

MUNIR BOODHWANI

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EDUCATION

- 2008 – 2009 Clinical Fellow - Complex Aortic & Mitral Valve Repair – Brussels, Belgium
2008 Fellow, Royal College of Physicians & Surgeons of Canada in Cardiac Surgery
2007 – 2008 Chief Resident, Cardiac Surgery – University of Ottawa Heart Institute, Canada
2004 – 2006 *Scholars in Clinical Science Program*, Masters in Medical Sciences – Harvard Medical School, Boston, USA
2004 – 2006 Research Fellow, Cardiothoracic Surgery – Beth Israel Deaconess Medical Center, Boston, USA
2001 – 2004 Resident, Cardiac Surgery - University of Ottawa Heart Institute, Canada
1997 – 2001 Doctor of Medicine, M.D. – University of Western Ontario, Canada
1994 – 1997 Bachelor of Science, B.Sc. *with High Distinction* – University of Toronto, Canada

AWARDS & DISTINCTIONS

- Designated as one of “Top 10 reviewers for Journal Thoracic Cardiovasc Surg” – 2009
- European Association of Cardiothoracic Surgery, Francis Fontan Prize – 2008/9
- Royal College of Physicians & Surgeons of Canada, Detweiller Fellowship – 2008/9
- American Association of Thoracic Surgery Resident Traveling Fellowship - 2007
- Canadian Cardiovascular Society – Paul Cartier Resident Research Award - 2007
- Walton C. Lilehei Resident Forum Finalist, American Assoc. Thoracic Surgery – 2007
- Wilbert J. Keon Award for Outstanding Achievement – Ottawa Heart Institute - 2007
- PSI (Physician Services Inc.) Foundation Resident Research Award – 2003, 2006, 2007
- Valedictorian, *Scholars in Clinical Science Program*, Harvard Medical School - 2006
- Best Basic Science Paper, Ottawa Heart Institute Research Day - 2007
- Graham Barber Award for Best Clinical Research Paper, University of Ottawa - 2006
- European Association of Cardiothoracic Surgery Young Investigator Award - 2005
- Vivien Thomas Young Investigator Award (Finalist), American Heart Assoc. - 2005
- American Heart Association, ATVB Merit Award For Young Investigators - 2005
- Harvard Medical School/Novartis Fellowship in Clinical Research – July 2004 - 2006
- Collin’s Day Resident Research Award – 2002, 2003, 2004, & 2007 Univ of Ottawa

RESEARCH FUNDING

“Scholars in Clinical Science Program”

National Institutes of Health / National Heart Lung and Blood Institute

Type: K30 HL04095-06 (July 2004 – June 2006)

The aim is to train clinical researchers in the areas of genomics, epidemiology, biostatistics, and clinical trials.

Role: Recipient/program participant

“Skeletonized versus Non-skeletonized Internal Thoracic Artery Harvest”

Agency: Physician Services Incorporated (PSI) Foundation

Grant No. R03-41 (September 2003 – September 2005)

The primary aim was to determine the optimal harvest technique of the internal thoracic artery during coronary surgery

Role: Principal Investigator

INVITED SPEAKER / MODERATOR

- **Harvard Medical School – *Scholars in Clinical Science Program 2009***
Course Instructor – “*Principles and Practice of Clinical Research*”
- **Association of Cardiac Surgeons XXVI Conference 2009 (Lisbon, Portugal)**
Topics: *Techniques of Cusp Repair in Aortic Valves*
Bicuspid Aortic Valve repair in Children
- **World Society of Cardiothoracic Surgery Meeting 2006** – Session Moderator
- **Statistical Society of Ottawa 2006** – Invited Speaker

REVIEWER

Ad Hoc Reviewer

- Circulation
- Journal of Thoracic and Cardiovascular Surgery
- Annals of Thoracic Surgery
- American Journal of Physiology
- European Journal of Cardiothoracic Surgery
- Cardiology
- Vascular Pharmacology
- Archives of Medical Research

