18th Congress of the International Society for Rotary Blood Pumps  
October 14-16, 2010, Berlin, Germany  

Helmut Reul Young Investigator Award  
Submitted Abstracts

Development of An Ultra-Durable Heparin-Free Extracorporeal Membrane Oxygenation System and Its Clinical Use for Pediatric Patients  
T. Saito

Operability of Ventricular Assist Device-peripherals by untrained paramedics  
L. Geidl

Prediction of Thrombus Formation with Non-invasive Optical Monitoring System  
S. Oshima

Pulsatility can be created in rotary pumps by ECG-synchronized rotation speed change mode  
A. Masahiko

Experimental and numerical investigation of hydraulic forces and moments for the hydrodynamic suspension of a miniaturised RBP impeller  
F. Amaral

The first five abstracts were selected for presentation in the Helmut Reul Young Investigator Award Session

In Vivo Validation of Selective Destruction and/or Removal of Aged RBCs by a Rotary Blood Pump  
N. Yokoyama

Assessment of hemodynamic as well as thrombogenic performances of a magnetically levitated centrifugal blood pump based on the Fast Fourier Transform analysis of impeller dynamics  
Y. Yokoyama

A Novel Photon Propagation Model for Non-invasive and Continuous Diagnosis of Blood during Extracorporeal Circulation with Rotary Blood Pumps  
D. Sakota

E. Nagaoka

Development of a MagLev Centrifugal Blood Pump Employing a Magnet-Less Disposable Pump Head  
W. Hijikata

Evaluation of platelet aggregation in calves during centrifugal blood pump support.  
T. Kimura

In Vitro Assessment of Cardiac Recovery Supported by Rotary Blood Pump LVAD  
S. Oshima
Mimicking of cerebral autoregulation by flow-dependent cerebrovascular resistance using CFD: a feasibility study
T. Kaufmann

Development and hydrodynamic evaluation of a novel inflow cannula in a mechanical circulatory support for bridge to decision
H. Sumikura

Investigating the compromise of hydraulic and electrical requirements of an LVAD motor
M. Krämer

In vitro and in vivo characterization of the Levitronix CentriMagTM Rotary Blood Pump
T. Pirbodaghi

Aortic and mitral valve competence and the effect on efficacy of continuous flow left ventricular assistance
J.R. Martina

Bearing gap control for a hydrodynamic-bearing centrifugal pump for prevention of hemolysis
R. Kosaka

In-Vitro Evaluation of a Compliant Inflow Cannula Reservoir to Reduce Suck-Down Events with Extracorporeal, Rotary VAD Support
S. Gregory

Evaluation of sensor and sensorless feedback signals for rotary TAH physiological controllers
N. Greatrex

LVAD-related systolic aortic valve insufficiency: An unusual phenomenon affecting valve competence during cf-LVADs support
J.R. Martina