

# CURRICULUM VITAE

**NAME:** Luis J. Castro, M.D.

**DATE OF BIRTH:** June 21, 1962

**PLACE OF BIRTH:** Los Angeles, California

**MARITAL STATUS:** Married, 2 Children

## PROFESSIONAL EMPLOYMENT:

1998-Present      Cardiovascular Surgeon  
Pacific Coast Cardiac & Vascular Surgeons  
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## PROFESSIONAL ACTIVITIES:

July 2004-Present      Cardiovascular Surgery Consultant  
Medtronic

## EDUCATION:

1980-1984      University of Southern California, Biology – BS 1984

1984-1988      Stanford University School of Medicine – MD 1988

## SURGICAL TRAINING:

1988-1993      Internship and Junior Residency  
Department of General Surgery  
Stanford University Medical Center

1993-1995      Senior and Chief Residency  
Department of General Surgery  
Stanford University Medical Center

1995-1997      Cardiovascular Surgery Residency  
Department of Cardiothoracic Surgery  
University of Southern California

1997-1998      Chief of Resident, USC University  
Chief of Resident, LAC/USC Medical Center  
Chief of Resident, LA Children's Hospital  
Chief of Resident, Huntington Memorial Hospital  
Department of Cardiothoracic Surgery  
University of Southern California

**RESEARCH EXPERIENCE:**

June 1985- Sept 1985	Research Assistant, Department of Physiology and Biology University of Southern California School of Medicine American Heart Association Summer Fellowship Supervisors: H.J. Meiselman, Ph.D and L. Julian Hayward Subject: Rheologic behavior of human red blood cells in various disease models.
July 1990- June 1992	Carl and Leah McConnell Cardiovascular Surgical Research Fellow Stanford University School of Medicine Supervisor: D. Craig Miller, M.D. Subjects: RV and LV systolic and diastolic function Regional and Global myocardial motion Aortic Dissection Coronary artery bypass bioprosthesis grafts

**HONORS and ORGANIZATIONS:**

1984	National Medical Fellowship
1985-1987	National Hispanic Fellowship
1985-1987	California State Graduate Fellowship
1992	The Paul C. Samson Award for Outstanding Resident Manuscript by the WTSA
1992	Moncada Award for Outstanding Scientific Paper on Cross Sectional Imaging by Society of Computed Body Tomography
1995	Housestaff Teaching Award from Stanford University Medical Center
2003	Society of Thoracic Surgeons

**LICENSURE:** 1991 California, No. G72322

**BOARD**

**CERTIFICATION:** 1996 The American Board of Surgery, No. 41191  
1999 The American Board of Thoracic Surgery, No. 622

## PUBLICATIONS

**Circumflex Occlusion Alters Mitral Subvalvular Mechanics:** Rayhill SC, Castro LC, Niczyporuk M, Ingels N, Daughters G, Yun K, Bolger A, Mead C, Derby G, Miller DC. *Circulation* 84(4), II – 44, 1991. Presented at Nov. 1991 American Heart Association Scientific Sessions.

**Rigid Ring Fixation of the Mitral Annulus Does Not Impair Left Ventricular Systolic Function in the Normal Canine Heart:** Rayhill SC, Castro LC, Niczyporuk M, Ingels N, Daughters G, Tye T, Bolger A, Derby G, Miller DC. *Circulation* 86[suppl II]:II-26-II-38. Presented at Nov. 1991 American Heart Association Scientific Sessions.

**Phase Contrast MRI Resonance Imaging Accurately Tracks Myocardial Motion in a Canine Model:** Sayre J, Pelc L, Herfkens R, Castro L, Rayhill S, Miller DC and Pelc N. *Circulation* 84(4):II-292, 1991. Presented at Nov. 1991 American Heart Association Scientific Sessions.

**Non-Invasive Quantitation of Arterial and Venous Blood Flow with Magnetic Resonance Imaging:** Pelc L, Pelc N, Rayhill S, Castro L, Glover G, Herfkens R, Miller DC, Jeffrey RB. Abstract presented at March 1992 Society of Computed Body Tomography Scientific Sessions.

**Validation of Phase Contrast Cine Derived Myocardial Motion in a Canine Model:** Sayre J, Lorie Pelc, Herfkens R, Castro L, Rayhill S, Miller DC, Pelc N. Presented at Dec. 1991 Scientific Assembly of the Radiological Society of North America.

**Fixation of the Mitral Annulus by Rigid or Flexible Ring Annuloplasty Does Not Impair Globe LV Function or Energetics in the Conscious Closed Chest Dog:** Castro L, Rayhill S, Moon M, Niczyporuk M, Ingels N, Daughters G, Derby G, Miller DC. *J Am Coll Cardiol* 19;365A, 1992. Presented at April 1992 American College of Cardiology 41<sup>st</sup> Annual Scientific Session.

**Mitral Annuloplasty Alters Left Ventricular Relaxation in the Conscious Closed Chest Dog:** Castro L, Rayhill S, Moon M, Niczyporuk M, Tye T, Ingels N, Daughters G, Derby G, Handen C, Miller DC. *J Am Coll Cardiol* 19;225A, 1992. Presented at April 1992 American College of Cardiology 41<sup>st</sup> Annual Scientific Session.

**Papillary Muscles Do Not Shorten Continuously Throughout Isovolumic Relaxation:** Rayhill S, Castro L, Ingels N, Daughters G, Bolger A, Derby G, Miller DC. *J Am Coll Cardiol* 19;305A, 1992. Presented at April 1992 American College of Cardiology 41<sup>st</sup> Annual Scientific Session.