Abstract Grader

- American Heart Association – Scientific Sessions – 2007, 2008, 2009

CONSULTING

Scientific Consultant

Pluromed Incorporated (www.pluromed.com)

January 2007 – September 2008

- Provide expert consultation on the design and implementation of pre-clinical and early clinical studies for FDA product approval

RESEARCH EXPERIENCE

Division of Cardiothoracic Surgery

Beth Israel Deaconess Medical Center, Harvard University

Supervisors/Collaborators: Dr. Frank W. Sellke

Research Focus:

- Effects of diabetes, hypercholesterolemia, and endothelial function on myocardial angiogenesis
- Coronary physiology and pharmacology

Division of Cardiac Surgery

University of Ottawa Heart Institute

Supervisors/Collaborators: Dr. Fraser Rubens
Dr. Thierry Mesana
Dr. Howard Nathan
Dr. Marc Ruel

Research Focus:

- Issues in complex coronary revascularization procedures and arterial grafting
- Polymer based delivery of endothelial progenitor cells for myocardial regeneration
- Cardiopulmonary bypass practices and clinical trials
- Neurocognitive outcomes following cardiac surgery

INTERNATIONAL EXPERIENCE

Pediatric Cardiac Surgery (November 2007)

Caribbean Heart Care

Port of Spain, Trinidad

- Assisted with and performed cases as part of a pediatric cardiac surgical team
- Preoperative evaluation and postoperative care of cardiac surgical patients

International Medical Elective (June 1999 – August 1999)

Aga Khan University and Medical Center

Faculty of Community Health Sciences

Karachi, Pakistan

- Assisted with the provision of medical services in rural Pakistan
- Implemented a community education program on breast health

COMMUNITY INVOLVEMENT

Medical Advisory Service, Chairperson (July 2002 – July 2004; July 2006 – Sept. 2008)

Aga Khan Health Board for Ottawa

- Provide information and resources to community members seeking medical advice
- Conduct seminars and workshops on cardiovascular disease and healthy lifestyles

Ismaili Volunteer Corps, Member, Toronto, Ottawa, Boston (July 1992 – present)

- Participate in multiple capacities in variety of community outreach projects including the World Partnership Walk
- Engage in day-to-day management of local community center and prayer facility

PUBLICATIONS

Peer-reviewed Publications

Boodhwani M, de Kerchove L, Glineur D, El Khoury G. A simple method for the quantification and correction of aortic cusp prolapse by means of free margin plication. *J Thorac Cardiovasc Surg*. 2009 (*In Press*)

de Kerchove L, **Boodhwani M**, Glineur D, Poncelet A, Rubay J, Watremez C, Vanoverschelde JL, Noirhomme P, El Khoury G. Cusp prolapse repair in trileaflet aortic valves: free margin plication and free margin resuspension techniques. *Ann Thorac Surg*. 2009 Aug; 88(2):455-61

El Oumeiri B, **Boodhwani M**, Glineur D, De Kerchove L, Poncelet A, Astarci P, Pasquet A, Vanoverschelde JL, Verhelst R, Rubay J, Noirhomme P, El Khoury G. Extending the scope of mitral valve repair in rheumatic disease. *Ann Thorac Surg*. 2009 Jun;87(6):1735-40.

Boodhwani M, de Kerchove L, El Khoury G. Aortic root replacement using the reimplantation technique: tips and tricks. *Interact Cardiovasc Thorac Surg*. 2009;8(5):584-6.

