The AV Canal
Keeping it in balance

12th DHZB Lange Symposium
September 17/18, 2016, Berlin
Dear colleagues,

For 2016 we would again like to invite you to our symposium in Berlin.

The **12th DHZB Lange Symposium for Congenital Heart Disease** will take place on September 17 and 18, 2016 at the dbb forum berlin, Friedrichstr. 169/170, 10117 Berlin.

This year the DHZB Lange Symposium will be held at a new time of year but the venue in the heart of Berlin remains the same. In 2016 the Symposium will look at the complex field of the AV canal with all its facets and difficulties. These lie not only in the great variability in forms of disease but also in the associated need 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, the USA and Australia to present an exciting and innovative program. Their contributions will lead us into the fascinating and highly complex world of the AV canal and reflect comprehensive 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:

- **Basics**
- Highlight Session – Keep it in balance
- The Balanced AV Canal – All you need is surgery
- **New Approaches**
- The Sunday Morning Highlight Lecture
- AV Canal – Losing the balance
- The Unbalanced AV Canal
- Long-Term Implications: Myocardium – PAH – quality of life

To complement the scientific program there will be an Evening Party on 17 September 2016 in the "Bar jeder Vernunft". After a walking dinner we will be treated to a live band, after which the dance floor will be opened, giving us the opportunity to further relax.

We are very much looking forward to a very interesting symposium and hope that we will be able to welcome you in large numbers in September 2016.

Prof. Dr. med. F. Berger  
Director, Dept. of Congenital Heart Defects/Pediatric Cardiology
Professor Norbert F. Voelkel MD was born in Bayreuth. At the University Hospital Hamburg pulmonary vascular diseases became a research interest which eventually led in 1977 to the move to the Cardiovascular Pulmonary Research Laboratory at the University of Colorado in Denver, Colorado. In 2007 he moved to the Virginia Commonwealth University (VCU) in Richmond, Virginia, to build the Victoria Johnson Center for Lung Research. His research interests continue to be the cellular and molecular mechanisms of pulmonary vascular remodeling and how the 'sick lung circulation' affects the heart-in particular right ventricular function.

Professor Michael Sacks is the W. A. "Tex" Moncrief, Jr. Simulation-Based Engineering Science Chair. He is a world authority on cardiovascular biomechanics with a focus on the quantification and modeling of the structure-mechanical properties of native and engineered cardiovascular soft tissues and the mechanical behavior and function of the native and replacement heart valves. Dr. Sacks is currently director of the ICES Center for Cardiovascular Simulation and Professor of Biomedical Engineering.

Dr. Jan Schmoranzer is a scientist with long-standing interest in developing advanced light microscopy methods to answer cell-/neuro-biological questions. By custom-building, optimizing and applying several advanced bioimaging modes, including TIRF and super-resolution microscopy, he has made numerous contributions to understand the fundamentals of membrane traffic and cytoskeletal dynamics. Currently, he is a group leader for Super-Resolution Microscopy and the head of the Advanced Medical Bioimaging Core Facility (AMBO) at Charité, Berlin.

Professor Pedro Del Nido is Chief of Cardiac surgery and the William E. Ladd Professor of Child Surgery at the Harvard Medical School. Dr. del Nido was born in Santiago, Chile and moved to Wisconsin with his family when he was 10 years old. In Wisconsin he received his medical degree from University of Wisconsin School of Medicine and Public Health and has been in practice for more than 20 years. He is one of the most rewarded pioneers of surgery in congenital heart disease and has a particular interest in valve repair, minimally invasive surgery and robotic tools.
08:30 Opening
09:00 Welcome and „warm up“ Berger

I. Basics

Chairmen: Ovrutskiy / Schubert

Keynote Lecture
09:15 Super resolution imaging of cells and tissue Schmoranzer

09:45 AV valve development and tissue maturation Gittenberger-de Groot
10:10 Balanced pathoanatomy Ho
10:35 Bio-mechanical aspects of AV valve function Sacks
10:55 Break

II. Highlight Session – Keep it in balance

Chairmen: Falk / Kühne

Keynote Lecture
11:30 Intraoperative imaging of AV valve apparatus Del Nido

12:00 Preoperative image-based decision making Dittrich
12:20 Prognostic imaging: the „machine learning“ approach Rueckert
12:40 Ask the experts
12:55 Lunch
III. The Balanced AV Canal – All you need is surgery

Chairmen: Brizard / Hazekamp

14:25 Standardized surgery in simple AV canal
14:45 Complex AV canal and associated cardiac disease
15:05 Intermediate type AV canal – one stop surgery?
15:25 Postoperative management – fast track or slow (NO) motion?

