

# Outcomes 2002 “The Key West Meeting”

## Thursday, May 23, 2002

- 8:00 - 8:30am Opening Remarks
- 8:30 - 9:00am Lecture:  
“*Emboli, Inflammation, and CNS Impairment: An Overview*”  
Brad Hindman, MD, Iowa City, IA
- POSTER DISCUSSION: NEUROBEHAVIORAL OUTCOMES & CARDIAC SURGERY  
Moderators: Brad Hindman, MD & John Murkin, MD
- 9:00 Encephalopathy after coronary artery bypass grafting: A serious post-operative outcome. Borowicz LM, Grega MA, Bechamps M, Royal RM, Selnes OA, Bailey MM, Baumgartner WA. The Johns Hopkins Hospital, Baltimore, MD.
- 9:10 Neurodevelopmental outcome after congenital heart surgery: Results from an institutional registry. Visconti KJ, Forbess JM, Hancock-Friesen C, Howe RC, Bellinger DC, Jonas RA. Boston’s Children’s Hospital, Boston, MA.
- 9:20 Changes in regional metabolism with 18FDG-PET before and after CABG. Harris DN, Choudury M, Jones, H. Hammersmith Hospital, London, UK.
- 9:30 Aspartate and glutamate: Putative markers of subclinical brain injury following carotid endarterectomy. Sahlein D, Heyer EJ, Rampersad A, Mocco J, Lozier AP, Connolly ES. Columbia University, New York, NY.
- 9:40 Cognitive change five years after coronary artery bypass surgery. Newman SP, Stygall J, Fitzgerald G, Arrowsmith JE, Steed L, Mulligan K, Humphries S, Pugsley W, Harrison MJG. Royal Free & University College London Medical School, London, UK.
- 9:50 Respiratory insufficiency following BPB is associated with re-infusion of mediastinal blood. Deal DD, Vernon JC, Zboyovski JM, Moody DM, Stump DA. Wake Forest University School of Medicine, Winston-Salem, NC.
- 10:00 - 10:30am Coffee – Exhibits
- 10:30 - 11:00am Lecture:  
“*Best Practice Cardiopulmonary Bypass for the Elderly High-Risk Patient*”  
Tim Willcox, CCP, Auckland, NZ
- POSTER DISCUSSION: PERFUSION and OUTCOMES  
Moderators: Tim Willcox, CCP & David Stump, PhD
- 11:00 Videomicroscopy of fat microemboli in caerebrocortical vessels. Kay JD, Byrick RJ, Wang Z, Mazer CD, Mullen JBM. Department of Anaesthesia, University of Toronto, St. Michael’s Hospital, Toronto, CAN.
- 11:10 A new method for removing scads from shed mediastinal blood. Jonsson H, Laurell T, Allers M, Nilsson A, Peterson F, Johnsson P. Department of Cardiothoracic Surgery and Electrical Measurements. University Hospital Lund, Lund, Sweden.
- 11:20 The effect of leucocyte depleting arterial line filters on microemboli and neuropsychological outcome following CABG surgery. Newman SP, Whitaker DC, Stygall J, Harrison MJG, Walesby RK. Royal Free & University College London Medical School, London, UK.
- 11:30 Vacuum-assisted venous return reduces blood usage. Banbury MK, Blackstone EH, Cosgrove DM. The Cleveland Clinic Foundation, Cleveland, OH.
- 11:40 Transcranial Doppler (TCD) characteristics of different embolic materials during in-vivo testing. Rodriguez RA, Giachino A, Hosking M, Nathan HH. Ottawa Heart Institute, Ottawa, ON, CAN.
- 11:50 Gaseous microemboli generation during CPB: The role of arterial filter purging into the cardiotomy reservoir. Stump DA, Zboyovski JM, Charles D. Wake Forest University School of Medicine, Winston-Salem, NC.
- 12:00 - 1:00pm LUNCH
- 1:00 - 1:30pm Lecture:  
“*Normal Accidents, Human Error, and the High-Risk System: Improving Clinical Practice*”  
Steven Dain, MD, London, Ontario, CAN
- POSTER DISCUSSION: NEUROPROTECTION  
Moderators: Steven Dain, MD & Tim Jones, FRCS
- 1:30 Clinical trial of the neuroprotectant clomethiazole in coronary bypass graft surgery: A randomized controlled trial. Kong R, Butterworth J, Aveling W, Stump DA, Harrison MJG, Hammon J, Stygall J, Rorie KD, Newman SP. Royal Free & University College London Medical School, London, UK.