Boodhwani M, Sellke FW. Therapeutic Angiogenesis in Diabetes and Hypercholesterolemia: Influence of Oxidative Stress. *Antioxid Redox Signal*. 2009 (*In Press*)

Boodhwani M, de Kerchove L, Glineur D, Poncelet A, Rubay J, Astarci P, Verhelst R, Noirhomme P, El Khoury G. Repair Oriented Classification of Aortic Insufficiency: Impact on Surgical Techniques and Clinical Outcomes. *J Thorac and Cardiovasc Surg* 2009 ;137(2):286-94 **** Designated as online Continuing Medical Education (CME) Article ****

Boodhwani M, Rubens FD, Wozny D, Nathan HJ. Effects Of Mild Hypothermia And Rewarming On Renal Function Following Coronary Artery Bypass Surgery. *Ann Thorac Surg* 2009;87(2):489-95

Boodhwani M, Nathan HJ, Mesana TG, Rubens FD. Effects of Shed Mediastinal Blood On Cardiovascular and Pulmonary Function: A Randomized, Double-Blind Study. *Ann Thorac Surg* 2008; 86(4):1167-73

Sodha NR, Clements RT, **Boodhwani M**, Xu SH, Laham RJ, Bianchi C, Sellke FW. Endostatin and angiostatin are increased in diabetic patients with coronary artery disease and associated with impaired coronary collateral formation. *Am J Physiol Heart Circ Physiol*. 2009; 296(2):H428-34.

Clements RT, Sodha NR, Feng J, **Boodhwani M**, Liu Y, Mieno S, Khabbaz KR, Bianchi C, Sellke FW. Impaired coronary microvascular dilation correlates with enhanced vascular smooth muscle MLC phosphorylation in diabetes. *Microcirculation*. 2009; 16(2):193-206

de Kerchove L, Glineur D, Poncelet A, **Boodhwani M**, Rubay J, Dhoore W, Noirhomme P, El Khoury G. Repair of aortic leaflet prolapse: a ten-year experience. *Eur J Cardiothorac Surg*. 2008; 34(4):785-91

Boodhwani M, Rubens FD, Wozny D, Rodriguez R, Nathan HJ. Effects of Sustained Mild Hypothermia on Neurocognitive Function Following Coronary Artery Bypass Surgery: A Randomized, Double-Blind Study. *J Thoracic and Cardiovasc Surgery* 2007; 134(6): 1443-50

Sodha NR, **Boodhwani M**, Ramlawi B, Clements RT, Mieno S, Feng J, Xu SH, Bianchi C, Sellke FW. Atorvastatin increases myocardial indices of oxidative stress in a porcine model of hypercholesterolemia and chronic ischemia. *J Card Surg*. 2008;23(4):312-20.

Sodha NR, **Boodhwani M**, Clements RT, Xu SH, Khabbaz KR, Sellke FW. Increased antiangiogenic protein expression in the skeletal muscle of diabetic swine and patients. *Arch Surg*. 2008; 143(5):463-70

Boodhwani M, Voisine P, Ruel M, Sodha NR, Feng J, Xu S, Sellke FW. Comparison of vascular endothelial growth factor and fibroblast growth factor-2 in a swine model of endothelial dysfunction, *Eur J Cardiothorac Surg* 2008 Apr; 33(4):645-50.

Boodhwani M, Mieno S, Feng J, Sodha NR, Clements RT, Xu S, Sellke FW. Atorvastatin Impairs the Myocardial Angiogenic Response to Chronic Ischemia in Normocholesterolemic Swine. *Journal of Thoracic and Cardiovascular Surgery* 2008; 135(1):117-22

Boodhwani M, Sodha NR, Mieno S, Ramlawi B, Xu S, Feng J, Clements RT, Ruel M, Sellke FW. Insulin Treatment Enhances the Myocardial Angiogenic Response in Diabetes. *J Thoracic and Cardiovascular Surgery* 2007; 134(6): 1453-60

Mieno S, Clements RT, **Boodhwani M**, Sodha NR, Ramlawi B, Bianchi C, Sellke FW. Characteristics and Function of Cryopreserved Bone Marrow-Derived Endothelial Progenitor Cells. *Annals of Thoracic Surgery* 2008 Apr;85(4):1361-6

