

 Event
Programme

Courage and
Innovation

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

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

SOUTH-NORTH DIALOGUE

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

08:00 – 10:45

Welcome (7min)
Procedural Introduction to the day
The Forgotten Millions (7min)
The Ethic Questions (20min)

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

Humanitarian missions / NGOs: Critical Appraisal

(5min Intro and 4min 'Blitzes' followed by 20min Roundtable)

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

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)
Solly Benatar (Toronto / Cape Town)

Moderator: Francis Smit (Bloemfontein, South Africa)

Ana Olga Mocumbi (Maputo)
Juan Mejia (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/ UVMHC)

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

Brief on "World Federation for Medical Education": An Example

World Heart Federation
EACTS
AATS
AATS
STS
Asian Society
PASCAR
PASCATS

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

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

David Wood (President/ London)
Jose Pomar (ex-President / Barcelona)
R. Morton Bolman, III (Burlington/ UVMHC)
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

12:45 – 13:30

13:30 – 14:40

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: 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

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)
Sdhanu Jena (CEO Jana Care Boston / USA)
Jacques Kpodonu (Ghana and USA)
Solly Benatar (Toronto, Canada and Cape Town South Africa)

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

Preparing the Stage

Bernard Gersh (Mayo Clinic) The epidemic of CVD in the Developing World: Global Implications (7min)
Karen Siwa (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)
Sdhanu Jena (CEO Jana Care)

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

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

16:20 16:40

16:40 18:20

Round Table "Consensus"

Cape Town Declaration

Moderators:

Procedural Introduction: Robert Kleinloog (Durban) 3min

Proposal for Consensus Declaration:

Joseph Bavaria (Philadelphia)
Friedhelm Beyersdorf (Freiburg)

Moderator Panel:

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

“South Panel” : Ahmed El Sayed (Khartoum)
 Sampath Kumar (Delhi/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 Hosseini (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)
 Afksendiyos Kalangos (Athens/ Greece)
 Alec Patterson (St. Louis/ USA)
 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/ UMMC 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

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 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 Mohacs via Skype (Ex-Stanford / Zurich, CH)

09:19 Vladimir Demikhov: The under-appreciated forefather
 Smon Matskeplishvili (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 Walpoth (Geneva, Switzerland)

10:30 – 10:45

Coffee Break

10:45 – 12:00

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

- 10:45 Willem Kolff, Robert Jarvik, Denton Cooley 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, GFR)
- 11:09 The Return of DCD Hearts: Back to the Future
Kumud Dhital (Sydney, AUS)

12:00 – 12:45

Finger Fork Lunch

12:45 – 15:30

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

- 12:45 Robotic Heart Surgery:
Has the Future begun (too early)?
Volkmar Falk (Berlin, GFR)
- 12:57 Does one really need a Robot for Endoscopic Mitral Valve Repair?
Hermann Reichenspurner (Hamburg, GFR)
- 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
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, GFR)

- 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, GFR)
- 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 FHD and non-calcified roots (Live in a Box Surgery)
Jacques Scherman (Groote Schuur Hospital, Cape Town SA)

15:30 – 16:00

Coffee Break

16:00 – 17:25

Session MC: Bruno Reichart (Munich, GFR) / 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 FHD
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
Sr Magdi Yacoub (London, UK)

19:30

Celebration Dinner: Jameson Hall, University of Cape Town

MC: Dr. Max Price (Vice Chancellor/Rector University of Cape Town)

Gala Speaker: Sr 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
Kumud Dhital (Sydney, AUS)
Invited Comment: David McGiffin (Melbourne, AUS)
- 09:20 Recent Changes in Organ allocation in Europe
Günther Laufer (Vienna, AT)

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

- 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)

10:40 – 11:00

Coffee Break

11:00– 12:20

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

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

- 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)

12:20– 13:10

Finger fork Lunch

ASSISTED CIRCULATION: CENTER-PLAYER AT LAST

Host Society: International Society for Mechanical Circulatory Support, (ISMCS)

