# John R. Doty, M.D.

### **Personal Information**

Title: Staff Surgeon, LDS Hospital

Business Address:

Division of Cardiovascular and Thoracic Surgery

324 Tenth Avenue, Suite 154

LDS Hospital

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Married (Kristy), 3 children (Grant, Madeline, Ainsley)

### Education

- High school: Woods Cross High School, Woods Cross, UT (valedictorian), 1985
- College: Brigham Young University, Provo, UT, B.A., 08/1990
- Medical School: Georgetown University School of Medicine, Washington, DC, M.D. (summa cum laude), 05/1994
- Internship: General Surgery, The Johns Hopkins Hospital, Baltimore, MD, 1994-95
- Residency: General Surgery, The Johns Hopkins Hospital, Baltimore, MD, 1995-96, 1998-2000
- Research Fellowship: Cardiac Surgery, The Johns Hopkins Hospital, Baltimore, MD, 1996-1998
- Fellowship: Cardiothoracic Surgery, The Johns Hopkins Hospital, Baltimore, MD, 2000-2003
- Registrar in Cardiothoracic Surgery: Green Lane Hospital and Ascot Hospital, Auckland, New Zealand, February 2002-May 2002

## **National and State Board Certification**

- Diplomate, National Board of Medical Examiners, February 1996, Certificate #40046450
- Diplomate, American Board of Surgery, February 12, 2001, Certificate #45856, valid until 07/01/2011
- Diplomate, American Board of Thoracic Surgery, June 11, 2004, Certificate #6902, valid until 12/31/2014
- Utah Department of Professional Licensing, Physican and Surgeon, issued 6/13/2003, #5296605-1205
- Commonwealth of Pennsylvania Board Certification, issued 10/02/2000, Certificate #MD-072237-L; expired (inactive) 12/31/2002
- Maryland Board of Physician Quality Assurance, issued 06/27/1996, Certificate #D50814;
   expired (inactive) 09/30/1998

# **Staff Appointments**

- Staff Surgeon, LDS Hospital, Salt Lake City, UT, 2003-present
- Adjunct Assistant Professor of Surgery, University of Utah, Salt Lake City, UT, 2003-present
- Surgical Assistant, Northwest Hospital, Pikesville, MD, 1997-1998
- Staff Physician, Emergency Department, Saint Joseph's Medical Center, Towson, MD, 1996-1998

# Awards and Community Service

- Eagle Scout, 1980
- Full-time missionary, Church of Jesus Christ of Latter-day Saints, Stockholm Sweden Mission, 1986-1988
- Award for Academic Excellence and Achievement, American Society of Clinical Pathologists, 1992
- Alpha Omega Alpha Medical Honor Society, Georgetown University Chapter, 1993
- Milton Corn Award and Prize, Department of Anesthesia, Georgetown University School of Medicine, 1993
- President, Alpha Omega Alpha Medical Honor Society, Georgetown University Chapter, 1994
- George M. Kober Medal in Medicine and Hygiene (valedictorian's award from Georgetown University School of Medicine), 1994
- The Cahill Award, Department of Surgery, Georgetown University School of Medicine, 1994
- Faustino R. Suarez Award, Department of Anatomy and Cell Biology, Georgetown University School of Medicine, 1994
- Anselm Talalay Award, Division of Cardiac Surgery, The Johns Hopkins Hospital, 1998
- Outstanding Senior Resident, Department of Surgery, The Johns Hopkins Hospital, 1999
- Faculty Teaching Award, University of Utah Affliated Hospitals, 2006

# **Society Memberships**

- Member, Society of Thoracic Surgeons
- Associate Fellow, American College of Surgeons
- Fellow, American College of Cardiology
- Member, American Heart Association
- Member, American College of Chest Physicians
- Member, American Medical Informatics Association
- Member, Cardiothoracic Surgery Network

