## **2012 Presentations**

- 1. Ündar A. Pediatric mechanical circulatory support in children. Pediatric Crtitical Care Fellow Lecture. Presented at the *Penn State Hershey Pediatric Cardiovascular Research Center*, *Penn State Hershey College of Medicine*, *Hershey*, *PA*, *USA*, February 16, 2012 [Invite Lecture].
- 2. Ündar A. PEDIATRIC CARDIOVASCULAR RESEARCH PROJECTS. Presented at the *Penn State Hershey Pediatric Cardiovascular Research Center*, *Penn State Hershey college of Medicine (for MD/PhD students*, March 1, 2012 [Invite Lecture].
- 3. Kiana Aran, Alex Fok, Larwence A. Sasso, Neal Kamdar, Yulong Guan, Qi Sun, Akif Ündar and Jeffrey D. Zahn. Microfiltration Platform for Continuous Blood Plasma Protein Extraction from Whole Blood during Cardiac Surgery. *Presented at the Penn State University's Pediatric Research Day*, Hershey, Pennsylvania, April, 5, 2012 [Poster Presentation].
- 4. Feng Qiu, Joseph B. Clark, Allen R. Kunselman, Akif Ündar, John L. Myers. Hemodynamic Evaluation of Arterial and Venous Cannulae Performance in a Simulated Neonatal Extracorporeal Life Support Circuit. *Presented at the Penn State University's Pediatric Research Day*, Hershey, Pennsylvania, April, 5, 2012 [Poster Presentation].
- 5. Sameer Khan, Rahul Vasavada, Feng Qiu, Allen R. Kunselman, Akif Ündar. Extracorporeal Life Support Systems: Alternative vs. Conventional Circuits. *Presented at the Penn State University's Pediatric Research Day*, Hershey, Pennsylvania, April, 5, 2012 [Poster Presentation].
- 6. Feng Qiu, Sameer Khan, Jonathan Talor, Allan R. Kunselman, Akif Ündar. Evaluation of two pediatric polymethyl pentene membrane oxygenators with pulsatile and non-pulsatile perfusion. *Presented at the Penn State University's Pediatric Research Day*, Hershey, Pennsylvania, April, 5, 2012 [Poster Presentation].
- 7. Lawrence A Sasso, Akif Ündar, Jeffrey D. Zahn. Multiplexed Real-Time Monitoring of Systemic Inflammation during Mechanical Circulatory Support. *Presented at the Penn State University's Pediatric Research Day*, Hershey, Pennsylvania, April, 5, 2012 [Poster Presentation].
- 8. J Lin, NM Dogal, RK Mathis, F Qiu, A Kunselman and Akif Ündar. Evaluation of Quadrox-i and Capiox FX neonatal oxygenators with integrated arterial filters in eliminating gaseous microemboli and retaining hemodynamic properties during simulated cardiopulmonary

- bypass. *Presented at the Penn State University's Pediatric Research Day*, Hershey, Pennsylvania, April, 5, 2012 [Poster Presentation].
- 9. NM Dogal, RK Mathis, J Lin, F Qiu, A Kunselman and Akif Ündar. Evaluation of three hollow-fiber membrane oxygenators without integrated arterial filters for neonatal cardiopulmonary bypass. *Presented at the Penn State University's Pediatric Research Day*, Hershey, Pennsylvania, April, 5, 2012 [Poster Presentation].
- 10. Feng Qiu, Chiajung K. Lu, David Palanzo, Larry D. Baer, John L. Myers, Akif Ündar. Hemodynamic Evaluation of the Avalon EliteTM Bi-Caval Dual Lumen Cannulae. *Presented at the Penn State University's Pediatric Research Day*, Hershey, Pennsylvania, April, 5, 2012 [Poster Presentation].
