

is therefore the tenth Supplement or Issue of *Cardiology in the Young* that we have produced from the annual meeting held in Saint Petersburg; this December, 2012 HeartWeek Issue of *Cardiology in the Young* is also the eighth that we have produced jointly with The Children's Hospital of Philadelphia (2004 2006, 2007, 2008, 2009, 2010, 2011, and 2012):^{2,4-9}

1. 2003 Meeting: Controversies Relating To The Hypoplastic Left Heart Syndrome
2. 2004 Meetings: Controversies of the Ventriculo-Arterial Junctions and Other Topics
3. 2005 Meeting: Controversies and Challenges in the Management of the Functionally Univentricular Heart
4. 2006 Meetings: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients
5. 2007 Meetings: Controversies and Challenges Facing Paediatric Cardiovascular Practitioners and their Patients
6. 2008 Meetings: Controversies and Challenges of Tetralogy Of Fallot and Other Challenges Facing Paediatric Cardiovascular Practitioners and Their Patients
7. 2009 Meetings: Innovation Associated with the Treatment of Patients with Congenital and Paediatric Cardiac Disease
8. 2010 Meetings: Rare and Challenging Congenital Cardiac Lesions: An Interdisciplinary Approach
9. 2011 Meetings: A Holistic Approach to Hypoplastic Left Heart Syndrome and Other Evolving Challenges in Paediatric and Congenital Cardiac Disease
10. 2012 Meetings: A Lifelong Interdisciplinary Approach to Common Arterial Trunk, Transposition of the Great Arteries, and Other Evolving Challenges in Paediatric and Congenital Cardiac Disease

The part of the joint programme of HeartWeek organised by The Congenital Heart Institute of Florida and All Children's Hospital and Sponsored by Johns Hopkins Medicine will continue to take place in Saint Petersburg, even in the years when the part designed by The Children's Hospital of Philadelphia will be held outside of Florida, as occurred in 2009 in the Bahamas and in 2011 when the meeting organised by the team from The Children's Hospital of Philadelphia returned to Arizona. Even during these years when the meeting organised by The Children's Hospital of Philadelphia is held outside of Florida, "HeartWeek" will

continue to be a collaborative project as manifest by the collaborative publication of this December, 2012 HeartWeek Issue of *Cardiology in the Young*, as well the various shared members of our international faculties. As has been stated on the website for the programme coordinated by The Children's Hospital of Philadelphia, "Providing optimal care for neonates, children and young adults with heart disease requires a multi-disciplinary team approach, including physicians (from cardiology, cardiac surgery, cardiothoracic anesthesia, neonatal and paediatric critical care medicine, and multiple consulting services), nurses, perfusionists, respiratory therapists, social workers and many others. All of these various practitioners must be experts in their own area, but should also be knowledgeable in what the other members of the team provide to the overall care of the patient". This statement presents the rationale not only for the annual part of the meeting emanating from The Children's Hospital of Philadelphia, but also for "HeartWeek in Florida". Both meetings are proud to emphasise collaboration that spans traditional geographic, subspecialty, and professional boundaries.

In recent years, we have dedicated this "Heart-Week Supplement" to leaders in the field of caring for patients with paediatric and congenital cardiac disease:

- The Supplement from the 2007 HeartWeek was dedicated to Professor Robert Anderson.
- The Supplement from the 2008 HeartWeek was dedicated to Hiromi Kurosawa of The Heart Institute of Japan and Tokyo Women's Medical University, Tokyo, Japan, and Norman Silverman of Stanford University and Lucile Packard Children's Hospital, Palo Alto, California, United States of America.
- The Supplement from the 2009 HeartWeek was dedicated to Marshall Lewis Jacobs and Charles S. Kleinman.
- The Supplement from the 2010 HeartWeek was dedicated to Constantine Mavroudis and Gerald Marx.
- The Supplement from the 2011 HeartWeek was dedicated to Martin Elliott and Gil Wernovsky.
- This December, 2012 HeartWeek Issue of *Cardiology in the Young* is dedicated to Richard A. Jonas.

Tribute to: Richard A. Jonas

The theme of this December, 2012 HeartWeek Issue of *Cardiology in the Young* generated from the 2012 HeartWeek in Florida begins with the phrase: "A Lifelong Interdisciplinary Approach...". We would like to dedicate this December 2012 HeartWeek

Issue of *Cardiology in the Young* to a physician who exemplifies the “*Lifelong Interdisciplinary Approach*” and who is a global leader in the field of caring for patients with paediatric and congenital cardiac disease: Richard Jonas.