- 1:40 Antifibrinolytics decrease the MRI-related claustrophobia after cardiac surgery. Djaiani G, Fedorko L, Carroll J, Cheng D, Karski J. Cardiac Anesthesia, Toronto General Hospital, Toronto, ON, CAN.
- 1:50 Aortic arch repair with a new cerebral protection strategy: Combined intermittent antegrade and retrograde cerebral perfusion. Conklin LD, LeMaire SA, Raskin SA, Pisimisis GT, Coselli JS. Baylor College of Medicine and The Methodist DeBakey Heart Center, Houston, TX.
- 2:00 Reduction of stroke following off-pump coronary artery bypass. Perkowski D, Muarcus A, Littlefield-Wagner S. Saddleback Memorial Medical Center, Laguna Hills, CA.
- 2:10 Coronary artery bypass: The increasing role of off-pump surgery in a large community hospital. M Sinclair, Wilsker GA, Morris DL, Mohan R, Hollenbeak CS. Lehigh Valley Hospital, Penn State College of Medicine, Hershey, PA.
- 2:20 Perioperative changes in DW-MRI in patients undergoing OPCAB or conventional CABG. Iglesias I, Murkin J, Hachinski V, Silver B, Frank C, Peterson R, Adams SJ, Schaefer B. University of Western Ontario, London, Ontario.
- 2:30 - 3:00pm Coffee - Exhibits
- 3:00 - 3:30pm Lecture:  
“*Using the STS and Multinational Cardiac Surgical Databases to Establish Risk-Adjusted Benchmarks for Clinical Outcomes*”  
Richard Wyse, MD, London, UK
- POSTER DISCUSSION: OUTCOMES, PREDICTORS, AND COSTS  
Moderators: Richard Wyse, MD & Joseph Sabik, MD
- 3:30 The Octopus Trial: Limited effect of off-pump bypass surgery on cognitive outcome. van Dijk D, Diephuis JC, Annemieke, Keizer AMA, Hijman R, Kalkman CJ. Utrecht University Hospital, Utrecht, The Netherlands.
- 3:40 Outcomes of off-pump surgery: A prospective randomized study with conventional bypass. Baker RA, Andrew MJ, Ross IK, Knight JL. Cardiac Surgery Research, Flinders Medical Centre, Adelaide, Australia.
- 3:50 The importance of intraoperative variables as predictors of morbidity following cardiac procedures. Ferraris VA, Ferraris SP, Kelley JM, Mentzer, Jr. RM. University of Kentucky, Lexington, KY.
- 4:00 Cognitive self-assessment one year after surgery: A comparison between on- and off-pump CABG. Keizer AMA, Hijman R, Kalkman CJ, Kahn RS. University Medical Center, Utrecht, The Netherlands.
- 4:10 Stroke after coronary artery bypass grafting: An updated prediction model. Borowicz LM, Grega MA, Bechamps M, Royal RM, Selnes OA, Moeller SM, Baumgartner WA, McKhann GM. The Johns Hopkins Hospital, Baltimore, MD.
- 4:20 The combination of stroke and encephalopathy after coronary artery bypass grafting. Borowicz LM, Grega MA, Bechamps M, Royal RM, Selnes OA, Bailey MM, Moeller SM. The Johns Hopkins Hospital, Baltimore, MD.
- 6:00 – 7:30pm POOLSIDE POSTER SESSION/EXHIBITS  
*Wine & Cheese*
- LACK OF PREMORBID COGNITIVE ESTIMATES INVALIDATES CONCLUSIONS REGARDING COGNITIVE DECLINE AFTER CABG. Fitzgibbons LJ, Bachand DP, Magee MJ, Dewey TM, Edgerton JR, Herbert MA, Cox DM, Mack M. Medical City Dallas Hospital, Dallas, TX.*
- A COGNITIVE COMPARISON OF CARDIAC ASSIST DEVICES WITH END STAGE HEART FAILURE COHORTS. Truesdell KC, Russell M, Carter A, Goldstein NE, Narula J, Holmes E, Samuels L, Petrucci RJ. MCP Hahnemann University, Philadelphia, PA.*
- INVESTIGATION OF CEREBRAL DYSFUNCTION DURING AND AFTER HYPOTHERMIC CARDIOPULMONARY BYPASS IN BABOONS. Undar A, Eichstaedt HC, Clubb Jr. FJ, Fung M, Lu M, Bigley JE, Deady B, Porter A, Vaughn WK, Fraser Jr. CD. Texas Children’s Hospital; Baylor College of Medicine; Texas Heart Institute, Houston, TX.*

