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FOURTH INTERNATIONAL CONFERENCE ON PEDIATRIC MECHANICAL CIRCULATORY SUPPORT SYSTEMS AND PEDIATRIC CARDIOPULMONARY PERFUSION

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The *Fourth International Conference on Pediatric Mechanical Circulatory Support Systems and Pediatric Cardiopulmonary Perfusion* was held at the Hilton Portland and Executive Tower, Portland, Oregon, May 22–24, 2008. Over 250 participants from 17 countries including Australia, Austria, Canada, China, France, Germany, Italy, Japan, Netherlands, New Zealand, Philippines, Saudi Arabia, South Korea, Sweden, Turkey, the United Kingdom, and the United States attended this unique event.

With the *Fourth Annual Event*, we continued to focus on the objective of our previous conferences, that is, to *explicitly describe the problems with current pediatric mechanical circulatory support systems, methods, and techniques during acute and chronic support and to suggest solutions*.¹ Of the 101 slide and poster presentations at this event, 48 were invited lectures by leading scholars from around the globe on selected topics. The Conference Proceedings with details of the final scientific program, as well as all abstracts from slide and poster presenters and invited lecturers, are now available on the conference web site <http://www.ohsu.edu/CPBConference>.

Special Thanks to Local Organizing Committee

Every single detail of this fourth event from A to Z was organized under the leadership of Prof. Ross Ungerleider. Dr. Ungerleider not only organized the scientific sessions and invited speakers, but also arranged an outstanding social program. We sincerely appreciate all the support we received from the Continuing Education Service of Oregon Health & Science University. We also thank Dr. Ungerleider's staff including Lisa Frankovich and Johann Kuball. In particular, our special thanks go to Irene Reskin for applying her spectacular skills in the coordination and organization of this event.

New Features of Conference

New features of this year's Conference included a pre-conference workshop, a wet-lab for perfusionists, a showing of surgical videos, and two debates between experts on pulsatility vs non-pulsatility and circuit miniaturization. For the first time, an *Audience Response Polling* system was used. As various questions were asked, the audience responses were immediately available and projected on the screen. This created a very lively and interesting question/answer session.

Pre-conference Sessions

Workshop—A pre-conference workshop, *Congruent Communication in Times of Stress*, was designed and organized by Drs. Jamie Dickey and Ross Ungerleider. This session was specifically created in response to the increasing attention that patient safety is receiving at both local and national levels. Objectives of this special session were to help participants recognize their own unique styles of coping with stressful situations and how these styles might integrate with others on their team; to learn ways of working with others whose styles and forms of communication might be different than their own; and to learn tools for creating emotionally intelligent (congruent) communication for their teams.

Wet-lab for Perfusionists—Another new feature this year, put together by Carmen Giacomuzzi and Brian Mejak, was an excellent wet lab for perfusionists offering hands-on experience. Perfusionists, representing four different institutions, demonstrated various extracorporeal systems. Participants rotated through workstations that included devices such as the MAQUET MECC™ System, neonatal circuit utilizing the Terumo System 1, a hybrid ECMO/VAD circuit, and the MEDOS Delta Stream Blood Pump DP1 and Console. In addition, participants experimented with pulsatile perfusion and learned how the EDAC™ Quantifier can impact their perfusion practice. Rotation through the workstations was followed by an open discussion forum. Instructors for this special session were Chris Brabant, CCP (Milwaukee, WI), Carmen Giacomuzzi, CCP (Portland, OR), Brian Mejak, CCP (Portland, OR), Steve Moss, CCP (Chicago, IL), Stuart Sheppard, PhD (Southampton, UK), Shigang Wang, MD (Hershey, PA), Karl Woitas, CCP (Hershey, PA).

Surgical Videos—The last session of the pre-conference workshop, again designed and organized by Dr. Ungerleider, consisted of selected surgical videos shown by invited lecturers.

