Modern Management of RVOT – Freeway to the Lung

13th DHZB Lange Symposium
September 16/17, 2017, Berlin
Dear colleagues,

For 2017 we would again like to invite you to our symposium in Berlin. The 13th DHZB Lange Symposium for Congenital Heart Disease will take place on September 16 and 17, 2017 at the dbb forum berlin, Friedrichstr. 169/170, 10117 Berlin.

This year the DHZB Lange Symposium will again be held at the venue dbb Forum in the heart of Berlin. In 2017 the Symposium will look at the complex field of the management of the Right Ventricular Outflow Tract with all its facets and difficulties. These lie not only in the great variability in forms of disease but also in the procedural and technical innovations for individual therapy strategies. At this year’s Symposium we would like to provide an overview of the current standards and discuss possible future developments – both surgical and interventional.

The two-day Symposium will again bring together clinical and research experts from Germany, Europe, and North America to present an exciting and innovative program. Their contributions will lead us into the fascinating and highly complex world of RVOT management and reflect comprehensive standardized and innovative treatment strategies. We are already looking forward to stimulating lectures and interactive discussions. Discussion will again have a special place, to encourage interaction between the participants and the speakers and chairpersons.

The main topics will be:

- Peter E. Lange Lecture | Historical evolution of patho-anatomical knowledge about the RVOT
- Modern Platform for Decision Making and Planning
- Transcatheter Valve Replacement (TPVR) – Past and Present
- Surgery - Paving the Way
- Complications / Limitations
- The Sunday Morning Highlight Lecture | Simulation of Physiology for Virtual Valve Replacement
- Nutrition / Pharmacology / Physiology
- Valve Replacement – Innovations

To complement the scientific program there will be a Get Together at the venue on the evening of 16 September 2017 to allow further contact and continued discussion.

We are looking forward to a very interesting symposium and hope that we will be able to welcome you in large numbers in September 2017.

Prof. Dr. med. F. Berger
Director, Dept. of Congenital Heart Defects/Pediatric Cardiology
Professor **Philipp Bonhoeffer** trained in medicine in Italy. After years as Director of the catheterisation laboratory at the Necker Hospital in Paris he became Head of Cardiology at the Great Ormond Street Hospital for Children in London and Professor of Cardiology at the Institute of Child Health at University College of London.

He has strong interest in designing strategies to deliver cardiac care in developing countries focusing on sustainability and independence of programmes. He developed the technique of Mitral Dilatation with the Multi-Track system which was introduced in more than 25 countries.

He began a research program with the aim of replacing the pulmonary valve without open heart surgery and performed the world’s first human trans-catheter heart valve implantation in France in 2000 and the ‘first in man’ procedure of a device, developed in association with Medtronic, in UK in 2009 (PPVI).

Philipp Bonhoeffer is an active musician and violinmaker.

**Maximilian Emmert** is a cardiac surgeon and translational scientist with extensive clinical and academic experience. He has more than 10 years of research experience in the fields of regenerative medicine, stem cell therapies and tissue engineering.

Since 2008, Maximilian Emmert is working in the Clinic for Cardiovascular Surgery at the University Hospital Zurich and in the Regenerative Medicine Program (REMedi) at the University of Zurich.

In the year 2012 he obtained his habilitation in minimally-invasive, transcatheter tissue engineered heart valve therapies from the University of Zurich; and received his Ph.D. in Biomedical Engineering focusing on „Translational therapies to repair the heart“ from the Eindhoven University of Technology a year later.

Professor **Siew Yen Ho** is Consultant Cardiac Morphologist at the Royal Brompton Hospital, London. Her main interests are research and education in congenital heart disease and arrhythmias including morphological correlates with cardiac imaging, surgery, interventions, and electrophysiology.

She has pioneered numerous specialist short courses including the renowned ‘Hands-on Cardiac Morphology’ for practitioners and allied health professionals. www.rbht.nhs.uk/cardiacMorphology

**Dr. Joost E. Lumens** is a Biomedical Engineer working as a tenured researcher in the Cardiovascular Research Institute Maastricht (CARIM) of Maastricht University. He leads the CircAdapt Research and Education Team (www.circadapt.org). His research focuses on cardiac mechanics and hemodynamics in the normal and the diseased heart. He currently is the Chair-Elect of the European Society of Cardiology Working Group on e-Cardiology.

