 Cardiopulmonary Resuscitation: Light at the end of
the tunnel?
Friedhelm Beyersdorf (Freiburg / Germany)

16:25 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”

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
5. Beat Walpoth: Bioengineering Solutions for Vascular Tissue Engineering
6. Ulf Hedrin: Molecular Remodeling Mechanisms in Carotid Atherosclerosis—lessons learned from carotid plaque biobanking

09:55– 10:15

Coffee Break

10:15 – 12:05

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

12:05– 13:00

Lunch

Afternoon Session

Cardiac and valve repair, remodeling and regeneration

13:00 – 15:05

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 van 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

15:05 – 15:20

Coffee Break

15:20 – 17:40

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 Meinhardt: 30 Years of Endothelial Cell Transplantation on Vascular Grafts
3. Nico L'Heureux: Building Completely Biological, Human Tissue Engineered Blood Vessels
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

“The Role of Failure in Life, Clinical Practice, and Translational Research”

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

Moderators: David Williams and Mike Wolf

17:15-17:45: Cocktails and Poster viewing

17:45-18:30: Expert panel discussion with audience participation

19:30

Faculty Dinner: ON19 Restaurant - Rooftop: The Westin

Speakers highlighted in green, are not yet confirmed