- 11. Xiaowei W. Su, Yulong Guan, Mollie Barnes, J. Brian Clark, John L. Myers, Akif Ündar. Improved Cerebral Oxygen Saturation and Blood Flow Pulsatility with Pulsatile Perfusion during Pediatric Cardiopulmonary Bypass. *Presented at the Penn State University's Pediatric Research Day*, Hershey, Pennsylvania, April, 5, 2012 [Slide and Poster Presentation].
- 12. Stella Yee, Feng Qiu, Xiaowei Su, Alan Rider, Allen R. Kunselman, Yulong Guan, Akif Undar. Evaluation of hl-20 roller pump and rotaflow centrifugal pump on perfusion quality and gaseous microemboli delivery Presented at the **2012 Medical Student Research Symposium**, **Junker Auditorium**, **Penn State Hershey College of Medicine**, April 13, 2012, Hershey, PA. [Slide Presentation] [Recognized as one of the top medical student research projects of the Class of **2012**].
- 13. Xiaowei W. Su, Yulong Guan, Mollie Barnes, J. Brian Clark, John L. Myers, Akif Ündar. Improved Cerebral Oxygen Saturation and Blood Flow Pulsatility with Pulsatile Perfusion during Pediatric Cardiopulmonary Bypass. Presented at the Penn State Hershey Children's Hospital Pediatric Grand Rounds, May 22, 2012, Hershey, Pennsylvania, USA. [Invited lecture]
- 14. Akif Ündar, Shigang Wang, Yulong Guan, Feng Qiu. Circuit Components' Selection during Neonatal / Pediatric CPB: An Engineering Approach. Presented at 8<sup>th</sup> International Conference on Pediatric Mechanical Circulatory Support Systems and Pediatric Cardiopulmonary Perfusion, JUNE 13-16, 2012, ISTANBUL, TURKEY. [Invited lecture]
- 15. William S. Pierce. A 40-year odyssey in mechanical circulatory support. Presented at 8th International Conference on Pediatric Mechanical Circulatory Support Systems and Pediatric Cardiopulmonary Perfusion, JUNE 13-16, 2012, ISTANBUL, TURKEY. [Keynote Lecture]

- 16. John L. Myers. HLHS- surgical approach. Presented at 8th International Conference on Pediatric Mechanical Circulatory Support Systems and Pediatric Cardiopulmonary Perfusion, JUNE 13-16, 2012, ISTANBUL, TURKEY. [Invited Lecture]
- 17. Linda B. Pauliks. Echocardiographic assessment of single ventricle heart. Presented at 8th International Conference on Pediatric Mechanical Circulatory Support Systems and Pediatric Cardiopulmonary Perfusion, JUNE 13-16, 2012, ISTANBUL, TURKEY. [Invited Lecture]
- 18. David Palanzo. Importance of complete MUF in pediatric cardiac surgery patients. Presented at 8th International Conference on Pediatric Mechanical Circulatory Support Systems and Pediatric Cardiopulmonary Perfusion, JUNE 13-16, 2012, ISTANBUL, TURKEY. [Invited Lecture]
- 19. NM Dogal, RK Mathis, J Lin, F Qiu, A Kunselman and Akif Ündar. Evaluation of Three Hollow-Fiber Membrane Oxygenators without Integrated Arterial Filters for Neonatal Cardiopulmonary Bypass. Presented at 8<sup>th</sup> International Conference on Pediatric Mechanical Circulatory Support Systems and Pediatric Cardiopulmonary Perfusion, JUNE 13-16, 2012, ISTANBUL, TURKEY. [Invited lecture]