*PEDIATRIC PHYSIOLOGIC PULSATILE PUMP ENHANCES CEREBRAL AND RENAL BLOOD FLOW DURING AND AFTER CARDIOPULMONARY BYPASS WITH DEEP HYPOTHERMIC CIRCULATORY ARREST IN A NEONATAL PIGLET MODEL.* Undar A, Masai T, Beyer EA, McGarry M, Goddard-Finegold J, Fraser Jr. CD. *Texas Children's Hospital; Baylor College of Medicine; Texas Heart Institute, Houston, TX.*

*NEUROLOGICAL AND COGNITIVE OUTCOMES AFTER CABG IN PATIENTS RANDOMIZED TO EPICARDIAL SCANNING OR AORTIC PALPATION.* McKenzie R, Murkin JM, Menkis AH, Peterson R, Meyer C, Adams SJ. *University of Western Ontario, London, Ontario.*

*CASE REPORT: GME FROM VENOUS CANNULA DETECTED BY ARTERIAL INFLOW MONITORING.* Zboyovsky, JM, Charles D, Stump DA. *Wake Forest University School of Medicine, Winston-Salem, NC.*

**Friday, May 24, 2002**

8:30 - 9:00am Lecture:  
*"Aprotinin: Antithrombotic and Vasoactive Mechanisms of Action"*  
**Clive Landis, MD, London, UK**

POSTER DISCUSSION:  
 MONITORING DURING CPB  
 Moderators: Clive Landis, MD & Eric Heyer, MD

- 9:00 Intraoperative rise in S100b and NSE during CABG comes from mediastinum and not brain. Harris DN, Lovell AT. Hammersmith Hospital, London, UK.
- 9:10 S100b and NSE levels from the jugular bulb during CEA. Sahlein D, Heyer EJ, Rampersad A, Mocco J, Lozier AP, Connolly ES. Columbia University, New York, NY.
- 9:20 Novel anti-factor D monoclonal antibody inhibits complement and leukocyte activation in a baboon model of cardiopulmonary bypass. Undar A, Eichstaedt HC, Clubb Jr. FJ, Fung M, Lu M, Bigley JE, Deady B, Porter A, Vaughn WK, Fraser Jr. CD. *Texas Children's Hospital; Baylor College of Medicine; Texas Heart Institute, Houston, TX.*
- 9:30 Nutritional supplementation with MyoVive® repletes essential cardiac myocyte nutrients and reduces left ventricular size. Errett L, Jeejeebhoy F, Keith M, Freeman M, Barr A, McCall A, Kurian R, Mazer D. *St. Michael's Hospital, Toronto, Ontario, Canada.*
- 9:40 Cerebral blood flow monitoring using transcranial Doppler ultrasound during acute type A aortic dissection. Estrera AL, Garami Z, Miller III CC, Porat EE, Sheinbaum R, Safi HJ. *The University of Texas at Houston, Memorial Hermann Hospital, Houston, TX.*
- 9:50 Xenon attenuates CPB-induced cognitive dysfunction in the rat. Ma D, Lurch J, Franks N, Maze M, Grocott HP. *Duke University Medical Center, Durham, NC; Imperial College of Medicine, London, UK.*

10:00 - 10:30am Coffee - Exhibits

10:30 - 11:00am Lecture:  
*"Surface Modified CPB Circuits: Modifying the Inflammatory Response"*  
**Fraser Rubens, MD, Ottawa, Ontario, CAN**

POSTER DISCUSSION: PHYSIOLOGICAL RESPONSES TO EXTRACORPOREAL CIRCULATION  
 Moderators: Fraser Rubens, MD & Hilary Grocott, MD, FRCPC

- 11:00 Impact of coated oxygenators on blood use: A prospective randomized trial. Dickinson T, Mahoney CB, Simmons M, Marison A, Polanski P. *University of Minnesota, Minneapolis, MN and Extracorporeal Alliance, Pontiac, MI.*
- 11:10 Surface modification of extracorporeal circuits: Is there really an impact on the pathophysiology of cardiopulmonary bypass? Kiessling AH, Isgró F, Ottinger U, Saggau W. *Heartcenter Ludwigshafen, Ludwigshafen, Germany.*
- 11:20 Clinical outcomes of complete x-coating circuit in mast: Condensed bypass setting. McCusker K, Zias E, Vijay V, Sisto D. *Westchester Medical Centre, Valhalla, NY.*
- 11:30 Neurocognitive decline after coronary artery bypass grafting: On-pump versus off-pump. Cummings CC, Baisden CE, Rajab MH, Rynearson K, Bolton JRW. *Scott & White Hospital and Clinic, Temple, TX.*
- 11:40 Comparison of six pediatric cardiopulmonary bypass pumps during pulsatile and nonpulsatile perfusion in piglets. Undar A, Eichstaedt HC, Masai T, Yang SQ, Bigley J, McGarry M, Mueller M, Deady B,