Boodhwani M, Rubens FD. Preserved Sternal Perfusion Following ITA Skeletonization: Implications for Bilateral ITA Grafting. *Annals of Thoracic Surgery* 2007 Nov;84(5):1796-7

Khabbaz KR, Feng J, **Boodhwani M**, Clements RT, Bianchi C, Sellke FW. Non-ischemic Myocardial Acidosis Adversely Affects Microvascular and Myocardial Function and Triggers Apoptosis during Cardioplegia. *Journal of Thoracic and Cardiovascular Surgery* 2008;135(1):139-46

Clements RT, Sodha NR, Feng J, Mieno S, **Boodhwani M**, Ramlawi B, Bianchi B, Sellke FW. Phosphorylation and translocation of heat shock protein 27 and α B-crystallin in human myocardium following cardioplegia and cardiopulmonary bypass. *Journal of Thoracic and Cardiovascular Surgery* 2007; 134(6): 1461-70.

Rubens FD, **Boodhwani M**, Nathan H. Interpreting Studies of Cognitive Function following Cardiac Surgery: A Guide for Surgical Teams. *Perfusion* 2007; 22(3): 185-92

Boodhwani M, Sodha NR, Mieno S, Xu SH, Feng J, Ramlawi B, Clements RT, Sellke FW. Functional, Cellular, and Molecular Characterization of the Angiogenic Response to Chronic Myocardial Ischemia in Diabetes. *Circulation* 2007;116(11 Suppl):I31-7

Rubens FD, **Boodhwani M**, Wozny D, Wells GA, Nathan HJ. The Cardiotomy Study: A Randomized, Double-Blind Trial to Assess the Effect of Processing of Shed Blood During

Cardiopulmonary Bypass on Transfusion and Neurocognitive Function. *Circulation* 2007;116(11 Suppl):I89-97

Sodha NR, **Boodhwani M**, Clements RT, Feng J, Xu SH, Sellke FW. Coronary Microvascular Dysfunction in the Setting of Chronic Ischemia is Independent of Arginase Activity. *Microvascular Research* 2008 Mar;75(2):238-46

Ramlawi B, Out H, Mieno S, **Boodhwani M**, Sodha NR, Clements RT, Bianchi C, Sellke FW. Oxidative Stress and Atrial Fibrillation after Cardiac Surgery: A Case-Control Study. *Annals of Thoracic Surgery* 2007;84(4):1166-72

Sodha NR, Feng J, Clements RT, Bianchi C, **Boodhwani M**, Ramlawi B, Mieno S, Khabbaz KR, Sellke FW. Protein Kinase C Alpha Modulates Microvascular Reactivity In The Human Coronary And Skeletal Microcirculation. *Surgery* 2007 Aug;142(2):243-52

Sodha NR, **Boodhwani M**, Ramlawi B, Clements RT, Mieno S, Feng J, Xu SH, Bianchi C, Sellke FW. Atorvastatin Increases Myocardial Indices of Oxidative Stress in a Porcine Model of Hypercholesterolemia and Chronic Ischemia. *Journal of Cardiac Surgery* (In Press)

Boodhwani M, Lam BK, Nathan HJ, Mesana TG, Ruel M, Zeng W, Sellke FW, Rubens FD. Skeletonized internal thoracic artery harvest reduces pain and dysesthesia and improves sternal perfusion after coronary artery bypass surgery: a randomized, double-blind, within-patient comparison. *Circulation* 2006 Aug 22;114(8):766-73.

**** cited by "Practice Points", *Nature Clinical Practice Cardiovascular Medicine* 2007; 4(4):188-9**

Boodhwani M, Veinot JP, Hendry PJ. A Surgical Approach to Papillary Fibroelastomas. *Can J Cardiology* 2007 15;23(4):301-2.

