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INTERNATIONAL CONFERENCE ON PEDIATRIC MECHANICAL CIRCULATORY SUPPORT SYSTEMS AND PEDIATRIC CARDIOPULMONARY PERFUSION: OUTCOMES AND FUTURE DIRECTIONS

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The overall objective of this unique meeting is to bring together internationally known clinicians, bioengineers, and basic scientists involved in the research of pediatric mechanical cardiac support systems and pediatric cardiopulmonary bypass procedures. The primary focus is to explicitly describe the problems with current pediatric mechanical circulatory support systems, methods, and techniques during acute and chronic support. The organizers of these continuing events believe that, in bringing together respected international scholars from 27 different countries, there has been a significant global impact made on the treatment of pediatric cardiac patients during the past three years alone. Over 800 participants from many countries, including Argentina, Australia, Austria, Belgium, Brazil, Canada, China, Finland, France, Germany, Greece, Ireland, Italy, Japan, Kuwait, Netherlands, New Zealand, Poland, South Korea, Saudi Arabia, Scotland, Spain, Switzerland, Taiwan, Turkey, the United Kingdom, and the United States, have participated in the 2005, 2006, and 2007 events.

To date, this International Conference on Pediatric Mechanical Circulatory Support Systems and Pediatric Cardiopulmonary Perfusion is the only conference solely dedicated to pediatric cardiac devices during acute and chronic mechanical circulatory support. There is no other national or international conference to precisely define the problems with pediatric cardiac patients, and to suggest solutions with new methodologies and devices for pediatric patients, specifically neonates and infants. The objectives of this editorial are to review the outcomes of these three events and share future directions.

Formal Conference Evaluations

Participants at the last three events were requested to evaluate all scientific and social programs comprising the 3 day conferences. The survey questions covered not only educational objectives of the event, but also conference administration, facilities, and personal

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expectations. In addition, Invited and Key Note Lecturers were evaluated in terms of teaching effectiveness, knowledge of the subject, quality of handouts, teaching strategies, and commercial bias. The ratings in all categories were remarkably high. A majority of the participants clearly stated that they learned something new which they would utilize in the coming year and share with others in their hospitals or institutions. Two-thirds of the total participants of this event attended at least two of the past three conferences.

The Conference Proceedings

Each participant of the *First*, *Second*, and *Third Conferences* received a copy of the *Conference Proceedings* which included all abstracts presented at the conferences. The *Conference Proceedings* were also placed on our conference web page to allow anyone to access the information via the internet <http://www.hmc.psu.edu/ce/pediatrics/>

Special Issues of the *ASAIO Journal*

All regular slide and poster abstract presenters at this event are required to submit full manuscripts before their presentations for per review and possible publication in the *ASAIO Journal*. Although it is not required, we also request that invited speakers submit full manuscripts as well. The Sept-Oct 2005, Sept-Oct 2006, and Nov-Dec 2007 issues of the *ASAIO Journal* were dedicated to the manuscripts submitted at the *First*, *Second*, and *Third Conferences*, respectively. All manuscripts were subjected to the usual peer-review process for publication acceptance in the *ASAIO Journal*. Articles published in these three special issues of cover most of the related areas of pediatric mechanical circulatory support systems, pediatric cardiopulmonary bypass procedures, and pediatric heart transplantation. All of the details, including key words of these articles, are included in Table 1.

Fourth Conference

The fourth conference (<http://www.ohsu.edu/CPBConference>) will take place at the Portland Hilton & Executive Tower, Portland, Oregon, on May 22-24, 2008. This year's meeting will include a "hands-on" perfusion workshop and a surgical video session on Wednesday, May 21, 2008. The meeting will commence on Wednesday evening, May 21, 2008 with registration. Formal presentations including Key Note Lectures, Invited Lectures and regular slide and moderated poster presentations will begin on Thursday morning (May 22, 2008) and continue through Saturday afternoon (May 24, 2008). Platform presentations will take place in two-hour blocks during the morning and afternoon sessions on Thursday, Friday, and Saturday. Additional slide and poster presentations will be chosen from submitted abstracts. Moderated poster presentations will be held in the late afternoon on Thursday and Friday. A banquet is planned for Thursday night (May 22, 2008) for all participants. The Nov-Dec 2008 issue of the *ASAIO Journal* will be dedicated to the manuscripts submitted at the *Fourth Conference*.

FUTURE CONFERENCES

The Board of Trustees of the American Society for Artificial Internal Organs (ASAIO) has invited us to combine our unique international event with the annual event of the ASAIO. After careful review, the organizers have accepted this invitation. The ASAIO's Board of Trustees unanimously approved this arrangement at their November 10, 2007 meeting. Starting in 2009, the *Fifth International Conference* will be held at the same time and location as the annual event of the ASAIO. Our scientific program will be totally independent from the ASAIO; however, all administrative issues including conference registration will be handled by the Executive Office of the Society. Our scientific sessions will parallel the ASAIO and take place in the same exhibition hall, so participants of both events can see exhibits on pediatric and adult devices.

Following is the list of locations and dates for the next two conferences. Fifth International Conference – The Hilton Hotel, Dallas, TX, May 28-30, 2009, Sixth International Conference – The Hilton Hotel, Baltimore, MD, May 27-29, 2010.

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Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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Table 1Original article topics presented and published (after peer-review) at the *First, Second, and Third Conferences*

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MCS = Mechanical circulatory support; CPB = Cardiopulmonary bypass; ECLS = Extracorporeal Life support; FDA = Food and Drug Administration; VAVD = Vacuum assisted venous drainage; MUF = Modified ultrafiltration; EEP = Energy Equivalent Pressure; SHE = Surplus Hemodynamic Energy; IABP = Intra-aortic blood pump