Porter A, McKay K, Fraser, Jr. CD. *Texas Children's Hospital; Baylor College of Medicine; Texas Heart Institute, Houston, TX.*

11:50 Lower endotoxin immunity predicts increased cognitive dysfunction in the elderly after cardiac surgery. Mathew JP, Grocott HP, Phillips-Bute B, Stafford-Smith M, Laskowitz D, Rossignol D, Blumenthal JA, Newman MF. *Duke University Medical Center, Durham, NC.*

12:00 - 1:30pm LUNCH

1:30 - 2:00pm Lecture:  
*"Basic Mechanisms of Blood Coagulation"*  
**Charise Petrovitch, MD, Washington, DC**

POSTER DISCUSSION:  
 HEMODYNAMIC CONSIDERATIONS OF CARDIAC SURGERY  
 Moderators: Charise Petrovitch, MD & Carole Hamilton, CCP, CPC, EBCP

- 2:00 Does Clopidogrel contribute to increased blood loss following coronary artery bypass surgery (CABG)? Chu M, Wilson S, Novick RJ, Quantz M. *London Health Sciences Centre, London, ON, CAN.*
- 2:10 Coagulation activation after CABG: Two-months follow-up. Parolari A, Naliato M, Wang X, Galanti A, Barili F, Mussoni L, Colli S, Eligini S, Alamanni F, Tremoli E, Biglioli P. *University of Milan, Milan, Italy.*
- 2:20 Perfusion of the renal arteries with cold blood: A new adjunct for renal protection during thoracoabdominal aortic aneurysm surgery. LeMaire SA, Conklin LD, Raskin SA, Coselli JS. *Baylor College of Medicine and The Methodist DeBakey Heart Center, Houston, TX.*
- 2:30 Regional spinal cord monitoring using transcutaneous near infrared spectroscopy. LeMaire SA, Conklin LD, Widman R, Undar A, Clubb FJ, Schmittling ZC, Fraser CD, Coselli JS. *Baylor College of Medicine and The Methodist DeBakey Heart Center, Houston, TX.*
- 2:40 The effect of cardiac disease on hemodynamic response to cognitive activation. Stroobant N, Vingerhoets G, Van Nooten G. *Ghent University, Ghent, Belgium.*
- 2:50 Jugular venous oxygen saturation during extracorporeal whole body hyperthermia. Diephuis JC, Cremer O, Kalkman C, Bruens M. *University Hospital, Utrecht, The Netherlands.*

3:00 - 3:30pm Coffee - Exhibits

3:30 - 5:00pm University, Industry and Governmental Consortia

Introduction: **Jay Moskowitz, PhD**  
*"Morbidity: The Real Cost of Cardiac Surgery"*  
 Lecture: *"Coronary Artery Bypass: The Increasing Role of Off-Pump Surgery in a Large Community Hospital"*  
**Christopher S. Hollenbeck, PhD, Hershey, PA**

Special Guest Speaker:  
*"NIH Perspective on Neurocognitive Dysfunction of Cardiac Surgery"*  
**Mary Ellen Michel, PhD, Rockville, MD**

7:00pm Luau and Entertainment

**Saturday, May 25, 2002**

8:30 - 9:00am Lecture:  
*"Thoracoabdominal Aneurysm Repair: Reducing Adverse Outcome with Selective Perfusion"*  
**Carole Hamilton, CCP, Vienna, AUT**

9:00 - 9:30am Lecture:  
*"Current UK Perfusion Practice: Fact or Fiction"*  
**Tim J. J. Jones, FRCS, Birmingham, UK**

9:30 - 10:00am Lecture:  
*"Does Off-Pump Coronary Surgery Reduce Morbidity and Mortality?"*  
**Joseph Sabik, MD, Cleveland, OH**

10:00 - 10:30 Coffee - Exhibits

10:30 - 12:00 Panel Discussion:  
*"Brain Injury and Cardiac Surgery: A Unifying Hypothesis?"*  
**David A. Stump, PhD, Winston-Salem, NC**  
**Dixon M. Moody, MD, Winston-Salem, NC**  
**John M. Murkin, MD, London, Ontario, CAN**

12:00 - 12:15pm Closing Comments of Outcomes 2002