**Papillary Muscles Do Not Lengthen During Early Systole:** Rayhill S, Castro L, Niczyporuk M, Ingels N, Daughters G, Yun K, Bolger A, Mead C, Derby G, Miller DC. *J Am Coll Cardiol* 19;288A, 1992. Presented at April 1992 American College of Cardiology 41<sup>st</sup> Annual Scientific Session.

**Treatment of Experimental Aortic Dissection with Vascular Stents:** Dake M, Pelc L, Liddell R, Castro L, Moon M, Miller DC, Mitchell RS. Presented at April 1992 Society of Cardiovascular and Interventional Radiology Annual Meeting in Washington, D.C.

**Intravascular Stenting of Acute Experimental Type B Dissections:** Moon MR, Dake MD, Pelc LR, Liddell R, Castro LC, Mitchell RS, Miller DC. *J of Surg Research* 54: 381-388 1993.

**Annuloplasty with Flexible or Rigid Ring Does Not Alter Left Ventricular Systolic Performance, Energetics, or Ventricular-arterial Coupling in Conscious, Closed-Chest Dogs:** Castro LC, Moon M, Rayhill S, Niczyporuk M, Daughters G, Ingels N, Miller DC. *J Thoracic and Cardiovasc Surg* 105: 643-659 1993. Presented 18<sup>th</sup> Annual Meeting of Western Thoracic Surgical Association – June 1992 in Kauai, HI.

**Calculation of Biventricular Volume: Myocardial Marker vs. Sonomicrometric Shell Subtraction Technique:** Moon M, Castro L, Niczyporuk M, Daughters G, Ingels M, Miller DC. Presented at Nov. 1992 American Heart Association Scientific Sessions.

**Alterations in Left Ventricular Twist Mechanics with Inotropic Stimulation and Volume Loading in Humans:** Moon M, Ingels N, Daughters G, Castro L, Hansen D, Miller DC. *Circulation* Presented at Nov. 1992 American Heart Association Scientific Sessions, New Orleans, LA.

**Effects of A-V Pacing on Global LV Systolic Mechanics in Conscious Closed-Chest Dogs:** Castro LC, Moon M, Rayhill S, Liem LB, Niczyporuk M, Daughters G, Ingels N, Miller DC. Submitted to *Circulation*, Presented at Nov. 1992 American Heart Association Scientific Sessions, New Orleans, LA.

**Complete LV Endocardial Strain Map in Intact Dogs: Heterogeneous Patterns of Deformation:** Castro L, Niczyporuk M, Moon M, Rayill S, Daughters G, Ingels M, Miller DC. Abstract presented at Nov. 1992 American Heart Association Scientific Sessions, New Orleans, LA.

**LVAD Support Alters Regional RV Systolic Mechanics** Marc Moon, Luis Castro, Abe DeAnda, Yasuko Tomizawa, George Daughters, Neil Ingels, D. Craig Miller. *Surgical Forum* Vol. XLV:334-337, 1994.

**Right Ventricular Dynamics During Left Ventricular Assistance in Closed-Chest Dogs:** Moon MR, Castro LJ, DeAnda A, Tomizawa Y, Daughters GT, Nikolic SD, Ingels NB, Miller DC. *Ann Thorac Surg* 56;54-67 1993.

**Influence of Right Ventricular Afterload on Regional Right Ventricular Volume and Septal Geometry in Closed-Chest Dogs:** Moon MR, DeAnda A, Castro LJ, Daughters GT, Nikolic DS, Ingels NB, Miller DC. Submitted to *Circulation Research* 2/9/94.

**Effects of Left Ventricular Support on Right Ventricular Mechanics During Experimental Right Ventricular Ischemia:** Moon MR, Castro LJ, DeAnda A, Daughters GT, Ingels NB, Miller DC. *Circulation* 90[part 2]: II-92-101, 1994.

**Coronary Bypass Grafting with Biological Grafts in a Canine Model:** Tomizawa Y, Moon MR, DeAnda A, Castro LJ, Kosek J, Miller DC. *Circulation* 90[part 2]: II-160-166, 1994.

**Cardiac Surgery in Pregnancy:** Cohen R, Castro LJ. *Cardiac Problems in Pregnancy, Diagnosis and Management of Maternal and Fetal Heart Disease, 3<sup>rd</sup> Edition*. Yuri Elkayam, Editor, Published June 1998.

**Arm Ischemia After Subclavian Flap Angioplasty: Repair by Carotid-Subclavian Bypass:** Wells WJ, Castro LJ. *Ann Thorac Surg* 2000 May; 69 (5): 1574-6.

**Routine Enlargement of the Small Aortic Root: A Preventive Strategy to Minimize Mismatch:** Castro LJ, Arcidi JM, Fisher AL, Gaudiani VA. *Circulation* Presented at the "48<sup>th</sup> Annual Meeting of the Southern Thoracic Surgical Association, San Antonio, TX, Nov 2001. *Annals of Thoracic Surgery* 2002; 74:31-6.

**The Risks and Benefits of Reoperation Aortic Valve Replacement:** Castro LJ, Grunkemeier GJ, Fisher AL, Wu Y, Aziz S. *J Am Coll Cardiology* 2003 Mar 19; 41 (6 Suppl B):516 (Abstract)

**Biventricular Pacing during Cardiac Operations:** Gaudiani VA, Castro LC, Fisher AL. *The Heart Surgery Forum* Vol 6, Issue 6, 2003.

**The Risks and Benefits of Reoperative Aortic Valve Replacement:** Gaudiani VA, Grunkemeier GL, Castro LJ, Fisher AL, Wu Y. *The Heart Surgery Forum* Vol 7, Issue 2, 2004.

**Mitral Valve Operations through Standard and Smaller Incisions:** Gaudiani VA, Grunkemeier GL, Castro LJ, Fisher AL, Wu Y. *The Heart Surgery Forum* Vol 7, Issue 4, 2004.