CURRICULUM VITAE

Michael Robert Mill, M.D.
Professor of Surgery and Professor of Pediatrics, University of North Carolina at Chapel Hill
Director of Pediatric Surgery, University of North Carolina at Chapel Hill

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EDUCATION AND TRAINING

Chief Resident, Thoracic Surgery, Stanford University Medical Center, Stanford, California, January-June 1988
Chief Resident and Fellow, Heart and Heart-Lung Transplantation, Stanford University Medical Center, July-December 1987
Chief Resident, Cardiovascular Surgery, Stanford University Medical Center, Stanford, California, July 1986-June 1987
Resident, Cardiovascular and Thoracic Surgery, Stanford University Medical Center, Stanford, California, July 1985-June 1986
Chief Resident, General Surgery, University of Colorado Health Sciences Center, Denver, Colorado, July 1984-June 1985
Resident, General Surgery, University of Colorado Health Sciences Center, Denver, Colorado, July 1981-June 1984
Intern, General Surgery, University of Colorado Health Sciences Center, Denver, Colorado, July 1980-June 1981
M.D., University of Colorado School of Medicine, Denver, Colo., May 1980
B.A., Chemistry, The Colorado College, Colorado Springs, Colo., June 1976

Board Certification

American Board of Thoracic Surgery – Subspecialty Certificate in Congenital Cardiac Surgery, 2009
American Board of Thoracic Surgery, 1989 – Thoracic Cardiovascular Surgery and Thoracic Surgery; recertified, 1998 and 2009
American Board of Surgery, 1987

Licensure

North Carolina, 1988 (current expiration: 3/20/2014)
California, 1985 (current expiration: 3/31/2015)
Colorado, 1981 (expired 5/31/2007)

PROFESSIONAL EXPERIENCE

Professor of Pediatrics, University of North Carolina School of Medicine (joint appointment with Department of Surgery), December 20, 2013 – present

Chief, Division of Cardiothoracic Surgery, UNC School of Medicine, January 2000-June 2011

Professor of Surgery, Division of Cardiothoracic Surgery, University of North Carolina School of Medicine, Chapel Hill, July 1998-present

Program Director, Cardiothoracic Residency Program, UNC School of Medicine, July 1998-May 2013

Director, UNC Comprehensive Transplant Center, University of North Carolina School of Medicine/UNC Hospitals, January 1994-January 2011

Director, UNC Heart and Heart/Lung Transplant Program, University of North Carolina School of Medicine/UNC Hospitals, July 1988-July 2008

Interim Chief, Division of Cardiothoracic Surgery, University of North Carolina School of Medicine, July 1998-December 1999

Associate Division Chief for Cardiac Surgery, Division of Cardiothoracic Surgery, University of North Carolina, April 1997-December 1999

Associate Professor of Surgery, Division of Cardiothoracic Surgery, University of North Carolina School of Medicine, Chapel Hill, July 1993-June 1998

Assistant Professor of Surgery, University of North Carolina School of Medicine, Chapel Hill, North Carolina, July 1988-June 1993

Instructor, Department of Surgery, University of Colorado School of Medicine, Denver, Colorado, July 1984-June 1985

Head Teaching Assistant, Introduction to Medical Sciences curriculum, University of Colorado School of Medicine, Summer Quarter, 1978

Teaching Assistant, Department of Anatomy, University of Colorado School of Medicine, Summer Quarter, 1977

HONORS AND AWARDS

Listed in U.S. News and World Report's *Top Doctors* (top 1%), Sept. 2012-present

Listed in *America's Top Doctors* (Castle Connolly Medical Ltd.), 2012-present
Listed in *Top Regional Doctors* (Castle Connolly Medical Ltd.), 2011-present

Listed in *Best Doctors in America* database (Best Doctors, Inc.), 2001-present

Listed in *Guide to America's Top Surgeons* (Consumers' Research Council of America), 2012, 2010, 2007, 2006

Listed in *Best Doctors in North Carolina* (Business North Carolina magazine), 2003-present.

Elected to membership in American Association for Thoracic Surgery, 2006

Listed in *Guide to America's Top Cardiologists* (Consumers' Research Council of America), 2006

Listed in *Guide to America's Top Physicians* (Consumers' Research Council of America), 2003.

Listed in *Guide to Top Doctors* (Center for the Study of Services), 1999

Denver Academy of Surgery Award (University of Colorado Medical School Outstanding Senior Student in Surgery Award), 1980

Boettcher Scholarship (4-year, full collegiate academic scholarship), 1972-76

BIBLIOGRAPHY

Book Chapters

Mill MR, Anderson RH, Cohn LH. Surgical anatomy of the heart. IN: Cardiac Surgery in the Adult, 4th ed. New York: McGraw Hill Medical, 2012, pages 21-41.