In the final manuscript of the HeartWeek 2010 Supplement,¹¹ Robert Campbell, Chief of Pediatric Cardiology at Children’s Healthcare of Atlanta Sibley Heart Center, Emory University School of Medicine in Atlanta, Georgia, presented his 9th Annual William J. Rashkind Memorial Lecture in Paediatric Cardiology: “The Reimbursement Tsunami: Preserving the Passion”. In this manuscript, Robert Campbell describes the “quintuple threat” professional as the health-care professional, with excellence in the five following domains:

- clinical care,
- teaching,
- research,
- business leadership, and
- alignment.

Richard Jonas is truly a “quintuple threat” professional, with sustained excellence in all five of these areas. It is our honour to dedicate this December 2012 HeartWeek Issue of *Cardiology in the Young* to Richard Jonas (Fig 1).

Richard A. Jonas, MD, is Chief of Cardiac Surgery, Co-Director of the Children’s National Heart Institute, and Cohen Fungar Professor of Cardiac Surgery at Children’s National Medical Center in Washington, District of Columbia. On Wednesday, May 30, 2012, I had the pleasure to visit with Dr Jonas and his team at Children’s National Medical Center as a Visiting Professor, when I had the opportunity to speak about: “Outcomes Analysis and Quality Improvement for the Treatment of Patients with Pediatric and Congenital Cardiac Disease”. During this visit, I had the chance to spend time with Richard and his team. It was obvious to me that Richard’s programme at Children’s National Medical Center excels in patient care, research, teaching, and leadership, alignment, and service. The clinical programme is equal to any centre in the world and achieves excellent results with the most complex of neonates. Under the leadership of Dr Jonas, the Children’s National Heart Institute has active and productive programmes in laboratory and clinical research. The programme also excels in training students and young physicians. Dr Jonas also excels at training junior surgeons, and many practising paediatric cardiac surgeons throughout the world owe a portion of their success to lessons learnt from Richard. Indeed, as pointed out by my partner Paul Chai, even surgeons who did not train



Figure 1.

Richard A. Jonas, MD, is Chief of Cardiac Surgery, Co-Director of the Children’s National Heart Institute, and Cohen Fungar Professor of Cardiac Surgery at Children’s National Medical Center in Washington, District of Columbia.

with Richard, and maybe do not even know him personally, are influenced by his teaching; his classic book, *Comprehensive Surgical Management of Congenital Heart Disease*, is now in its second edition and is a valuable resource to paediatric cardiac surgeons throughout the world. Dr Jonas is a true leader among cardiac surgeons: he is a former President of both The American Association for Thoracic Surgery and The Congenital Heart Surgeons’ Society, and a current Vice President and future President of The World Society for Pediatric and Congenital Heart Surgery. The efforts of Dr Jonas to develop paediatric cardiac surgery at Shanghai Children’s Hospital in China are a model for overseas charitable surgical missions. Richard Jonas has excelled in multiple professional domains throughout his career. On a personal note, Richard has been a mentor to me and offered me important advice over the years in several areas including cardiac surgery, leadership, the STS Congenital Heart Surgery Database, and The Congenital Heart Surgeons’ Society, where I was Chair of the Program Committee and Richard was President.

At the All Children's Hospital faculty dinner in Saint Petersburg during HeartWeek 2012, several faculty members made important toasts to Richard Jonas. Marshall Jacobs has given me permission to reproduce his toast in this article.

Tribute to Richard A. Jonas, MD, written by Marshall Lewis Jacobs, MD

"A Toast to a Teacher – Richard Jonas"

"Dr. Jonas has been acknowledged and saluted as a great surgeon, investigator, leader and humanitarian. I want to talk about him as a teacher. It is my good fortune to have met Richard Jonas back in 1984, on the first day of my final year of training at Boston Children's Hospital.

Having previously trained in Melbourne, Australia and Auckland, New Zealand, Dr. Jonas had come to Boston to serve a fellowship at the Peter Bent Brigham Hospital. This led to his serving as Chief Resident in Cardiovascular Surgery at Children's Hospital in 1983 under Aldo Castaneda and William Norwood. Having demonstrated exceptional skill and maturity as a Chief Resident, Richard was a natural choice to become Dr. Castaneda's associate when Dr. Norwood departed Boston for Philadelphia. As a result, Richard stepped into what was probably the busiest and most demanding position that could have been contemplated at the time by a young man or woman pursuing a career as a congenital heart surgeon.