15:45 Ask the experts

16:05 Break

IV. New Approaches

Chairmen: Del Nido / Photiadis

16:35 Interventional solutions on the horizon
16:55 Avoid replacement by reconstructive surgery
17:15 Bail-out procedure – the growth-adaptive MV replacement
17:35 Tricuspid valve – other side, another story?
17:55 In silico mitral valve repair

18:15 Ask the experts

18:30 Adjourn

19:30 Evening party – connecting people
Sunday morning Highlight Lecture
09:30  Towards truly engineered approaches to AV repair and replacement  Sacks

VI. AV Canal – Losing the balance
Chairmen: Berger / Kumar

10:00  Prenatal discrimination  Chaoui
10:20  Unbalanced pathoanatomy  Ho
10:40  Postnatal balancing and bridging  Stiller

11:00  Ask the experts

11:10  Break

VII. The Unbalanced AV Canal
Chairmen: Dähnert / Stiller

Keynote Lecture
11:40  Mechanisms of ventricular adaptation  Voelkel

12:10  How small is too small?  Ovrutskiy
12:25  Rescuing the unbalanced AV canal to a 2-ventricle physiology  Del Nido
12:45  Palliative surgical approach – one ventricle is better than nothing  Brizard
13:05  Is there a current worldwide minimum standard of care?  Kumar

13:25  Ask the experts

13:35  Lunch
VIII. Long-Term Implications: Myocardium – PAH – Quality of life

Chairmen: Voelkel / Dittrich

14:30 Evidence for pharmacological treatment of the myocardium in congenital heart disease Pieske

14:50 Corrected AV canal Hazekamp
15:10 Untreated AV canal Diller
15:30 Fast or slow – the rhythmic end of a long story Hebe

15:50 Round table discussion

16:05 Lottery draw Berger

16:10 Closing remarks Berger

16:15 12th DHZB Lange Symposium draws to a close
### Faculty

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
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<tbody>
<tr>
<td>Prof. Christian Brizard, M.D.</td>
<td>Melbourne, Australia</td>
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<td>Prof. Dr. med. Felix Berger, Berlin</td>
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<td>Prof. Dr. med. Rahib Chaoui, Berlin</td>
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<td>Prof. Pedro J. del Nido, M.D., Boston, USA</td>
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<td>Prof. Dr. med. Ingo Dähnert, Leipzig</td>
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<td>Prof. Adriana C. Gittenberger-de Groot, PhD, Leiden, NL</td>
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<td>Prof. Dr. med. Nikolaus Haas, Munich</td>
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<td>Prof. Mark G. Hazekamp, M.D., Leiden, NL</td>
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<td>Dr. med. Joachim Hebe, Bremen</td>
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<td>Prof. Siew Yen Ho, M.D., London, UK</td>
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<td>PD Dr. med. Stephan Jacobs</td>
<td>Berlin</td>
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<td>Prof. Martin Kostolny, M.D., London, UK</td>
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<td>Prof. Dr. med. Titus Kühne, Berlin</td>
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<td>Prof. R. Krishna Kumar, M.D., Kerala, IND</td>
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<td>PD Dr. med. Stanislav Ovrutskiy, Berlin</td>
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<td>Prof. Dr. med. Joachim Photiadis, Berlin</td>
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<td>Prof. Daniel Rueckert, PhD, London, UK</td>
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<td>Prof. Michael Sacks, PhD, Texas, USA</td>
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<td>Dr. Jan Schmoranzer, Berlin</td>
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<td>PD Dr. med. Stephan Schubert, Berlin</td>
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<td>Prof. Dr. med. Brigitte Stiller, Freiburg</td>
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<td>Prof. Norbert Voelkel, M.D., Virginia, USA</td>
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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)

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<tr>
<th>Payment received</th>
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<tr>
<td>till 30.06.16</td>
<td>€ 200</td>
<td>€ 150</td>
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<td>till 16.09.16</td>
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„CME-Certified 16 points, EBAC 11 points“
Hope to see you all again at the 13th DHZB Lange Symposium
Berlin September 16/17, 2017