Bowdish M, Ben-Or S, Mill MR, Sheridan BC. Coronary artery bypass surgery. IN: Runge MS, Stouffer GA, Patterson C (eds), Netter's Cardiology, 2nd ed. Teterboro, N.J.: Icon Learning Systems (MediMedia USA); 2010, pages 129-133.

Bowdish M, Mill MR and Sheridan BC. Cardiac transplantation and mechanical circulatory support devices. IN: Runge MS, Stouffer GA, Patterson C (eds), Netter's Cardiology, 2nd ed. Teterboro, N.J.: Icon Learning Systems (MediMedia USA); 2010, pages 197-205.

Bowdish M, Mill MR and Sheridan BC. Surgical treatment of valvular disease. IN: Runge MS, Stouffer GA, Patterson C (eds), Netter's Cardiology, 2nd ed. Teterboro, N.J.: Icon Learning Systems (MediMedia USA); 2010, pages 353-358.

Ben-Or S, Bowdish M, Mill MR, Sheridan BC. Congenital coronary anomalies. IN: Runge MS, Stouffer GA, Patterson C (eds), Netter's Cardiology, 2nd ed. Teterboro, N.J.: Icon Learning Systems (MediMedia USA); 2010, pages 481-486.

Stewart RD, Henry GW, Mill MR. Surgical interventions for congenital heart disease. IN: Runge MS, Stouffer GA, Patterson C (eds), Netter's Cardiology, 2nd ed. Teterboro, N.J.: Icon Learning Systems (MediMedia USA); 2010, pages 457-464.

Mill M.R., Wilcox, B.R., Anderson, R.H.: Surgical anatomy of the heart. IN: L.H. Cohn (ed.). Cardiac Surgery in the Adult. 3rd edition. New York: McGraw-Hill, 2008, pages 29-50.

Sheridan BC and Mill MR**.** Coronary artery bypass surgery. IN: Runge MS and Ohman EM (eds.), Netter's Cardiology. Teterboro, N.J.: Icon Learning Systems (MediMedia USA), 2004, pages 112-118.

Mill MR and Sheridan BC. Cardiac transplantation. IN: Runge MS and Ohman EM (eds.), Netter's Cardiology. Teterboro, N.J.: Icon Learning Systems (MediMedia USA), 2004, pages 175-182.

Parsons AM, Henry GW and Mill MR. Surgical interventions for congenital heart disease. IN: Runge MS and Ohman EM (eds.), Netter's Cardiology. Teterboro, N.J.: Icon Learning Systems (MediMedia USA), 2004, pages 456-466.

Husain SA, Sheridan BC and Mill MR. Congenital coronary anomalies. IN: Runge MS and Ohman EM (eds.), Netter's Cardiology. Teterboro, N.J.: Icon Learning Systems (MediMedia USA), 2004, pages 491-6.

Mill, M.R., Mill, M.S.: Cardiac Transplantation. IN: J.E. Tintinalli, G.D. Kelen, J.S. Stapazynski (eds). Emergency Medicine: A Comprehensive Study Guide. 6th edition. New York: McGraw-Hill, 2003.

Mill, M.R., Wilcox, B.R., Anderson, R.H.: Surgical anatomy of the heart. IN: L.H. Cohn (ed.). Cardiac Surgery in the Adult. 2nd edition. New York: McGraw-Hill, 2003.

Mill, M.R, Grady, M.S.: Cardiac transplantation. IN: J.E. Tintinalli, E. Ruiz, R.L. Krome (eds.). Emergency Medicine: A Comprehensive Study Guide. 5th edition. New York: McGraw-Hill, 1999, pp. 422-428.

Mill, M.R., Wilcox, B.R., Anderson, R.H.: Surgical anatomy of the heart. IN: L.H. Edmunds, Jr. (ed.). Cardiac Surgery in the Adult. New York: McGraw-Hill, 1997, pp. 35-57.

Mill, M.R.: Cardiac transplantation. IN: J.E. Tintinalli, E. Ruiz, R.L. Krome (eds.). Emergency Medicine: A Comprehensive Study Guide. 4th edition. New York: McGraw-Hill, 1996, pp. 399-403.

Mill, M.R., Stinson, E.B.: Heart and lung retransplantation. IN: J. Stark, A.D. Pacifico (eds.). Reoperations in Cardiac Surgery. London: Springer-Verlag, 1989, pp. 93-103.