Boodhwani M, Williams K, Babaev A, Gill G, Saleem N, Rubens FD. Ultrafiltration reduces blood transfusions following cardiac surgery: A meta-analysis. *Eur J Cardiothorac Surg* 2006 Dec;30(6):892-7.

Boodhwani M, Mieno S, Voisine P, Feng J, Sodha NR, Xu S, Li J, Sellke FW. High-dose Atorvastatin is Associated with Impaired Myocardial Angiogenesis in Response to Vascular Endothelial Growth Factor in Hypercholesterolemic Swine. *J Thorac and Cardiovasc Surg* 2006 Dec;132(6):1299-306

Mieno S, **Boodhwani M**, Clements RT, Ramlawi B, Sodha NR, Li J, Sellke FW. Aging is associated with an impaired coronary microvascular response to vascular endothelial growth factor in patients. *J Thorac Cardiovasc Surg* 2006 Dec;132(6):1348-55.

Boodhwani M, Nakai Y, Voisine P, Feng J, Li J, Mieno S, Ramlawi B, Bianchi C, Laham RJ, Sellke FW. High Dose Atorvastatin Improves Hypercholesterolemic Coronary Endothelial Dysfunction Without Improving the Angiogenic Response. *Circulation* 2006 Jul 4;114(1 Suppl):I402-8.

Boodhwani M, Rubens FD, Wozny D, Rodriguez R, Hendry PJ, Nathan H. Predictors of Early Neurocognitive Outcome in Low-Risk Patients Undergoing On-pump Coronary Artery Bypass Surgery. *Circulation* 2006 Jul 4;114(1 Suppl):I461-6.

Mieno S, Ramlawi B, **Boodhwani M**, Clements RT, Minamimura K, Maki T, Xu S, Bianchi C, Li J, Sellke FW. Role of stromal derived factor-1 α in the induction of circulating CD34+CXCR4+ progenitor cells after cardiac surgery. *Circulation* 2006 Jul 4;114(1 Suppl):I186-92.

Ramlawi B, Rudolph JL, Mieno S, Khabbaz K, Sodha NR, **Boodhwani M**, Levkoff SE, Marcantonio ER, Sellke FW. Serologic markers of brain injury and cognitive function after cardiopulmonary bypass. *Ann Surg* 2006 Oct;244(4):593-601.

Ramlawi B, Feng J, Mieno S, Szabo C, Zsengeller Z, Clements R, Sodha N, **Boodhwani M**, Bianchi C, Sellke FW. Indices of Apoptosis Activation after Blood Cardioplegia and Cardiopulmonary Bypass. *Circulation* 2006 Jul 4;114(1 Suppl):I257-63.

Feng J, Sellke ME, Ramlawi B, **Boodhwani M**, Clements R, Li JY, Bianchi C, Sellke FW. Bradykinin induces microvascular preconditioning via opening of calcium-activated potassium channels. *Surgery* 2006 Aug;140(2):192-7.

Mieno S, **Boodhwani M**, Ramlawi B, Li J, Feng J, Bianchi C, Laham RJ, Li J, Sellke FW. Human coronary microvascular effects of cardioplegia induced stromal derived factor-1 α . *Annals of Thoracic Surgery* 2006 Aug;82(2):657-63.

Ramlawi B, Rudolph JL, Mieno S, Gautam S, Feng J, Levkoff SE, Khabbaz K, **Boodhwani M**, Marcantonio ER, Sellke FW. C-reactive protein and inflammatory response associated to neurocognitive decline following cardiac surgery. *Surgery* 2006 Aug;140(2):221-6.

Boodhwani M, Sellke FW. The Status and Future of Cardiac Surgery. *Expert Review Cardiovascular Therapeutics* 2006 May;4(3):279-81.