## **Editorial Positions**

- Editor, CTSNet Residents' Section, 1999-2003
- Editor, Cardiothoracic Surgery Notes, 1996-2003
- Reviewer, The Annals of Thoracic Surgery, 1996-present
- Reviewer, Journal of Thoracic and Cardiovascular Surgery, 2003-present
- Reviewer, Asian Cardiovascular and Thoracic Annals, 2001-present
- Member, STS Information Technology Committee, 1996-2005
- Member, STS Committee on Graduate Medical Education, 2005-present
- Member, American College of Surgeons Committee on Informatics, 2003-present
- Co-Director, CORE Curriculum review courses for written and oral thoracic surgery board examinations, 2003-present

#### **Research Interests**

- Spinal cord protection during thoracic aneurysm surgery
- Internet-based education for cardiothoracic surgery
- Information technology applications for cardiovascular disease
- Clinical outcomes for homograft and xenograft valves
- Minimally invasive surgery
- Surgery for atrial fibrillation

# **Research Funding and Grants**

Medtronic, Inc, 2003-present.

Unrestricted grant for ongoing development of CORE Curriculum Review course.

Donald B. Doty Education Award, Western Thoracic Surgical Association, 2005.

Principal Investigator. Unrestricted grant to develop Internet-based learning management system for education of residents in cardiothoracic surgery (Fundamentals of Cardiothoracic Surgery).

Cryolife, Inc., 2006

Principal Investigator. Clinical follow-up of Synergraft bioprostheses.

Paracor Medical, Inc., 2006

Co-Investigator. Paracor Heart Net feasibility study.

## **Publications**

- 1. Doty DB, **Doty JR**, Jones KW. Bypass of superior vena cava. Fifteen years' experience with spiral vein graft for obstruction of superior vena cava caused by benign disease. J Thorac Cardiovasc Surg. 1990 May;99(5):889-95; discussion 895-6.
- 2. Fonger JD, **Doty JR**, Sussman MS, Salomon NW. Lateral MIDCAB grafting via limited posterior thoracotomy. Eur J Cardiothorac Surg. 1997 Sep;12(3):399-404; discussion 404-5.
- 3. **Doty JR**, Fonger JD, Nicholson CF, Sussman MS, Salomon NW. Cost analysis of current therapies for limited coronary artery revascularization. Circulation. 1997 Nov 4;96(9 Suppl):II-16-20.
- 4. **Doty JR**, Salazar JD, Liddicoat JR, Flores JH, Doty DB. Aortic valve replacement with cryopreserved aortic allograft: ten-year experience. J Thorac Cardiovasc Surg. 1998 Feb;115(2):371-9; discussion 379-80.
- 5. Doty DB, DiRusso GB, **Doty JR**. Full-spectrum cardiac surgery through a minimal incision: ministernotomy (lower half) technique. Ann Thorac Surg. 1998 Feb;65(2):573-7.
- 6. Liddicoat JR, **Doty JR**, Stuart RS. Management of the atherosclerotic ascending aorta with endoaortic occlusion. Ann Thorac Surg. 1998 Apr;65(4):1133-5.
- 7. **Doty JR**, Salazar JD, Fonger JD, Walinsky PL, Sussman MS, Salomon NW. Reoperative MIDCAB grafting: 3-year clinical experience. Eur J Cardiothorac Surg. 1998 Jun;13(6):641-9.
- 8. **Doty JR**, Walinsky PL, Salazar JD, Alejo DE, Greene PS, Baumgartner WA. Conservative management of late rejection after heart transplantation: a 10-year analysis. Ann Surg. 1998 Sep;228(3):395-401.
- 9. **Doty JR**, Liddicoat JR, Salomon NW, Greene PS. Surgical education via the Internet: the Cardiothoracic Surgery Network. Md Med J. 1998 Nov;47(5):264-6.
- 10. Fonger JD, **Doty JR**. The expanded role of minimally invasive coronary grafting. Eur J Cardiothorac Surg. 1998 Oct;14 Suppl 1:S3-6.
- 11. Salazar JD, **Doty JR**, Tseng EE, Marin PC, Girotto JA, Roseborough GS, Yang SC, Heitmiller RF. Relationship of the long thoracic nerve to the scapular tip: an aid to prevention of proximal nerve injury. J Thorac Cardiovasc Surg. 1998 Dec;116(6):960-4.
- 12. Salazar JD, **Doty JR**, Lin JW, Dyke MC, Roberts J, Heitmiller ES, Heitmiller RF. Does cell type influence post-esophagectomy survival in patients with esophageal cancer? Dis Esophagus. 1998 Jul;11(3):168-71.
- 13. Doty JR, Doty DB. Management of small aortic roots. Adv Card Surg. 1998;10:175-96.