My impressions of Richard Jonas as a young attending surgeon can be described in terms of an analogy to a newly minted coin – on one side is found the smooth, gracefully sculpted profile of a presidential head; that was the Aldo side. On the other side is found the great seal; the eagle with sharp eyes and sharp talons, grasping a bunch of arrows. I think perhaps that was the Bill Norwood side. But it also became clear very quickly that there were more than those two dimensions, and Richard was definitely his own man. Very early on, I remember him explaining to Dr. Castaneda the approach to repair of total anomalous pulmonary venous connection that he'd learned from Sir Brian Barratt Boyes, and how it was superior to the approach utilised in Boston.

It quickly became evident to everyone around him that Richard had extraordinary natural gifts and was rapidly developing into a congenital heart surgeon of the very top echelon. To those of us who assisted him in the operating theatre, his movements were fluid, and apparently effortless – the kind of economy of motion that we'd heard described in relation to Denton Cooley or Sir Magdi Yacoub. But it was on the occasions when he helped one of us perform an operation that we became aware of the

thoughtful, methodical approach to the operation, as his patient tutelage belied the fact that he had studied the conduct of each operation as the conductor of a philharmonic orchestra studies the score. To help a young individual in training to successfully perform a Senning operation or to repair a complete common atrioventricular canal defect in an infant requires much more than is involved in doing it oneself. In his first year as a teacher, it was evident that Richard combined an intensity that left no room for equivocating or fuzzy thinking, with a generosity and commitment to the education and training of his pupils and junior colleagues that anticipated his eventual role as one of the outstanding mentors in the field of surgery for congenital heart disease.

Well, that is what was apparent nearly thirty years ago. The legacy of Richard's immense contributions as a teacher are merely exemplified by the remarkable story of the development of congenital heart surgery at Shanghai Children's Hospital, where his leadership and guidance have had such an important impact. Over the course of his prodigiously productive years in Boston and Washington, and through nearly three decades of dedication to the advancement of the care of patients with congenital heart disease in all corners of the world, Richard has directly touched the lives of tens of thousands, and indirectly through his generosity as a teacher, has literally improved the lives of millions of children and their families".

– Presented by Marshall L. Jacobs, MD

This December, 2012 HeartWeek Issue of *Cardiology in the Young*

We are pleased and honoured to dedicate this December, 2012 HeartWeek Issue of *Cardiology in the Young* to Richard Jonas. As stated above, the theme of this theme of this December, 2012 HeartWeek Issue of *Cardiology in the Young* generated from the 2012 HeartWeek in Florida begins with the phrase: "*A Lifelong Interdisciplinary Approach...*". Richard Jonas is a huge advocate of the interdisciplinary approach to patients with paediatric and congenital cardiac disease. Throughout his career, he has promoted collaboration that spans traditional geographic, subspecialty, and professional boundaries. This concept is the very essence of HeartWeek in Florida! It is our honour to dedicate this December 2012 HeartWeek Issue of *Cardiology in the Young* to Richard Jonas.

All manuscripts in this December, 2012 HeartWeek Issue of *Cardiology in the Young* underwent formal peer review and were reviewed by the Editor-in-Chief of *Cardiology in the Young*: Professor Edward Baker, Medical Director, Oxford Radcliffe Hospitals NHS Trust, John Radcliffe Hospital, Headington,

Oxford, United Kingdom. All manuscripts in *Cardiology in the Young*, and all manuscripts in all Supplements to *Cardiology in the Young*, including this December, 2012 HeartWeek Issue of *Cardiology in the Young*, are listed in MEDLINE[®], which is the premier bibliographic database of the National Library of Medicine of the United States of America covering the fields of medicine, nursing, dentistry, veterinary medicine, the health-care system, and the preclinical sciences. All manuscripts in *Cardiology in the Young*, and all manuscripts in all Supplements to *Cardiology in the Young*, including this December, 2012 HeartWeek Issue of *Cardiology in the Young*, are assigned a Digital Object Identifier, which is a unique and persistent digital identification code for any object of intellectual property. The references to these articles and their Digital Object Identifier can be found in PubMed, which comprises more than 20 million citations for biomedical literature from MEDLINE, life science journals, and online books. Citations in PubMed may include links to full-text content from PubMed Central and publisher websites.

It is gratifying for me, as a representative of Johns Hopkins Children's Heart Surgery, All Children's Hospital and Florida Hospital for Children, to confirm our ongoing commitment to continue "HeartWeek in Florida", combining the International Symposium on Congenital Heart Disease now organised by All Children's Hospital and Johns Hopkins Medicine, with the annual postgraduate course in Pediatric Cardiovascular Disease organised by The Children's Hospital of Philadelphia. I thank Gil Wernovsky, Director of the meeting organised by Children's Hospital of Philadelphia, as well as Tina Mannices, Manager of Continuing Medical Education at The Children's Hospital of Philadelphia, and also Tom Spray and Bill Gaynor, for their support.