13:10– 14:55

- 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 Tyne, UK)
- 13:55 Mechanical Circulatory Support – Down Under
Kumud Dhital (St Vincent Hosp, Darlinghurst, AUS)

Chair: Georg M. Wieselthaler UCSF, USA

- 14:10 MCS Development in Japan the Future Projections
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)
- 14:55 Achievements and Limits of temporary MCS
Lessons learned from the Croatian National ECLS Network
Bojan Biocina (Zagreb, Croatia)

15:10-15:35

Coffee Break

15:35-16:50

Chair: Georg M. Wieselthaler UCSF, USA

15:35 The Perfect Pump: State of the Art and Future Trends in VAD Technologies
Ulrich Steinseifer (RWTH Aachen, GER)

16:20 Boon and Bane of Extracorporeal Life Support in Cardiac Shock and Resuscitation
Christian Hagl (LMU Munich, GER)

15:50 Future Developments in LVAD Technology – The Industry Perspective
Jim Schurman (Medtronic Inc., USA)

16:35 Mechanical circulatory support: strategies and outcomes in pediatric congenital heart disease
James Kirkin (Birmingham, Alabama USA)

16:05 Neo-Angiogenesis for LVAD patients
Nir Uriel (Univ. of Chicago, 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

07:00 – 07:30 Registration and Speaker Ready assistance
07:30 – 07:40 Introduction and welcome address (Elena Aikawa, ISACB President)
07:40 – 08:00 Welcome Lecture: The Surgeon Scientist (Peter Zilla)

08:05 – 09:55

Morning Session

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

Pathologic Arterial Remodeling and Bioengineering Solutions

Moderators: Beat Walpoth, Toshi Shinoka, Tim Pennel

08:05 – 08:25 Plenary: History of Vascular Tissue Engineering Research and Long-term Clinical Results of Tissue Engineered Vascular Grafts (Toshi Shinoka)
08:25 – 09:55 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

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

12:05– 13:00

Lunch

13:00 – 15:05

Afternoon Session

Cardiac and valve repair, remodelling and regeneration

Valve replacement and repair

Moderators: Dan Smionescu, Magdi Yacoub

13:00 – 13:20 Plenary: Integrating heart valve biology into surgery (Magdi Yacoub)

13:20 – 15:05 Invited Speakers and Abstracts

13:20 – 13:35 In Vitro Regeneration of Living Aortic and Pulmonary Valve Roots and Preclinical Testing (Dan Smionescu)

13:35 – 13:50 Calcific Aortic Valve Disease: From calcifying Exosomes to Systems Biology (Elena Aikawa)

13:50 – 14:05 Aortic Valve Repair Using Geometric Ring Annuloplasty (Teddy Fischlein)

14:05 – 14:20 Growing Heart Valves Inside the Heart: from immunomodulatory scaffolds to long-term follow-up (Carlijn Bouten)

14:20 – 14:35 A Role for Telomerase in Valvular Calcification (Cynthia St. Hilaire)

14:35 – 14:50 Tissue-engineered Matrices to Regenerate the Heart (Max Emmert)

14:05 – 15:05 Aortic Valve Melanocytic Cells Control Valvular Elastogenesis (Joshua Hutcheson)

15:05 – 15:20

Coffee Break

15:20 – 17:40

Tissue engineering and regeneration

Moderators: Simon Hoerstrup, Agneta Smionescu

15:20 – 15:40 Plenary: Translational Challenges in Cardiovascular Tissue Engineering (Simon Hoerstrup)

15:40 – 17:00 Invited Speakers and Abstracts

15:40 – 15:53 Mitral Valve Tissue Engineering-a model for investigating valve degeneration (Agneta Smionescu)

15:53 – 16:06 30 Years of Endothelial Cell Transplantation on Vascular Grafts (Jo Meinhardt)

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 David 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 Meinhardt)

18:05 – 18:20 Lessons Learned from a Preclinical 1-Stage Cell Seeding Concept (Mike Wolf)

18:20 – 18:30 Open discussion

19:30

Faculty Dinner: ON19 Restaurant - Rooftop: The Westin