Boodhwani M, Feng J, Mieno S, Ramlawi B, Sodha N, Clements R, Sellke FW. Effects of purified poloxamer 407 gel on vascular occlusion and the coronary endothelium. *European Journal of Cardiothoracic Surgery* 2006 Apr 12;29(5):736-741

Boodhwani M, Nakai Y, Mieno S, Voisine P, Bianchi C, Araujo E, Feng J, Michael K, Li J, Sellke FW. Hypercholesterolemia Impairs the Myocardial Angiogenic Response in a Swine Model of Chronic Ischemia: Role of Endostatin and Oxidative Stress. *Ann Thorac Surg*. 2006 Feb;81(2):634-41.

Boodhwani M, Nathan HJ, Lam BK, Rubens FD. The Internal Thoracic Artery Skeletonization Study: A Paired, Within-Patient Comparison. *Trials* 2006; 7(1):1-8.

Sellke FW, **Boodhwani M**. Inhibition of complement activation in cardiac surgery. *J Thorac Cardiovasc Surg* 2006 Feb;131(2):266-7.

Boodhwani M, Rubens FD, Sellke FW, Mesana TG, Ruel M. Mortality and Myocardial Infarction Following Percutaneous Versus Surgical Treatment of Isolated Left Anterior Descending Artery Disease: A Meta-analysis. *European Journal of Cardiothoracic Surgery* 2006 Jan;29(1):65-70.

****Cited by 'Evidence-Based Cardiovascular Medicine' as one of the 100 most influential papers of the year**

Boodhwani M, Cohn WE, Feng J, Ramlawi B, Mieno S, Schwarz A, Sellke FW. Safety and Efficacy of a Novel Gel for Vascular Occlusion in Off-pump Surgery. *Annals of Thoracic Surgery* 2005 Dec;80(6):2333-7.

Boodhwani M, Ruel M, Mesana TG, Rubens FD. Minimally Invasive Direct Coronary Artery Bypass (MIDCAB) for the Treatment Of Isolated LAD Disease. *Canadian Journal of Surgery* 2005; 48(4): 307-10

Lam BK, **Boodhwani M**, Veinot JP, Hendry PJ, Mesana TG. In-Vitro Evaluation of Electrocautery For Atrial Ablation Surgery. *European Journal of Cardiothoracic Surgery* 2005; 27(3): 456-61

Reviews, Book Chapters, and Editorials

Boodhwani M. Invited Commentary. *Annals of Thoracic Surgery* 2008;85(1):79

Sodha NR, **Boodhwani M**, Sellke FW. Is There Still A Role for Aprotinin in Cardiac Surgery? *Drug Safety* 2007;30(9):731-40

Boodhwani M, Sodha NR, Sellke FW. Biologically based myocardial regeneration: is there a role for the surgeon? *Curr Opin Cardiol* 2006 Nov;21(6):589-94.

Boodhwani M, Sellke FW. Myometrium: another candidate for cell-based myocardial angiogenesis. *Am J Physiol Heart Circ Physiol* 2006 Nov;291(5):H2039-40.

Boodhwani M, Sodha NR, Laham RJ, Sellke FW. The future of therapeutic myocardial angiogenesis. *Shock* 2006 Oct;26(4):332-41.

Boodhwani M, Ramlawi B, Laham RJ, Sellke FW. Targeting VEGF in Angina Therapy. *Expert Opin Ther Targets* 2006 Feb;10(1):5-14.

Sodha NR, **Boodhwani M**, Bianchi C, Ramlawi B, Sellke FW. Aprotinin in cardiac surgery. *Expert Rev Cardiovasc Ther* 2006 Mar;4(2):151-60.