The December 2012 Issue of *Cardiology in the Young* that you are now about to read, therefore, focuses on "A Lifelong Interdisciplinary Approach to Common Arterial Trunk, Transposition of the Great Arteries, and Other Evolving Challenges in Paediatric and Congenital Cardiac Disease". It has been prepared to give a flavour of the presentations given during the two meetings that composed HeartWeek in Florida, in Saint Petersburg and Orlando, in February, 2012.

The theme of the December 2012 HeartWeek Issue of *Cardiology in the Young* is *Common Arterial Trunk and Transposition of the Great Arteries*. After this Introduction, the Issue is divided into four Parts:

1. Part 1 contains two manuscripts about The World Congress of Paediatric Cardiology and Cardiac Surgery: The first is written by Christopher Hugo-Hamman and Jeffrey P. Jacobs and

describes the Sixth World Congress of Paediatric Cardiology and Cardiac Surgery in South Africa. The second is written by Jane Somerville and provides a beautiful and powerful summary of the history and development of The World Congress (part of Jane's legacy) – true documentation of living history and very AWESOME!

2. Part 2: A Holistic Approach to Common Arterial Trunk and Transposition of the Great Arteries
3. Part 3: Ethical Considerations
4. Part 4: Featured Topics

The second Part above includes a series of articles that focus on a multi-disciplinary approach to patients with common arterial trunk and transposition of the great arteries. Multiple disciplines will be considered including:

- nomenclature,
- cardiac morphology,
- echocardiography,
- interventional cardiology,
- cardiac surgery,
- critical care,
- primary care, and
- longitudinal follow-up.

The third Part above includes two manuscripts discussing ethical issues:

- ethical considerations for post-cardiotomy extracorporeal membrane oxygenation, and
- the role of research for sustainable paediatric cardiac programmes in developing countries.

The fourth Part above includes two manuscripts related to three featured topics that influence many patients with congenital cardiac disease including those with common arterial trunk and transposition of the great arteries:

- centre variation in cost and outcomes for congenital cardiac surgery, and
- computational fluid dynamics.

The final three articles in this December, 2012 HeartWeek Issue of *Cardiology in the Young* is the publication of three named lectures from the CHOP meeting held in Orlando:

- 13th Annual Featured Lecture in Cardiovascular Nursing: T. Garrett Rauch Memorial Lecture – One Parent's Perspective: Helping Families Deal With The Non-Medical Challenges of Congenital Heart Disease by Jean Chatzky.
- 11th Annual William J. Rashkind Memorial Lecture in Pediatric Cardiology – A Short History of Progress: Where we've been, where we are, where we're going by Gil Wernovsky, MD.

- 13th Annual C. Walton Lillehei Memorial Lecture in Cardiovascular Surgery – Invisible Problems: What can we learn from prospective observational studies? by James Tweddell, MD.

Over the years, HeartWeek in Florida has provided many opportunities for the excellent scientific exchange of ideas, and the development of awesome friendships. I would like again to thank Bob Anderson and Ted Baker for all of their help, support, trust, and patience during the preparation of this December 2012 Issue of *Cardiology in the Young*. I would also like to thank my good friends who compose the Editorial Board of this December, 2012 HeartWeek Issue of *Cardiology in the Young*: David S. Cooper, Gul Dadlani, Allan D. Everett, William M. DeCampli, Gil Wernovsky, and Robert H. Anderson. Each of the members of the Editorial Board of this December 2012 HeartWeek Issue of *Cardiology in the Young* has made important and valued contributions.

I would especially like to thank Nicki Marshall of *Cardiology in the Young* for her incredible editorial support during the creation of this December, 2012 HeartWeek Issue of *Cardiology in the Young*. I would also like to thank Ted Baker, the Editor in Chief of *Cardiology in the Young*, and Sarah Maddox, Editor, Commercial and Special Projects, Cambridge University Press for their support. Without their help, this project would not have been possible.

I am especially grateful to Jonathan Ellen, MD, President and Physician-in-Chief at All Children's Hospital and Vice Dean and Professor of Pediatrics, The Johns Hopkins University School of Medicine, for facilitating the publication of this December 2012 HeartWeek Issue of *Cardiology in the Young*. I would also like to thank several additional members of our team at All Children's Hospital, namely Arnie Stenberg, Bill Horton, Cindy Rose, Pat Clark, Melodye Farrar, Suzanne Anderson, Susan Collins, Jean Wilhelm, and all our cardiac nurses. I would also like to thank the Co-Chairs of our Saint Petersburg meeting, namely, Emile Bacha, MD, David S. Cooper, MD, MPH, Gul H. Dadlani, MD, Allan D. Everett, James C. Huhta, MD, Richard M. Martinez, MD, James A. Quintessenza, MD, and James S. Tweddell.