- 14. **Doty JR**, Cameron DE, Elmaci T, Salomon NW. Penetrating trauma to the tricuspid valve and ventricular septum: delayed repair. Ann Thorac Surg. 1999 Jan;67(1):252-3.
- 15. **Doty JR**, Flores JH, Millar RC, Doty DB. Aortic valve replacement with medtronic freestyle bioprosthesis: operative technique and results. J Card Surg. 1998 May;13(3):208-17.
- 16. **Doty JR**, Fonger JD, Salazar JD, Walinsky PL, Salomon NW. Early experience with minimally invasive direct coronary artery bypass grafting with the internal thoracic artery. J Thorac Cardiovasc Surg. 1999 May;117(5):873-80.
- 17. **Doty JR**, Flores JH, Doty DB. Superior vena cava obstruction: bypass using spiral vein graft. Ann Thorac Surg. 1999 Apr;67(4):1111-6.
- 18. Baumgartner WA, Walinsky PL, Salazar JD, Tseng EE, Brock MV, **Doty JR**, Redmond JM, Blue ME, Goldsborough MA, Troncoso JC, Johnston MV. Assessing the impact of cerebral injury after cardiac surgery: will determining the mechanism reduce this injury? Ann Thorac Surg. 1999 Jun;67(6):1871-3; discussion 1891-4.
- 19. Fonger JD, **Doty JR**, Salazar JD, Walinsky PL, Salomon NW. Initial experience with MIDCAB grafting using the gastroepiploic artery. Ann Thorac Surg. 1999 Aug;68(2):431-6.
- 20. Doty DB, Flores JH, **Doty JR**, Millar RC. Mitral valve replacement with homograft. Semin Thorac Cardiovasc Surg. 1999 Oct;11(4 Suppl 1):191-3.
- 21. Doty DB, Flores JH, **Doty JR**. Cardiac valve operations using a partial sternotomy (lower half) technique. J Card Surg 2000;15:35-42.
- 22. Chun HJ, **Doty JR**, Salazar JD, Richmond J, Fonger JD. Noninvasive graft flow and patency assessment following minimally invasive direct coronary artery bypass (MIDCAB) grafting. Heart Surg Forum. 1999;2(3):230-4.
- 23. Salazar JD, Wityk RJ, Grega MA, Borowicz LM, **Doty JR**, Petrofski JA, Baumgartner WA. Stroke after cardiac surgery: short- and long-term outcomes. Ann Thorac Surg. 2001 Oct;72(4):1195-201.
- 24. Doty DB, **Doty JR**, Flores JH, Millar RC. Cardiac valve replacement with mitral homograft. Semin Thorac Cardiovasc Surg. 2001 Oct;13(4 Suppl):35-42.
- 25. **Doty JR**, Salazar JD, Forastiere AA, Heath EI, Kleinberg L, Heitmiller RF. Post-esophagectomy morbidity, mortality, and length of stay after preoperative chemoradiation. Ann Thorac Surg. 2002 Jul;74(1):227-31.
- 26. **Doty JR**, Cameron JL, Yeo CJ, Campbell K, Coleman J, Hruban RH. Cholecystectomy, liver resection, and pylorus-preserving pancreaticoduodenectomy for gallbladder cancer. Report of five cases. J Gastrointest Surg. 2002 Sep-Oct;6(5):776-80.
- 27. **Doty JR** and Doty DB. Images in clinical medicine. Floating left atrial thrombus. N Engl J Med. 2002 Nov 7;347(19):e5.