Boodhwani M, Wykrzykowska JJ, Laham RJ. Growth Factors in *Textbook of Interventional Cardiovascular Pharmacology*; Ed by Nicholas Kipshidze, Jawed Fareed, Jeffrey Moses and Patrick W Serruys. Martin Dunitz Ltd, London, UK

Ramlawi B, Harrison D, **Boodhwani M**, Sellke FW. Regulation of Coronary Vascular Tone and Microvascular Physiology in *Angiogenesis: Basic Aspects (Vol. 1)*; Imperial College Press

Wykrzykowska JJ, **Boodhwani M**, Laham RJ. Results of Recent Clinical Trials in *Textbook of Interventional Cardiovascular Pharmacology*; Ed by Nicholas Kipshidze, Jawed Fareed, Jeffrey Moses and Patrick W Serruys. Martin Dunitz Ltd, London, UK

Voisine P, Wykrzykowska JJ, **Boodhwani M**, Harrison DG, Sellke FW, Laham RJ. The Coronary Microcirculation and Angiogenesis in *Angiogenesis and Direct Myocardial Revascularization*. Humana Press Inc. 2005

Rubens FD, **Boodhwani M**, Lavalee G, Mesana T. Perioperative Red Blood Cell Salvage. *Can Journal of Anesthesia* 2003; 50(6 Supp): S31-40.

Abstracts

Boodhwani M, de Kerchove L, Glineur D, Verhelst R, Rubay J, Van Dyck M, El Khoury et al. Analysis of Recurrent Aortic Insufficiency following Aortic Valve Repair: Incidence, Predictors, and Clinical Impact. Society of Heart Valve Disease 2009

Boodhwani M, de Kerchove L, Glineur D, Verhelst R, Rubay J, Watremez C, Pasquet A, Noirhomme P, El Khoury G. Valve Repair for Regurgitant Bicuspid Aortic Valves: A Systematic Approach AATS 2009

Grisoli D, **Boodhwani M**, Bourke M, Ruel M, Mesana T, Rubens FD. Safety of Bilateral Skeletonized ITA harvest in the Elderly. STS 2009

de Kerchove L, **Boodhwani M**, Glineur D, Poncelet A, Rubay J, Watremez C, Vanoverschelde JL, Noirhomme P, El Khoury G. Cusp prolapse repair in trileaflet aortic valves: free margin plication and free margin resuspension techniques. STS 2009

de Kerchove L, **Boodhwani M**, Glineur D, El Khoury G et al. Effect of preoperative aortic insufficiency on outcome following aortic valve sparing surgery. AHA 2009

Boodhwani M, Rubens FD, Wozny D, Nathan HJ. Effects of Mild Hypothermia And Rewarming on Renal Injury Following Coronary Artery Bypass Surgery AATS 2008

Boodhwani M, Sodha NR, Kelesidis T, Xu S, Clements RT, Mantzoros CM, Sellke FW. High Dose Atorvastatin Induces Myocardial Hypertrophy In Swine: Role Of Adiponectin And Akt. American Heart Association 2007

Boodhwani M, Tao H, Ruel M, Bourke M, Rubens FD. Is Bilateral Internal Thoracic Artery Grafting Safe in the Elderly? Canadian Cardiovascular Congress 2007

Boodhwani M, Rubens FD, Wozny D, Rodriguez R, Nathan HJ. Effects of Sustained Mild Hypothermia on Neurocognitive Function Following Coronary Artery Bypass Surgery: A Randomized, Double-Blind Study. AATS 2007

Boodhwani M, Sodha NR, Xu SH, Mieno S, Feng J, Ruel M, Sellke FW. Insulin Treatment Enhances the Myocardial Angiogenic Response in Diabetes. AATS 2007

(Lilehei Resident Research Forum – Finalist)

Boodhwani M, Nathan HJ, Rubens FD, On Behalf of the Cardiomy Investigators. Processing of Shed Mediastinal Blood Improves Cardiac and Pulmonary Function Following Cardiac Surgery: A Randomized, Double-Blind Study. STS 2007

Boodhwani M, Sodha NR, Mieno S, Xu SH, Feng J, Ramlawi B, Clements RT, Sellke FW. Functional, Cellular, and Molecular Characterization of the Angiogenic Response to Chronic Myocardial Ischemia in Diabetes. AHA 2006/ CCS 2006