Mill, M.R.: Upper gastrointestinal bleeding. IN: Surgical Secrets, C. Abernathy (ed.). Philadelphia: Hanley & Belfus, 1986, pp. 115-118.

Mill, M.R.: Small bowel obstruction. IN: Surgical Secrets, C. Abernathy (ed.). Philadelphia: Hanley & Belfus, 1986, pp. 127-130.

Original Research Articles

Godown J, Baker C, Kuhn N, Brown K, Buck S, Mill M, Price W. Delayed repair of hemitruncus in an extremely low birth weight infant. Congenit Heart Dis 2013;8(1): E13-6. PMID: 21824332

Burker EJ, Madan A, Evon D, Finkel JB, Mill MR. Educational level, coping, and psychological and physical aspects of quality of life in heart transplant candidates. Clin Transplant 23:233-240, 2009. PMID: 19208104

Burker EJ, Evon DM, Ascari JC, Loiselle MM, Finkel JB, Mill MR. Relationship between coping and depression in heart transplant candidates and their spouses. Prog Transplant. 16(3):215-21, 2006. PMID: 19208104

Selzman CH, Bhati RS, Sheridan BC, Stansfield WE, Mill MR. Surgical therapy for heart failure. J Am Coll Surg 203(2):226-39, 2006. PMID: 16864035

Bhati RS, Sheridan BC, Mill MR, Selzman CH. Heart transplantation for progressive cardiomyopathy as a manifestation of MELAS syndrome. J Heart Lung Trans 24:2286-9, 2005. PMID: 16864035

Burker EJ, Evon D, Loiselle MM, Finkel J, Mill M. Planning helps, behavioral disengagement does not: coping and depression in the spouses of heart transplant candidates. Clin Transplant. 19(5):653-8, 2005 PMID: 16146558

Burker, E., Evon, D., Loiselle, M., Finkel, & Mill, M. Coping predicts depression and disability in heart transplant candidates. J Psychosom Res, 59(4), 215-22, 2005. PMID: 16223624

Ketner M, Lucas C, Mill M, Sheridan B, Lucas W. Energetics and hemodynamic changes of normal and various right heart bypass (Fontan) circulations in lambs under varying respiration parameters. Conf Proc IEEE Eng Med Biol Soc. 5:3785-8, 2004. PMID: 172711119

Masters JC, Ketner M, Bleiweis MS, Mill M, Yoganathan A, Lucas CL. The effect of incorporating vessel compliance in a computational model of blood flow in a total cavopulmonary connection (TCPC) with caval centerline offset. J Biomech Eng. 126(6):709-13, 2004. PMID: 15796329

Markert, M.L., Sarzotti, M, Ozaki, D.A., Sempowski, G.D., Rhein, M.E., Hale, L.P, LeDeist, F, Alexief, M.J., Li, J, Haynes, B.F., Rice, H.E., Skinner, M.A., Mahaffey, S.M., Jaggers, J, Stein, L.D., Mill, M.R., Hauser, E. Thymus transplantation in complete DiGeorge syndrome: immunologic and safety evaluations in 12 patients. Blood.102(3): 1121-30, 2003. PMID: 12702512

Egan TM, Detterbeck FC, Mill MR, Bleiweis, MS, Aris R, Paradowski L, Retsch-Bogart G, Mueller BS. Long term results of lung transplantation for cystic fibrosis. Eur J Cardiothorac Surg. 22:602-609, 2002. PMID: 12297180

Krishnan S.C., Falsone J.M., Sanders W.E., Chen H., Mill M.R., Kushwaha S.S. Catheter ablation of atrial flutter in a heart transplant recipient. Pacing Clin Electrophysiol. 25(8):1262-5, 2002. PMID: 12358178

Lucas C, Mill M, Lucas W, Bleiweis M, Lee T, Ketner M, Masters J, Yoganathan A. Modeling modified Fontan circulations: focus on the effectiveness of alternative placements of cardiac assist devices. Biomedical Engineering: Recent Developments: 85-86, 2002.