- 28. **Doty JR**, Walinsky PL, Salazar JD, Haggerty M, Brawn J, Redmond JM, Baumgartner WA, Gott VL. Left atrial-inferior vena cava bypass achieves retroperfusion of the porcine spinal cord: morphologic and preliminary physiologic studies. J Surg Res. 2002 Nov;108(1):157-64.
- 29. Chen H, **Doty JR**, Schlossberg L, Bulkley GB. Technique of thymectomy by anterior-superior cervicomediastinal exenteration. J Am Coll Surg. 2002 Dec;195(6):895-900.
- 30. **Doty JR**, Wilentz RE, Salazar JD, Hruban RH, Cameron DE. Atheroembolism in cardiac surgery. Ann Thorac Surg 2003 Apr;75:1221-1226.
- 31. **Doty JR** and Doty DB. Stentless xenografts for a rtic valve replacement. J Cardiothorac Vasc Anesth. 2003 Apr;17(2):240-51.
- 32. Salazar JD, Lee R, Wheatley GH 3rd, **Doty JR**. Are there enough jobs in cardiothoracic surgery? The thoracic surgery residents association job placement survey for finishing residents. Ann Thorac Surg. 2004 Nov;78(5):1523-7.
- 33. Bethea BT, Salazar JD, Grega MA, **Doty JR**, Fitton TP, Alejo DE, Borowicz LM Jr, Gott VL, Sussman MS, Baumgartner WA. Determining the utility of temporary pacing wires after coronary artery bypass surgery. Ann Thorac Surg. 2005 Jan;79(1):104-7.
- 34. Doty DB, Doty JR, Reid BB, Anderson JL. Left atrial sarcoma: resection and repair by cardiac autotransplant and in situ pericardial patch. Ann Thorac Surg. 2006 Oct;82(4):1514-7.

# **Book Chapters**

Doty JR and Doty DB. Vein Grafts for the Superior Vena Cava. In *General Thoracic Surgery*, 5<sup>th</sup> edition (eds. Shields, LoCicero, Ponn), 2000:2167-2172.

Fonger JD and Doty JR. Targeted Minimally Invasive Direct Coronary Artery Bypass Grafting in the Reoperative Patient. In *Minimally Invasive Cardiac Surgery* (eds. Cohen, Mack, Fonger, Landreneau), 1999:197-204.

Doty DB and Doty JR. The Stentless Aortic Prosthesis for Aortic Valve Replacement. In *Harrison's Advances in Cardiology*, (ed. Braunwald) 2003:342-7.

Doty JR and Cameron DE. Surgery for Marfan syndrome. In *Advanced Therapy in Cardiac Surgery*, (eds. Franco and Verrier), 2003:304-10.

Doty JR and Doty DB. Stentless xenografts for aortic valve replacement. In *Cardiac Surgery in the Adult* (ed. Cohn), 2003:889-98.

Doty JR and Doty DB. Superior vena cava syndrome. In *Current Therapy in Cardiothoracic Surgery* (eds. Cameron and Yang), 2004:184-6.

Doty JR and Doty DB. The small aortic root. In *Current Therapy in Cardiothoracic Surgery* (eds. Cameron and Yang), 2004:614-7.

Doty JR and Yang SC. Concomitant Cardiac and Thoracic Operations. In *Current Therapy in Cardiothoracic Surgery* (eds. Cameron and Yang), 2004:519-20.