Boodhwani M, Rubens FD, Wozny D, Wells GA, Nathan HJ. The Cardiomy Study: A Randomized, Double-Blind Trial to Assess the Effect of Processing of Shed Blood During Cardiopulmonary Bypass on Transfusion and Neurocognitive Function. Circulation AHA 2006

Boodhwani M, Lam BK, Nathan HJ, Mesana TG, Ruel M, Zeng W, Sellke FW, Rubens FD. Skeletonized internal thoracic artery harvest reduces pain and dysesthesia and improves sternal perfusion after coronary artery bypass surgery: a randomized, double-blind, within-patient comparison. AHA 2006/ CCS 2006

Boodhwani M, Nakai Y, Voisine P, Sellke FW. High Dose Atorvastatin Improves Hypercholesterolemic Endothelial Dysfunction Without Improving Collateral-dependent Myocardial Perfusion: Role of Endostatin and Vascular Endothelial Growth Factor (**American Heart Assoc. 2005 – Vivien Thomas Young Investigator Award**)

Boodhwani M, Rubens FD, Wozny D, Rodriguez R, Hendry PJ, Nathan H. Predictors of Neurocognitive Outcome Following Low-Risk On-pump Coronary Artery Bypass Surgery (AHA 2005)

Boodhwani M, Voisine P, Feng J, Xu SH, Li J, Mieno S, Ramlawi B, Bianchi C, Laham RJ, Sellke FW. Atorvastatin Impairs Myocardial Angiogenic Response to Chronic Ischemia in Normocholesterolemic Swine (**American Heart Assoc. 2005 – Atherosclerosis, Thrombosis Vascular Biology Merit Award**)

Boodhwani M, Rubens FD, Sellke FW, Ruel M. Mortality and Myocardial Infarction With Surgical Versus Percutaneous Therapy for Isolated Left Anterior Descending Artery Disease: A Meta-analysis. (**European Assoc. Cardiothoracic Surgery 2005 –Young Investigator Award**)

Boodhwani M, Voisine P, Nakai Y, Sellke FW, et al. Comparison of VEGF versus FGF-2 in a model of hypercholesterolemia and endothelial dysfunction. (CCS 2005)

Boodhwani M, Cohn WE, Feng J, Ramlawi B, Mieno S, Schwarz A, Sellke FW. Safety and Efficacy of a Novel Gel for Vascular Occlusion in Off-pump Surgery. (EACTS 2005)

Boodhwani M, Nakai Y, Voisine P, Li J, Xu S, Feng J, Bianchi C, Ruel M, Sellke FW. Atorvastatin alters myocardial expression of VEGF and endostatin in hypercholesterolemic swine: implications for angiogenesis. (ACS 2005)

Boodhwani M, Lam BK, Veinot JP, Hendry PJ, Mesana TG. Can Diathermy Treat Atrial Fibrillation? (EACTS, CCS 2004)

Boodhwani M, Hynes M, Nicholson D, Mesana T. Early Experience with Mitral Valve Repair combined with Radiofrequency Ablation. (CCC 2003)

Boodhwani M, Ruel M, Mesana T, Rubens FD. Percutaneous Coronary Intervention versus Minimally Invasive Direct Coronary Artery Bypass for the treatment of isolated, proximal LAD disease. (ISMICS 2003)

Boodhwani M, Ruel M, Mesana T, Rubens FD. Minimally Invasive Direct Coronary Artery Bypass (MIDCAB) for the treatment of Isolated LAD disease. (CCC 2002)

Boodhwani M, Boyd WD, Novick R et al. Higher Risk Patients Benefit Most from Off-pump Coronary Artery Bypass. (CCC 2001)

Boodhwani M. The rationale and evidence for the use of beta-blockers in chronic congestive heart failure. *Western Medical Journal*; December 1999.