Pro and Con Debates—The last new feature of this year event's was pro and con debates on selected topics. Drs. Yukihiro Nose and Akif Ündar discussed pulsatile vs. non-pulsatile flow while Rich Ginther, CCP, and Ed Darling, CCP, debated whether or not circuit miniaturization will add risk for the patient.

American Society for Artificial Internal Organs

The American Society for Artificial Internal Organs (ASAIO) has endorsed this event since its inception, dedicating an issue of the *ASAIO Journal* to manuscripts developed each year from the Conferences. All regular slide and poster abstract presenters are required to submit full manuscripts before their presentations for possible publication in the *ASAIO Journal*. Although it is not required, we also request that invited speakers submit full manuscripts. All manuscripts undergo the usual rigorous peer-review process for publication acceptance in the *ASAIO Journal*. Organizers of this event greatly appreciate the hard work of the Editorial Office including Betty L. Littleton, BA, Managing Editor, and Joseph B. Zwischenberger, MD, Editor of the *Journal*.

Financial Support

During the past three years, we were able to organize this event using significant funds from the Penn State Hershey Children's Hospital. For the Fourth Conference, we received educational grants from Bayer Healthcare, the *National Heart, Lung, and Blood Institute* and the *Office of Rare Diseases at the National Institutes of Health*. In addition, major financial support was received from companies including Baxter, Berlin Heart, CorMatrix Cardiovascular, CryoLife, Levitronix, Lipponcott Williams & Wilkens, Luna Innovations, MAQUET, Medos, Medtronic, MicroMed Cardiovascular, Somanetics, Sorin group USA, Syncardia, and St. Jude Medical.

Future Conferences

After four successful events, organizers of this event believe that this is the right moment to combine it with the ASAIO for further growth. Starting in 2009, the Fifth International Conference will be held at the same time and place as the Annual ASAIO Meeting. All administrative issues including conference registration will be handled by the Executive Office of the ASAIO. This merger will not impact our scientific program. We will have parallel scientific sessions in the same exhibit hall, so participants of both events can see pediatric as well as adult devices. This collaboration may have greater impact on the treatment of pediatric cardiac patients, in particular neonates and infants with congenital heart diseases.

The ***Fifth International Conference*** will be held at the Hilton Anatole Hotel, Dallas, TX, May 28–30, 2009 (Confirmed); the ***Sixth International Conference*** at the Hilton Hotel, Baltimore, MD, May 27–29, 2010 (Confirmed). All updated information regarding future conferences as well as conference proceedings for the past four events can be found at <http://www.hmc.psu.edu/childrens/pedscpb/>.

In concluding this editorial, we thank the many dedicated individuals who have contributed a tremendous collective effort to the success of the Conferences. Our motto continues to be: *If the course of just one child's life is improved as a result of this event, we have reached our goal.*

Dr. Ündar's Personal Note

No matter how much one achieves, or how much one has done, there are always some special people who have directly or indirectly helped in his/her success. While I was in graduate school and pursuing my PhD in Biomedical Engineering at the University of Texas at Austin, I needed to complete my experiments using a neonatal piglet cardiopulmonary bypass model. Through Dr. John Calhoon, who is currently the Chief of Surgery at the UTHSC at San Antonio and was co-supervisor of my dissertation along with thesis advisor Dr. Thomas Runge, I met with Dr. Ross Ungerleider (who was the Chief of Pediatric Cardiac Surgery at Duke University). During the summer of 1995 (less than 6 weeks) with Dr. Ungerleider's surgery residents, Andrew J. Lodge and Casey W. Daggett, we were able to complete all of the necessary experiments for my PhD project [2] (39 CPB experiments in piglets) at Dr. Ungerleider's laboratory at Duke University Medical Center. Without Dr. Ungerleider's support, it could have taken a couple of more years to complete the necessary experiments.

Since then, Ross has not only become my true mentor, but also a friend whose advice I always trust. I felt so fortunate to know Ross and was especially honored to co-chair the fourth international event with such an exceptional person.

Acknowledgements

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