

1. **Akif Üндar**. Pediatric Cardiovascular Research Projects for the MD/PhD students. Penn State Hershey College of Medicine, Hershey, PA, January 3, 2013. [Invited Lecture]
2. David A. Palanzo, Larry D. Baer, Aly El-Banayosy, Shigang Wang, **Akif Üндar** and Walter E. Pae. Choosing a pump for adult extracorporeal membrane oxygenation. Presented at the *34th Annual Seminar of The American Academy of Cardiovascular Perfusion* Millennium Biltmore Hotel, Los Angeles, California, January 25, 2013. [Invited Lecture].
3. **Akif Üндar**. Evidence based research to improve the outcomes of pediatric cardiac patients after cpb procedures: a multidisciplinary approach. Presented at the *Centre Chirurgicale Marie Lanneleongue, Centre de Référence Malformation Cardiaques Congénitales Complexes*, Le Plessis-Robinson, Paris, France, January 30, 2013. [Grand Round Lecture]
4. **Akif Üндar**. Evaluation of commercially available neonatal/pediatric ECLS systems. *Presented at the KIDS 2013 - Mercure Porte d'Orléans Hotel*, Paris, France, February 1, 2013 [Invited Lecture].
5. **Üндar A.** ABC's of Pediatric Cardiovascular Research for Medical, Engineering and Nursing Students. Presented at the *5<sup>th</sup> Istanbul Symposium: Koç University, Engineering Auditorium, Istanbul, Turkey*, 19 April 2013 [Invited Lecture].
6. **Üндar A.** Importance of Neonatal/Pediatric oxygenators with or without Arterial Filters for capturing microemboli during CPB procedures. Presented at the *5<sup>th</sup> Istanbul Symposium: Koç University, Engineering Auditorium, Istanbul, Turkey*, 19 April 2013 [Invited Lecture].
7. Akcevin A, **Üндar A.** What are the real problems for pediatric cardiac patients in Turkey? Why multi-modality approach is necessity, not an option? Presented at the *5<sup>th</sup> Istanbul Symposium: Koç University, Engineering Auditorium, Istanbul, Turkey*, 19 April 2013 [Invited Lecture].
8. Alkan-Bozkaya T, Turkoglu H, Akcevin A, **Üндar A.** Impact of pulsatile perfusion on clinical outcomes of neonates and infants with complex pathologies undergoing CPB procedures. Presented at *5<sup>th</sup> Istanbul Symposium: Koç University, Engineering Auditorium, Istanbul, Turkey*, 19 April 2013 [Invited Lecture].
9. Akif Üндar, Shigang Wang, Allen R. Kunselman, Conrad Krawiec, Yves Durandy. Pulsatile Extracorporeal Life Support Systems for Neonatal and Pediatric Patients. Presented at *9th International Conference on Pediatric Mechanical Circulatory Support Systems and Pediatric Cardiopulmonary Perfusion*, May 8-11, 2013, Hershey, PA USA. [Invited Lecture]
10. Ronald P. Wilson, William J. Weiss, Akif Üндar. Development of Animal Models for Pediatric Mechanical Circulatory Support Research and Training. Presented at *9th International Conference on Pediatric Mechanical Circulatory Support Systems and*

*Pediatric Cardiopulmonary Perfusion*, May 8-11, 2013, Hershey, PA USA. [Invited Lecture]

11. Mehmet A. Ağırbaşlı, Jianxun Song, Fengyang Lei, Shigang Wang, Allen R. Kunselman, Joseph B. Clark, John L. Myers, Akif Ündar. Biomarkers of neurological injury during pediatric CPB procedures. Presented at **9th International Conference on Pediatric Mechanical Circulatory Support Systems and Pediatric Cardiopulmonary Perfusion**, May 8-11, 2013, Hershey, PA USA. [Invited Lecture]
12. David A. Palanzo, Larry D. Baer, Aly El-Banayosy, Shigang Wang, Akif Ündar, Walter E. Pae. Choosing a Pump for Extracorporeal Life Support. Presented at **9th International Conference on Pediatric Mechanical Circulatory Support Systems and Pediatric Cardiopulmonary Perfusion**, May 8-11, 2013, Hershey, PA USA. [Invited Lecture]
13. Shigang Wang, Yulong Guan, Feng Qiu, Ryan K. Mathis, Natalie M. Dogal, Judith Lin, Ashton Strother, Allen R. Kunselman, J. Brian Clark, John L. Myers, Akif Ündar. Microemboli Detection and Capturing During CPB. **Presented at 9th International Conference on Pediatric Mechanical Circulatory Support Systems and Pediatric Cardiopulmonary Perfusion**, May 8-11, 2013, Hershey, PA USA. [Invited Lecture]
14. Akif Ündar. International research collaborations: 2013 Update. **Presented at 9th International Conference on Pediatric Mechanical Circulatory Support Systems and Pediatric Cardiopulmonary Perfusion, May 8-11, 2013, Hershey, PA USA**. [Invited Lecture]
15. Conrad Krawiec, Shigang Wang, Allen R. Kunselman, Akif Ündar. Impact of Pulsatile Flow on Hemodynamic Energy in a Medos Deltastream DP3 Pediatric Extracorporeal Life Support System. **Presented at 9th International Conference on Pediatric Mechanical Circulatory Support Systems and Pediatric Cardiopulmonary Perfusion**, May 8-11, 2013, Hershey, PA USA. [Slide Presentation]
16. Alkan-Bozkaya T, Karaaslan P, Gökay Vural B, Türkoğlu H, Akçevin A, Ersoy C, Ündar A. Postoperative Cerebral Perfusion Monitoring with NIRS in Pediatric Patients Undergoing Cardiac Surgery. Presented at 9th International Conference on Pediatric Mechanical Circulatory Support Systems and Pediatric Cardiopulmonary Perfusion, May 8-11, 2013, Hershey, PA USA. [Slide Presentation]
17. Alkan-Bozkaya T, Karacı AR, Sasmazel A, Ersoy C, Türkoğlu H, Akçevin A, Karaaslan P, Gökay Vural B, Ündar A. Is There a Difference between Pulsatile and Nonpulsatile Perfusion Mode According to the Regional Brain Perfusion via Using NIRS in Patients Which Underwent to Pediatric Cardiac Surgery with CPB. **Presented at 9th International Conference on Pediatric Mechanical Circulatory Support Systems and Pediatric Cardiopulmonary Perfusion**, May 8-11, 2013, Hershey, PA USA. [Slide Presentation]
18. Alkan-Bozkaya T, Akçevin A, Ersoy C, Türkoğlu H, Karaaslan P, Gökay Vural B, Ündar A. Is it important the NIRS (Near infrared spectroscopy) Monitoring during Pediatric Aortic