His research approach typically combines computer modeling/simulation with experimental and clinical data to gain mechanistic insight in cardiac diseases and their treatments (e.g. cardiac resynchronization therapy). Importantly, translation of novel mechanistic insights into diagnostic, therapeutic and educational improvement is always pursued.
Saturday, September 16, 2017

08:30 Opening
09:00 Welcome and „warm up“ Berger

**Peter E. Lange Lecture**
09:05 Historical evolution of patho-anatomical knowledge about the RVOT Ho

**I. Modern Platform for Decision Making and Planning**

*Chairmen: Schubert / Ewert*

09:35 Clinically based decision making / Guidelines Michel-Behnke
09:50 Incorporating 3D Imaging and Printing Glöckler in RVOT management
10:05 Image fusion (Echo/CT/MR with angiography) Schubert

**Highlight Lecture**
10:25 Machine based decision making – when, how, what? Hennemuth

10:45 Ask the experts
11:00 Break

**II. Transcatheter Valve Replacement (TPVR) - Past and Present**

*Chairmen: Nordmeyer / Bonhoeffer*

**Keynote Lecture**
11:30 Approaching 20 years experience with TPVR – what have we learned? Bonhoeffer

12:00 Ten years of Melody: pooled data – clinical experience Ewert
12:20 Midterm experience – Edwards valve in pulmonic position Haas
12:40 Current results - Venus P valve Qureshi

13:00 Ask the experts
13:15 Lunch
III. Surgery – Paving the Way

Chairmen: Berger / Photiadis

14:45 No valve – no chance – Valve sparing techniques or conduit replacement
Prêtre

15:05 Transannular patch – good for lifetime?
Tsang

Do interventional needs determine the first surgical approach?

15:25 Pro
Benson

15:45 Contra
Photiadis

16:05 Round table rebuttal – Ask the experts

16:25 Break

IV. Complications / Limitations

Chairmen: Schubert / Prêtre

16:55 Endocarditis – Incidence and implications
Eicken

17:15 Pathohistology of the explanted specimen
Sigler

17:30 Biofilm analysis – a diagnostic must
Moter

17:45 Coronaries – the game changer
Schubert

Complex bifurcation – a preclusion for interventional solutions?

18:05 Pro
Prêtre

18:20 Contra
Kretschmar

18:35 Round table rebuttal – Ask the experts

18:50 Adjourn

19:00 Get together
**Sunday morning Highlight Lecture**
09:30 Right ventricular (dys)function: what can we learn from virtual patients? Lumens

**V. Nutrition / Pharmacology / Physiology**
*Chairmen:* Kühne / Ovroutski

10:00 Heart failure and nutrition Grune
10:20 Updates on current pediatric trials for heart failure medication Bonnet
10:40 Adaptive, adverse and reverse remodeling in normal pulmonary vascular resistance and PAH Kübler

11:00 Ask the experts

11:15 Break

**VI. Valve Replacement – Innovations I**
*Chairmen:* Tsang / Prêtre

**Keynote Lecture**
11:45 Tissue engineering - we grow with our needs Emmert

12:15 Autologous solutions Schmitt
12:30 Decellularized solutions Horke
12:45 Bioabsorbable carriers Feyerabend

13:00 Ask the experts

13:15 Lunch
VII. Valve Replacement – Innovations II

Chairmen: Qureshi / Kretschmar

14:15 Harmony Benson
14:30 Alterra Krings
14:45 Pulsta and others Qureshi
15:00 Concept of an expandable cardiac valve for surgical implantation Emani
15:15 In silico engineering of devices Capelli