Jim Huhta and I have now collaborated on this meeting for 13 years. The meeting would not have been possible without the leadership and vision of Jim. Finally, I would like to thank my current partners, Jim Quintessenza, Paul Chai, Gus Mavroudis, Duke Cameron, and Luca A. Vricella, and my former partners, Victor Morell and Harald Lindberg, for their constant support and guidance, and my wife Stacy, and children Jessica and Joshua,

for their understanding and patience. It continues to be an ongoing fact, as I have emphasised in previous introductions to Supplements, that all of the family members of the authors of the reviews included in this December, 2012 HeartWeek Issue of *Cardiology in the Young* are owed a debt of gratitude, because writing manuscripts markedly decreases the time available with them.

References

1. Jacobs JP, Anderson RH (eds.). Supplement to *Cardiology in the Young*: controversies relating to the hypoplastic left heart syndrome. *Cardiol Young* 2004; 14 (Suppl 1): 1–130.
2. Jacobs JP, Wernovsky G, Gaynor JW, Anderson RH (eds.). Supplement to *Cardiology in the Young*: controversies of the ventriculo-arterial junctions and other topics. *Cardiol Young* 2005; 15 (Suppl 1): 1–198.
3. Jacobs JP, Wernovsky G, Gaynor JW, Anderson RH (eds.). Supplement to *Cardiology in the Young*: controversies and challenges in the management of the functionally univentricular heart. *Cardiol Young* 2006; 16 (Suppl 1): 1–104.
4. Jacobs JP, Wernovsky G, Gaynor JW, Anderson RH (eds.). Supplement to *Cardiology in the Young*: controversies and challenges of the atrioventricular junctions and other challenges facing paediatric cardiovascular practitioners and their patients. *Cardiol Young* 2006; 16 (Suppl 3): 1–156.
5. Anderson RH, Jacobs JP, Wernovsky G (eds.). Supplement to *Cardiology in the Young*: annual heart week in Florida supplement number 5 – controversies and challenges facing paediatric cardiovascular practitioners and their patients. *Cardiol Young* 2007; 17 (Suppl 2): 1–174.
6. Jacobs JP, Wernovsky G, Cooper DS, Gaynor JW, Anderson RH (eds.). Supplement to *Cardiology in the Young*: annual heart week in Florida supplement number 6 – controversies and challenges of tetralogy of Fallot and other challenges facing paediatric cardiovascular practitioners and their patients. *Cardiol Young* 2008; 18 (Suppl S3): 1–83.
7. Jacobs JP, Cooper DS, Wernovsky G, Goldberg D, Anderson RH (eds.). Supplement to *Cardiology in the Young*: annual heart week in Florida supplement number 7 – innovation associated with the treatment of patients with congenital and pediatric cardiac disease. *Cardiol Young* 2009; 19 (Suppl S2): 1–162.
8. Jacobs JP, Cooper DS, Goldberg D, Wernovsky G, DeCampli WM, Anderson RH (eds.). Supplement to *Cardiology in the Young*: annual heart week in Florida supplement number 8 – rare and challenging congenital cardiac lesions: an interdisciplinary approach. *Cardiol Young* 2010; 20 (Suppl S3): 1–204.
9. Jacobs JP, DeCampli WM, Cooper DS, et al. Supplement to *Cardiology in the Young*: Annual Heart Week in Florida supplement number 9 – a holistic approach to hypoplastic left heart syndrome and other evolving challenges in pediatric and congenital cardiac disease. *Cardiol Young* 2011; 21 (Suppl 2): 1–176.
10. Wernovsky G. Foreword: *cardiology* 2007 – 10th annual update on pediatric cardiovascular disease. *Cardiol Young* 2007; 17 (E-Suppl 1): 1–9.
11. Campbell R. 9th Annual William J. Rashkind Memorial Lecture in Paediatric Cardiology: “The Reimbursement Tsunami: Preserving the Passion”. In: Jacobs JP, Cooper DS, Goldberg D, Wernovsky G, DeCampli WM, Anderson RH (eds.). 2010 Supplement to *Cardiology in the Young*: Annual Heart Week in Florida Supplement Number 8 – Highlights of Heart Week in Florida 2010 – Rare and Challenging Congenital Cardiac Lesions: An Interdisciplinary Approach. *Cardiol Young*, 2010; 20 (Suppl S3): 154–159, December 2010.