- 20. Akif Ündar, Shigang Wang, Yulong Guan, Feng Qiu, Bonnie Weaver, Linda Pauliks, Larry Baer, David Palanzo, Robert McCoach, Robert Wise, Karl Woitas, Allen R. Kunselman, J. Brian Clark, Sertac Haydin, Perihan Yivli, Ali Ekber Cicek, Ersin Erek, Ahmet Saşmazel, Mehmet Ağirbaşli, Tijen Alkan-Bozkaya, Atif Akçevin, Ihsan Bakir, Atif Akçevin, John L. Myers. Translational Research on Neonatal/Pediatric ECLS: 2012 Update. Presented at 8<sup>th</sup> International Conference on Pediatric Mechanical Circulatory Support Systems and Pediatric Cardiopulmonary Perfusion, JUNE 13-16, 2012, ISTANBUL, TURKEY. [Invited lecture]
- 21. Lawrence A. Sasso, Ian H. Johnston, Mihgde Zheng, Rohit K. Gupte, Akif Ündar, Jeffrey D. Zahn. A Microfluidic Device to Continuously Measure Inflammation Biomarkers in Circulating Blood during Mechanical Circulatory Support Procedures. Presented at 8<sup>th</sup> International Conference on Pediatric Mechanical Circulatory Support Systems and Pediatric Cardiopulmonary Perfusion, JUNE 13-16, 2012, ISTANBUL, TURKEY. [Slide Presentation]
- 22. Priti G. Albal, Riza Turkoz, Akif Undar, Kerem Pekkan. A Novel Fontan Fenestration with Desirable Flow Characteristics - In Vitro Analysis and Lumped Parameter Modeling. Presented at 8<sup>th</sup> International Conference on Pediatric Mechanical Circulatory Support Systems and Pediatric Cardiopulmonary Perfusion, JUNE 13-16, 2012, ISTANBUL, TURKEY. [Poster Presentation]
- 23. J Lin, NM Dogal, RK Mathis, F Qiu, A Kunselman and Akif Ündar. Evaluation Of Quadrox-I and Capiox FX Neonatal Oxygenators with Integrated Arterial Filters in Eliminating Gaseous Microemboli and Retaining Hemodynamic Properties during Simulated Cardiopulmonary Bypass. Presented at 8<sup>th</sup> International Conference on Pediatric

- Mechanical Circulatory Support Systems and Pediatric Cardiopulmonary Perfusion, JUNE 13-16, 2012, ISTANBUL, TURKEY. [Poster Presentation]
- 24. Akif Ündar, Shigang Wang, Yulong Guan, Feng Qiu, Xiaowei W. Su, Ashley Rogerson, Allen R. Kunselman, Mollie L. Barnes, Karl R. Woitas, J. Brian Clark, John L. Myers. Brain Protection during Pediatric Cardiac Surgery: A Multi-Disciplinary Team Approach at Penn State Hershey Children's Hospital & Pediatric Cardiovascular Research Center. Presented at 8<sup>th</sup> International Conference on Pediatric Mechanical Circulatory Support Systems and Pediatric Cardiopulmonary Perfusion, JUNE 13-16, 2012, ISTANBUL, TURKEY. [Slide Presentation]
- 25. Kiana Aran, Larwence A. Sasso, Mercedes Morales, Jean Lo, Feng Qui, Akif Ündar and Jeffrey D. Zahn. Microfluidic-Based System for Continuous Blood Protein Extraction during In-Vivo Piglet Model of Extracorporeal Life Support. Presented at 8<sup>th</sup> International Conference on Pediatric Mechanical Circulatory Support Systems and Pediatric Cardiopulmonary Perfusion, JUNE 13-16, 2012, ISTANBUL, TURKEY. [Poster Presentation]
- 26. Ismihan Selen Onan, Perihan Yivli, Halime Erkan, Atıf Akçevin, Akif Ündar, Ihsan Bakir. Perfusion Practices and Education of Perfusionists for Open Heart Surgery in Turkey. Presented at 8<sup>th</sup> International Conference on Pediatric Mechanical Circulatory Support Systems and Pediatric Cardiopulmonary Perfusion, JUNE 13-16, 2012, ISTANBUL, TURKEY. [Slide Presentation]