15:30 Ask the experts

15:45 Lottery draw Berger

15:50 Closing remarks Berger

15:55 13th DHZB Lange Symposium draws to a close
## Faculty

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prof. Lee Benson, M.D.</td>
<td>Toronto, CA</td>
</tr>
<tr>
<td>Prof. Dr. med. Philipp Bonhoeffer</td>
<td>Pisa, IT</td>
</tr>
<tr>
<td>Prof. Dr. med. Damien Bonnet</td>
<td>Paris, FR</td>
</tr>
<tr>
<td>Prof. Claudio Capelli, M.D.</td>
<td>London, GB</td>
</tr>
<tr>
<td>PD Dr. med. Andreas Eicken</td>
<td>München</td>
</tr>
<tr>
<td>Prof. Sitaram Emani, M.D.</td>
<td>Boston, USA</td>
</tr>
<tr>
<td>Prof. Dr. med. Maximilian Emmert</td>
<td>Zürich, CH</td>
</tr>
<tr>
<td>Prof. Dr. med. Peter Ewert</td>
<td>München</td>
</tr>
<tr>
<td>Dr. rer. nat. Frank Feyerabend</td>
<td>Geesthacht, NL</td>
</tr>
<tr>
<td>PD Dr. med. Martin Glöckler</td>
<td>Erlangen</td>
</tr>
<tr>
<td>Prof. Dr. Tilman Grune</td>
<td>Potsdam</td>
</tr>
<tr>
<td>Prof. Dr. med. Nikolaus A. Haas</td>
<td>München</td>
</tr>
<tr>
<td>Dr. Ing. Anja Hennemuth</td>
<td>Berlin</td>
</tr>
<tr>
<td>Prof. Siew Yen Ho, M.D.</td>
<td>London, UK</td>
</tr>
<tr>
<td>Dr. med. Alexander Horke</td>
<td>Hannover</td>
</tr>
<tr>
<td>Prof. Dr. med. Oliver Kretschmar</td>
<td>Zürich, CH</td>
</tr>
<tr>
<td>Dr. med. Gregor Krings</td>
<td>Utrecht, NL</td>
</tr>
<tr>
<td>Prof. Dr.med. Wolfgang M. Kübler</td>
<td>Berlin</td>
</tr>
<tr>
<td>Prof. Dr. med. Titus Kühne</td>
<td>Berlin</td>
</tr>
<tr>
<td>Dr. Joost E. Lumens, PhD</td>
<td>Maastricht, NL</td>
</tr>
<tr>
<td>Prof. Dr. med. Ina Michel-Behnke</td>
<td>Wien, A</td>
</tr>
<tr>
<td>PD Dr. med. Annette Moter</td>
<td>Berlin</td>
</tr>
<tr>
<td>PD Dr. med. Johannes Nordmeyer</td>
<td>Berlin</td>
</tr>
<tr>
<td>PD Dr. med. Stanislav Ovrutskiy</td>
<td>Berlin</td>
</tr>
<tr>
<td>Prof. Dr. med. Joachim Photiadis</td>
<td>Berlin</td>
</tr>
<tr>
<td>Prof. Dr. med. René Prêtre</td>
<td>Lausanne, CH</td>
</tr>
<tr>
<td>Prof. Shakeel A Qureshi, M.D.</td>
<td>London, GB</td>
</tr>
<tr>
<td>Dr. med. Boris Schmitt</td>
<td>Berlin</td>
</tr>
<tr>
<td>PD Dr. med. Stephan Schubert</td>
<td>Berlin</td>
</tr>
<tr>
<td>Prof. Dr. med. Matthias Sigler</td>
<td>Göttingen</td>
</tr>
<tr>
<td>Prof. Victor T. Tsang, M.D.</td>
<td>London, GB</td>
</tr>
</tbody>
</table>
We express our thanks for generous support

Platin Sponsors: Medtronic

Gold Sponsors: Venus P-valve Edwards

Silver Sponsors: Abbott Actelion Gore

Bronze Sponsors: Abbvie Bentley Siemens Healthineers GE Healthcare Admedus Occlutech Philips

Sponsors: Angiopro, Berlin Heart, Mediplan, PFM

- at time of going to print not all sponsors were known -

Transparency Code
Details of sponsorship of the event are to be found on our website: www.lange-symposium.de
Organisation and Registration

Scientific Committee:
Prof. Dr. F. Berger | Prof. Dr. T. Kühne | PD Dr. S. Ovrutskiy | PD Dr. S. Schubert

Organization Committee:
Daniela Moeske-Scholz | Heike Schultz | Sonja Wibbeke

Department of Congenital Heart Disease / Pediatric Cardiology
Deutsches Herzzentrum Berlin and Charité – Universitätsmedizin Berlin
Augustenburger Platz 1 | 13353 Berlin

Phone: +49 / 30 / 4593 - 2810
Fax: +49 / 30 / 4593 - 2862
E-mail: info@lange-symposium.de

Registration fee Saturday and Sunday (Euro)

<table>
<thead>
<tr>
<th>Payment received</th>
<th>regular</th>
<th>reduced*</th>
</tr>
</thead>
<tbody>
<tr>
<td>till 30.06.17</td>
<td>€ 200</td>
<td>€ 150</td>
</tr>
<tr>
<td>till 15.09.17</td>
<td>€ 250</td>
<td>€ 170</td>
</tr>
<tr>
<td>Onsite registration</td>
<td>€ 290</td>
<td>€ 200</td>
</tr>
</tbody>
</table>

*Students / Nurses

Please transfer the appropriate amount to:

Name: DHZB DL GmbH
Commerzbank AG
Bank code: 100 800 00
Account no.: 0 667 570 000
IBAN: DE16 1008 0000 0667 5700 00
BIC: DRESDEFF100
Reference: kikasymp2017 (and your name)

Please register online:
info@lange-symposium.de | www.lange-symposium.de

CME-Certified 15 points, EBAC 11 points
Hope to see you all again at the 14th DHZB Lange Symposium
Berlin September 15/16, 2018