Heindel, S.W., Mill, M.R., Freid, E.B., Valley, R.D., White, G.C 2nd, Norfleet, E.A. Fatal thrombosis associated with a hemi-fontan procedure, heparin-protamine reversal, and aprotinin. Anesthesiology 94 (2):369-71, 2001. PMID:111176109

Bleiweis, M.S., Mill, M.R. Transthoracic Right Atrial Catheterization. Operative Techniques in General Surgery. 2001; 3: 226-231

Jones, D.R., Guy, J.S., Mill, M.R., Baker, C.C. Retrograde arterial bullet embolus to the coronary artery: case report. J Trauma 46:1135-1136, 1999. PMID: 10372641

Egan, T.M., Detterbeck, F.C., Mill, M.R., Gott, K.K., Rea, J.B., McSweeney, J., Aris, R.M., Paradowski, L.J. Lung transplantation for cystic fibrosis: effective and durable therapy in a high-risk group. Ann Thorac Surg 66:337-346, 1998. PMID: 9725366

Wilcox, B.R., Jones, D.R., Frantz, E.G., Brink, L.W., Henry, G.W., Mill, M/R., Anderson, R.H.: An anatomically sound, simplified approach to repair of "complete" atrioventricular septal defect. Ann Thorac Surg 64:487-494, 1997. PMID: 9262599

Detterbeck, F.C., Scott, W.W., Howard, Jr., J.F., Egan, T.M., Keagy, B.A., Starek, P. J. K., Mill, M.R., Wilcox, B.R. One hundred consecutive thymectomies for myasthenia gravis. Ann Thorac Surg 62:242-5, 1996. PMID: 8678650

Egan, T.M., Detterbeck, F.C., Mill, M.R., Paradowski, L.J., Lackner, R.P., Ogden, W.D., Yankaskas, J.R., Westerman, J.H., Thompson, J.T., Weiner, M.A., Cairns, E.L., Wilcox, B.R. Improved results of lung transplantation for cystic fibrosis. J Thorac Cardiovasc Surg 109:224-235, 1995. PMID: 7531796

Egan, T.M., Thompson, J.T., Detterbeck, F.C., Lackner, R.P., Mill, M.R., Ogden, W.D., Aris, R.M., Paradowski, L.J.: Effect of size (mis)matching in clinical double-lung transplantation. Transplantation 59:707-713, 1995. PMID: 7886797

Detterbeck, F.C., Mill, M.R., Egan, T.M.: Lung transplantation after previous thoracic surgical procedures. Ann Thorac Surg 60:139-143, 1995. PMID: 7598576

Flume, P.A., Egan, T.M., Westerman, J.H., Paradowski, L.J., Yankaskas, J.R., Detterbeck, F.C., Mill, M.R.: Lung transplantation for mechanically ventilated patients. J Heart Lung Transplant 13:15-21, 1994. PMID: 7513185

Mill, M.R., Wilcox, B.R., Detterbeck, F.C., Anderson, R.H.: Anomalous course of the left brachiocephalic vein. Ann Thorac Surg 55:600-602, 1993. PMID: 8452420

Detterbeck, F.C., Mill, M.R., Williams, W., Egan, T.M.: Organ donation and the management of the multiple organ donor. Contemp Surg 42:281-285, 1993.

Serody, J.S., Mill, M.R., Detterbeck, F.C., Weber, D.J., Harris, D.T., Cohen, M.S.: Blastomycosis in transplant recipients: report of a case and review. Clin Infect Dis 16:54-58, 1993. PMID: 8448319

Egan, T.M., Detterbeck, F.C., Keagy, B.A., Turpin, S., Mill, M.R., Wilcox, B.R.: Single lung transplantation for eosinophilic granulomatosis. Southern Medical Journal 85:551-553, 1992. PMID: 1374933

Mill, M.R., Egan, T.M.: Lung and heart-lung transplantation: selecting the appropriate procedure (Cluster Review). Current Surgery 49:195-201, 1992.

Egan, T.M., Westerman, J.H., Lambert, C.J.Jr., Detterbeck, F.C., Thompson, J.T., Mill, M.R., Keagy, B.A., Paradowski, L.J., Wilcox, B.R.: Isolated lung transplantation for end stage lung disease: a viable therapy. Ann Thorac Surg 53:590-596, 1992. PMID: 1554266

Miles, M.V., Miranda-Massari, J.R., Dupuis, R.E., Mill, M.R., Zaritsky, A L., Nocera, M., Lawless, S.T.: Determination of salivary digoxin with a dry strip immunometric assay. Ther Drug Monit 14:249-254, 1992.

Myers, G.H., Sapin, P.M., Mill, M.R., Jain, A.: Usefulness of coronary angiography in patients requiring repeat cardiac valve surgery. Am J Cardiol 68:1717-1719, 1991. PMID: 1746478

Tazelaar, H.D., Baird, A.M., Mill, M.R., Grimes, M.M., Schulman, L.L., Smith, C.R.: Bronchocentric mycosis occurring in transplant recipients. Chest 96:92-95, 1989. PMID: 2661162

Pearce, W.H., Mill, M.R., Marsch, J.G.: Cerebrovascular insufficiency. Crit Care Quar 8:11-24, 1985.