Coarctation and/or Arch Repair? *Presented at 9th International Conference on Pediatric Mechanical Circulatory Support Systems and Pediatric Cardiopulmonary Perfusion*, May 8-11, 2013, Hershey, PA USA. [Poster Presentation]

19. Ashton Strother, Shigang Wang, Allen R. Kunselman, Akif Üндar. Handling Ability of Gaseous Microemboli of Two Pediatric Arterial Filters in a Simulated CPB Model. *Presented at 9th International Conference on Pediatric Mechanical Circulatory Support Systems and Pediatric Cardiopulmonary Perfusion*, May 8-11, 2013, Hershey, PA USA. [Poster Presentation]
20. Ranjodh Dharni, Shigang Wang, Akif Üндar. In Vitro Comparison of the Delivery of Gaseous Microemboli and Hemodynamic Energy for a Rotary and Roller Pump. *Presented at 9th International Conference on Pediatric Mechanical Circulatory Support Systems and Pediatric Cardiopulmonary Perfusion*, May 8-11, 2013, Hershey, PA USA. [Poster Presentation]
21. Neelima Marupudi, Shigang Wang, Allen R. Kunselman, Akif Üндar. Evaluation of Two Types of Neonatal Oxygenators in Reducing Gaseous Microemboli and Maintaining Optimal Hemodynamic Stability during CPB. *Presented at 9th International Conference on Pediatric Mechanical Circulatory Support Systems and Pediatric Cardiopulmonary Perfusion*, May 8-11, 2013, Hershey, PA USA. [Poster Presentation]
22. Shigang Wang, Akif Üндar. In Vitro Performance Analysis of Novel Pulsatile Diagonal Pump in Simulated Pediatric Mechanical Circulatory Support System. *Presented at 9th International Conference on Pediatric Mechanical Circulatory Support Systems and Pediatric Cardiopulmonary Perfusion*, May 8-11, 2013, Hershey, PA USA. [Poster Presentation]
23. Pelumi Adedayo, Shigang Wang, Akif Üндar. Impact of Pulsatile Flow Settings on Hemodynamic Energy Levels Using the Novel Diagonal Medos DP3 Pump in a Simulated Pediatric ECLS System. *Presented at 9th International Conference on Pediatric Mechanical Circulatory Support Systems and Pediatric Cardiopulmonary Perfusion*, May 8-11, 2013, Hershey, PA USA. [Poster Presentation]
24. Shigang Wang, Allen R. Kunselman, Akif Üндar. In Vitro Evaluation of Medos Deltastream DP3 Pulsatile ECLS System. *Presented at 9th International Conference on Pediatric Mechanical Circulatory Support Systems and Pediatric Cardiopulmonary Perfusion*, May 8-11, 2013, Hershey, PA USA. [Poster Presentation]
25. Shigang Wang, Allen R. Kunselman, Akif Üндar. Evaluation of Capiiox and Quadrox-i Hollow Fiber Membrane Oxygenator in a Simulated CPB Circuit for Adolescents. *Presented at 9th International Conference on Pediatric Mechanical Circulatory Support Systems and Pediatric Cardiopulmonary Perfusion*, May 8-11, 2013, Hershey, PA USA. [Poster Presentation]

26. Akif Ündar. The Importance of Choosing ECLS components in pediatric population: 2013 Update. ***Presented at 6<sup>th</sup> Istanbul Symposium***, June 22, 2013, Istanbul, Turkey [Invited Lecture]
27. Akif Ündar. Fundamental principles pre-CPB in neonates and infants. ***Presented at 7<sup>th</sup> Istanbul Symposium***, September 28, 2013, Istanbul, Turkey [Invited Lecture]
28. Akif Ündar. Cerebral Protection during CPB in neonates and infants. ***Presented at 7<sup>th</sup> Istanbul Symposium***, September 28, 2013, Istanbul, Turkey [Invited Lecture]
29. Akif Ündar. Evaluation of pediatric ECLS systems 2013 update: is it possible to reduce mortality and morbidity with the new generation circuits. Presented at the ***27<sup>th</sup> European association for Cardio-Thoracic Surgery Annual Meeting***, Vienna, Austria, October 5-9, 2013. [Invited Lecture]
30. Akif Ündar. Multi-disciplinary team approach is a necessity to minimize the vital organ injury during CPB and ECLS in pediatric population. Presented at ***4<sup>th</sup> International Pediatric Perfusion Symposium***, October 25-27, 2013, Singapore [Invited Lecture]