Doty JR and Doty DB. Vein Grafts for the Superior Vena Cava. In *General Thoracic Surgery*, 5<sup>th</sup> edition (eds. Shields, LoCicero, Ponn and Rusch), 2005:2567-2571.

Doty JR and Doty DB. Problems specific to homografts, autografts, and stentless valves. In *Heart Valve Disease* (eds. Butchart, Gohlke-Barwolf, Antunes, and Hall), 2006:67-74.

### **Books**

Doty JR, Bull DA, Doty DB. Adult and Congenital Cardiac Surgery Question Book. Intermountain Healthcare, Salt Lake City UT, 2006.

Doty JR, Bull DA, Doty DB. Vascular and General Thoracic Surgery Question Book. Intermountain Healthcare, Salt Lake City UT, 2006.

## **Internet Publications**

Cardiothoracic Surgery Notes. <a href="http://www.ctsnet.org/residents/ctsn">http://www.ctsnet.org/residents/ctsn</a>/. Online review course for cardiothoracic surgery. Established 1996.

CTSNet Operative Log. <a href="http://www.ctsnet.org/residents/oplog/">http://www.ctsnet.org/residents/oplog/</a>. Online application for operative case tracking and ABTS certification. Established 1997.

McCarron E, **Doty** JR, Heitmiller RF. Transhiatal Esophagectomy. <a href="http://www.ctsnet.org/doc/6117">http://www.ctsnet.org/doc/6117</a>. CTSNet General Thoracic Experts' Techniques, September 2002.

# **Manuscripts in Preparation**

Comparison of Standard Maze III and Radiofrequency Maze Operations for Treatment of Atrial Fibrillation. Submitted to the *Journal of Thoracic and Cardiovascular Surgery*, in review.

Long-term Results of Sternal Eversion for Repair of Pectus Excavatum in Adults. For submission to CHEST.

# **Major Presentations**

Aortic valve replacement with cryopreserved aortic allograft: ten-year experience. Twenty-third Annual Meeting of the Western Thoracic Surgical Association, San Diego, CA, June 26, 1997.

Lateral MIDCAB grafting via limited posterior thoracotomy. Eleventh Annual Meeting of the European Association for Cardio-Thoracic Surgery, Copenhagen, Denmark, September 1997.

Cholesterol embolism in cardiac surgery. Outcomes 1998 – The Key West Meeting, Key West, FL, May 1998.

Post-esophagectomy morbidity, mortality, and length of stay after preoperative chemoradiation. Forty-eighth Annual Meeting of the Southern Thoracic Surgical Assocation, San Antonio, TX, November 8, 2001.

Valve repair and replacement for valvular heart disease secondary to phentermine-fenfluramine use. Seventy-fourth Annual Scientific Session of the American Heart Association, Anaheim, California, November 14, 2001.

Overview of Cardiac Operations in the STS Adult Cardiac Surgery Database. The 2003 National Adult Cardiac Database Managers Meeting, San Diego, California, February 2, 2003.

Comparison of Standard Maze III and Radiofrequency Maze Operations for Treatment of Atrial Fibrillation. Thirtieth Annual Meeting of the Western Thoracic Surgical Association, Maui, Hawaii, June 2004.

Comparison of Standard Maze III and Radiofrequency Maze Operations for Treatment of Atrial Fibrillation. Fourteenth Annual Meeting of the Asian Society for Cardiovascular Surgery, Osaka, Japan, June 1, 2006.

Early and Long-Term Results of the Maze Operation. Sixth Annual Hanshin Heart Valve Symposium, Wakayama, Japan, October 19, 2006.

Which Valve: Stented Vs. Stentless. Sixth Annual Hanshin Heart Valve Symposium, Wakayama, Japan, October 20, 2006.

Long-term Results of Sternal Eversion for Repair of Pectus Excavatum in Adults. American College of Chest Physicians, CHEST 2006, Salt Lake City, Utah, October 23, 2006.