- 27. Ryan K. Mathis, Judith Lin, Natalie M. Dogal, Feng Qiu, Allen Kunselman, Shigang Wang, Akif Ündar. Evaluation of Four Pediatric Cardiopulmonary Bypass Circuits In Terms of Perfusion Quality and Capturing Gaseous Microemboli. Presented at 8<sup>th</sup> International Conference on Pediatric Mechanical Circulatory Support Systems and Pediatric Cardiopulmonary Perfusion, JUNE 13-16, 2012, ISTANBUL, TURKEY. [Poster Presentation]
- 28. Priti G. Albal, Riza Turkoz, Akif Ündar, Kerem Pekkan. A Novel Fontan Fenestration with Desirable Flow Characteristics In Vitro Analysis and Lumped Parameter Modeling. Presented at 8<sup>th</sup> International Conference on Pediatric Mechanical Circulatory Support Systems and Pediatric Cardiopulmonary Perfusion, JUNE 13-16, 2012, ISTANBUL, TURKEY. [Poster Presentation]
- 29. Alkan-Bozkaya T., Akçevin A., Türkoğlu H., Paker T., Bayer V., Ersoy C., Ündar A. Aorticopulmonary Window w/wo Interrupted Aortic Arch: Surgical Correction Of In Neonatal Period and Results. Presented at 8<sup>th</sup> International Conference on Pediatric Mechanical Circulatory Support Systems and Pediatric Cardiopulmonary Perfusion, JUNE 13-16, 2012, ISTANBUL, TURKEY. [Poster Presentation]
- 30. Alkan-Bozkaya T., Akçevin A., Türkoğlu H., Paker T., Ündar A. Impact of Pulsatile Perfusion in Neonates and Infants with Complex Pathologies: Results. Presented at 8<sup>th</sup> International Conference on Pediatric Mechanical Circulatory Support Systems and

- **Pediatric Cardiopulmonary Perfusion**, JUNE 13-16, 2012, ISTANBUL, TURKEY. [Slide Presentation]
- 31. Ündar A. Impact of Istanbul Sympsoiums on ECLS education in Turkey. Presented at the 4<sup>th</sup> Istanbul Symposium on pediatric ECLS and CPB: 2012 Update (Invited Lecture), *Istanbul Mehmet Akif Ersoy Thoracic and Cardiovascular Surgery Training and Research Hospital*, Istanbul, Turkey, July 28, 2012.
- 32. Ündar A. Recommendations for component selection during pediatric CPB procedures (Invited Lecture). Presented at the 4<sup>th</sup> Istanbul Symposium on pediatric ECLS and CPB: 2012 Update, *Istanbul Mehmet Akif Ersoy Thoracic and Cardiovascular Surgery Training and Research Hospital*, Istanbul, Turkey, July 28, 2012.
- 33. Ündar A. Impact of translational research on neonatal and pediatric ECLS: 2012 Update [Invited Lecture]. *The Third International Pediatric Perfusion Symposium*, October 6-7, 2012, Toronto, ON, Canada.
- 34. Ündar A. Importance of arterial filters for capturing microemboli during pediatric CPB procedures [Invited Lecture]. *The Third International Pediatric Perfusion Symposium*, October 6-7, 2012, Toronto, ON, Canada.
- 35. Ündar A. Translational research on neonatal/pediatric ECLS: 2012 update [Keynote Lecture #1]. 29<sup>th</sup> Annual Scientific Meeting of the Australian & New Zealand College of Perfusionists, Urulu Northern Territory, Australia, Nov 1-3, 2012.
- 36. Ündar A. Pulsatile ECMO [Keynote Lecture #2]. 29<sup>th</sup> Annual Scientific Meeting of the Australian & New Zealand College of Perfusionists, Urulu Northern Territory, Australia, Nov 1-3, 2012.
- 37. Ündar A. Microemboli handling and assessment in pediatric circuitry [Keynote Lecture #3]. **29**<sup>th</sup> **Annual Scientific Meeting of the Australian & New Zealand College of Perfusionists**, Urulu Northern Territory, Australia, Nov 1-3, 2012.