



## W. Douglas Boyd, M.D.

**Clinical Interests** Dr. Boyd is recognized for his pioneering work in cardiothoracic surgery and for his use of robotic-assisted surgical systems. He specializes in minimally invasive cardiac and robotic-assisted heart surgery. He completed the world's first closed-chest, beating-heart coronary artery bypass surgery using a robotic system in 1999 and performed the first human extracellular matrix xenograft implant for cardiovascular repair several years later. Prior to his appointment as a professor of surgery at UC Davis Health System, Dr. Boyd served as chair of the Department of Cardiothoracic Surgery at the Cleveland Clinic in Florida. As the author of more than 50 peer-reviewed, journal articles, Dr. Boyd's research interests include cardiac tissue regeneration using extracellular matrix/stem cells, new techniques for robot-assisted minimally invasive coronary artery revascularization, valve surgery and telesurgery. He is a graduate of Carleton University and obtained his medical degree the University of Ottawa.

**Title** Professor, Department of Surgery

**Specialty** [Surgery - Cardiothoracic](#), Surgery - Robotic

**Department** [Surgery](#)

**Division** Cardiothoracic Surgery

**Center/Program Affiliation** [Cardiovascular Services](#)  
[Robotic Surgery Program](#)

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**Education** M.D., University of Ottawa, Ottawa, 1984  
B.Sc., Carleton University, Ottawa, 1980

**Professional Memberships** American Heart Association  
Bay Area Society of Thoracic Surgery



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California Medical Association  
Canadian Cardiovascular Society  
Canadian Medical Association  
Florida Medical Association  
International Society for Minimally Invasive Cardiac Surgery  
Ontario Medical Association  
Society of Thoracic Surgeons

### Honors and Awards

California Super Doctors, 2011  
Florida's Top Doctors, Cardiothoracic Surgery, 2009  
America's Top Doctors, Cardiothoracic Surgery, 2008  
Good Housekeeping Top Cardiovascular Surgeon for women in the Nation, 2004  
Best Scientific Presentation, International Society of Minimally Invasive Cardiac Surgery - Munich, Germany, 2001  
Smithsonian Institute/Computer World Honours Award - Washington, DC 2001, 2001  
Best Scientific Presentation, International Society of Minimally Invasive Cardiac Surgery - Atlanta, Georgia, 2000  
American Medical Association, James S. Todd Memorial Grant For Highest Ranked Grant In Research Competition, 1999  
Best Clinical Research Paper, International Society of Minimally Invasive Cardiac Surgery - Paris, France, 1999  
Educating Future Physicians for Ontario Fellowship, to pursue formal training in Medical Education, 1993  
University of Ottawa, Department of Surgery Award, for Outstanding Resident Teaching, 1991  
University of Ottawa Department of Surgery Award,, for Excellence in Teaching, 1989  
American College of Chest Physicians Award, for the Outstanding Presentation at the ACCP Affiliate forum; 53rd Annual - Atlanta, Georgia, 1987  
E.I. Dupont Award, for the Outstanding Housestaff Presentation; American Medical Association Education and Research Foundation, Eastern Research Forum. University of Miami School of Medicine - Miami, Florida, 1987  
C.H. Hand Memorial Scholarship, Carleton University, Ottawa, 1980

### Select Recent Publications

W. Douglas Boyd, MD, William E Johnston III, MD., Parvez K. Sultan, MD, Thomas F Deering, MD, FACC, FACP, FHRS, Robert G. Matheny, MD, FACS Pericardial Reconstruction Using an Extracellular Matrix Implant Correlates with Reduced risk of Postoperative Atrial fibrillation in Coronary Artery



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- Bypass Surgery Patients. *The Heart Surgery Forum* 13(5), 2010
- Christopher W. Nickum, W. Douglas Boyd, Richard J. Novick, Eugene H. Blackstone, Carolyn Apperson-Hanson, John A. McAuliffe. Division of the Brachioradialis Muscle: A Modification of the Current Technique in Endoscopic Radial Artery Harvesting. *The Heart Surgery Forum*, 8(6). 2005
- Bob Kiaii, MD, R. Scott McClure MD, Larry Stitt MSc, Reiza Rayman MD, Wojciech B. Dobkowski MD, George Jablonsky MD, Richard J. Novick MD. W. Douglas Boyd MD. A Prospective Angiographic Comparison of Direct, Endoscopic and Telesurgical Approaches to Harvesting the Internal Thoracic Artery. *Annals of Thoracic Surgery*. 2005
- Novaro GM, Cabrales RE, Boyd WD. Mitral Valve Papillary Fibroelastoma: Surgical Considerations. *Asian Cardiovascular Thoracic Annals* 2006, (14) 58-59. 2005
- Menkis A. H, Kodera K, Kiaii B, Swinamer S, Rayman R, Boyd, W. Douglas. Robotic Surgery, the First 100 Cases: Where Do We Go From Here? *The Heart Surgery Forum*, 7(7). 2004
- Donias HW, Schwartz T, Tang DG, DeAnda Jr A, Tabaie HA, Boyd DW, Karamanoukian HL. A Porcine Beating Heart Model for Robotic Coronary Artery Surgery. *Heart Surg Forum*, 6(6): 249-253. 2003.
- Novick R.J., Fox S.A., Kiaii B.B., Stitt L.W., Rayman R., Kodera K., Menkis, A.H., Boyd W.D. Analysis of the Learning Curve in Telerobotic Beating Heart Coronary Artery Bypass Grafting: A 90 Patient Experience. *Ann Thorac Surg*, (76) 749-753. 2003.
- Patel Y.R., Donias H.W., Boyd W.D., Pande R.U., Amodeo J.L., Karamanoukian R.L., D'Ancona G, Karamanoukian H.L. Are You Ready to Become a Robo-Surgeon? *American Surg*, 69(7): 599-603. 2003.
- Semere WG, Edwards TM, Boyd D, Barsoumian R, Murero M, Donias Karamanoukian HL. The World Wide Web and Robotic Heart Surgery. *Heart Surg Forum*, 6(6): E111-9. 2003
- Stahl K, Fromkin K, Bochenek A, Boyd W.D., Vassiliades T, Karamanoukian H, Cisowski M. Combined Angioplasty and Robotic Coronary Bypass Surgery in Multivessel Coronary Artery Disease. *J Am Col Cardiol*. 2003.
- Boyd W.D., Stahl K.D. A Perspective on a New Era of Computer-Enhanced Robotic Cardiac Surgery. *J Thoracic Cardiovasc Surg*, 126(4): 625-30. 2003.
- Boyd, W. Douglas. Robotic Surgery Using Zeus Micro-Wrist Technology. *Journal of Cardiac Surgery*, 18(1): 6-7. 2003.

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