## References

Kent W. Jones, MD Division of Cardiovascular and Thoracic Surgery LDS Hospital 324 Tenth Avenue, Suite 154 Salt Lake City, UT 84103 Telephone: (801) 408-8666

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Peter S. Greene, MD Division of Cardiac Surgery Blalock 618 The Johns Hopkins Hospital 600 N. Wolfe Street Baltimore, MD 21287 Telephone: (410) 955-2979

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Greenlane Hospital
Greenlane West
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Telephone: (64) 09-630-9951

The Second Chinese National Cardiothoracic Surgery Congress. Xian CHINA 1988
The American Heart Association the 63th Scientific Sessions. Dallas Texas Nov.1990
The American Heart Association the 64th Scientific Sessions. Anaheim California, 1991
The 27th Annual meeting of the American Association for Thoracic Surgery. San Francisco 1991

The 71st Annual meeting of the American Association for Thoracic Surgery. Washington DC 91 The 73ed Annual meeting of the American Association for Thoracic Surgery. Los Angeles 1992 The American Heart Association the 65th Scientific Sessions. New Orleans, Louisiana 1992 The American Heart Association the 66th Scientific Sessions. Atlanta, Georgia Nov. 1993 The 29th Annual meeting for Society of Thoracic Surgeons. San Antonio, Texas Jan. 1993

The Western Thoracic Surgical Association 20th Annual Meeting. Lake Tahoe, CA June 1994

The 31st Annual meeting for Society of Thoracic Surgeons. Palm Springs, CA Feb 1995
The Touth World Congress of the International Society for Artificial Organs, Tainei, Tainei

The Tenth World Congress of the International Society for Artificial Organs. Taipei, Taiwan Nov.13-18 1995 As a member of Chairman Group

The 78th Annual meeting of the American Association for Thoracic Surgery. Boston May 1998 The AATS & STS annual meeting attended every year (since 1996 to 2005, every year)

Chinese-American Medical Conference for 21<sup>st</sup> Century. Boston, June, 2001

The Japanese Cardiovascular Annual meeting. Tokyo Japan, Mach 2002

A national Chinese Cardiovascular surgeon Training Program at Zhong-Shan Hospital, Shanghai, China March 2002.

A Conference at Fu-Wai Hospital Beijing. March 2002 Beijing, CHINA

The WTSA 81<sup>st</sup> Annual meeting. Big Sky, Montana May 2002.

China the First CEA Conference in Xian Jiaotong University, China 2002 -11

The First invitation treatment conference in No 4 Army Hospital (presentation PFO with Stroke) 2003 10 Xian China As a member of Chairman Group

Beijing Tiantan Hospital 2006 Stroke Conference (presentation Close PFO prevent Stroke and Migraine 2006.10)

Presentation prevent Cardiac Stroke in China (Baotou; Xianyang; Xiangfan ect. 2006.10)

## **Current Memberships:**

Chinese Medical Association

Chinese Cardiothoracic Association

Chinese Red Cross Association

American Heart Association

American Thoracic Surgery

American Stroke Association

Associate Professor (Cardiothoracic Surgeon) since 1989

Professor of OingDao No.2 hospital 1995

Honor Professorship of Xian Jiaotong University First Hospital since 2002

## Awards Obtained:

The Third class Award from Chinese National Health Department. For invented Small Bubble Oxygenator 1983

The good articles Awards from Shaanxi Province Health Department in 1983 as fallow each one got one award:

- 1). Treatment of Atrium Septum Defect
- 2). Treatment of Ventricular Septum Defect
- 3). Diagnosis and Treatment of Traumatic Diaphragmatic Hernia

The First class Award for Clinical Use for Homograft, from No. 1 Teaching Hospital of Xian Medical University 1989

The third class Award for Intravenous Injection of protamine before CPB to Prevent Hypotesion, when it is used to Neutralize Heparin