Moore, F.A., Moore, E.E., Mill, M.R.: Preoperative antibiotics for abdominal gunshot wounds: a prospective, randomized study. Am J Surg 146:762-765, 1983. PMID: 6359913

Other Journal Articles

Mill MR. The rapid development of solid organ transplantation in North Carolina. NC Med J. 2004, 65(1):30-2, 2004. PMID: 15052708

Egan, T.M., Westerman, J., Mill, M.R., Wilcox, B.R.: Lung transplantation at UNC: the first year. NC Med J 52:325-329, 1991. PMID 1881471

Published Abstracts

Ketner M, Lucas C, Masters J, Mill M, Lucas W, Dean D, Yoganathan A, Ensley A. Energy of normal and Fontan circulations in lambs under varying respiration parameters. Medical Physics 27:1430, 2000.

Lucas C, Mill M, Lucas W, Dean D, Ketner M, Masters J, Ensley A, Yoganathan A. Modeling the Fontan circulation: a computer simulation of the respiration effects in lamb models. Medical Physics 27:1444, 2000.

Egan, T.M., Rea, J., McSweeney, J., Gott, K., Detterbeck, F., Mill, M., Roberts, C., Paradowski, L., Aris, R., Burker, E. Bilateral lobe transplant: how often is this a realistic option in CF patients? Pediatric Pulmonology 17 (Suppl):291, 1999.

Egan, T.M., Gott, K.K., Detterbeck, F.C., Mill, M.R., Jones, D.R., Roberts, C.S., Paradowski, L.J., Aris, R.M., McSweeney, J.L. Lung transplantation for CF: long term results and directions for improvement. Pediatric Pulmonology 19(Suppl):291, 1999.

Lucas C, Mill M, Lucas W, Kiser A, Hoffmann S, Ketner M, Masters J, Wilcox B, Ansley A, Yoganathan A. Modeling the Fontan Circulation. Annals of Biomedical Engineering 26 (Supplement 1):S-52, 1998.

Ketner M, Lucas C, Masters J, Mill M, Lucas W, Kiser A, Hoffmann S, Wilcox B, Ansley A, Yoganathan A. Hemodynamics of Fontan Circulation. Annals of Biomedical Engineering 26 (Supplement 1): S-52, 1998

Ketner M, Lucas C, Mill M, Lucas W, Kiser A, Ha B, Henry GW, Yim P, Hoffman S, Masters J, Wilcox B, Yoganathan A, Ensley A, Lynch P, Chatzimavroudis G, Sharma S. Hemodynamic perspectives of Fontan circulations. BME Annual Research Review: p 11, 1998.

Yoganathan AP, Sharma S, Lucas C, Ha B, Yim P., Mill M, Jones D, Lucas W, Ensley A.E., Normal D.L., Lynch P, Chatzimavroudis, G.P. The fluid mechanics of the Fontan anastomoses; effects on circulatory efficiency. International Journal of Cardiovascular Medicine and Science 1:1:43, 1997.

Lucas C., Mill M., Jones D., Lucas W., Yim P., Ha B., Wilcox B.R. A lamb model of the Fontan Circulation. Journal Cardiovascular Diagnostic Procedures 13: 229, 1996.

Burker, E.J., Morrisette M.K., Mill, M., Teichman B.J. Factors associated with depression in the spouses of heart transplant recipients. Psychosomatic Medicine 57:71, 1995.

Egan, T., Detterbeck, F., Mill, M., Paradowski, L., Weiner, M., Cairns, E, Aris, R. Intermediate-term results of lung transplant for CF. Pediatric Pulmonology 12(Suppl):258, 1995.

Lackner, R.P., Thompson, J.T., Detterbeck, F.C., Mill, M.R., Paradowski, L.J. The role of gancyclovir prophylaxis in a lung transplant (LTX) program. American Journal of Respiratory and Critical Care Medicine 149(Part 2):A524, 1994.

Lackner, R.P., Mill, M.R., Vaughn, B.V., Detterbeck, F.C., Egan, T.M. New onset seizures after lung transplantation in patients with cystic fibrosis. Pediatric Pulmonology (Suppl):269, 1994.

Lucas, C.L., Mill, M.R., Jones, D.R., Lucas, W., Yim, P., Ha, B., Wilcox, B.R. A lamb model of the Fontan circulation. J Cardiovasc Diag & Proc 12:119, 1994.

Egan, T.M., Westerman, J.H., Lambert, C. J. Jr., Detterbeck, F.C., Thompson, J.T., Mill, M.R., Keagy, B.A., Paradowski, L J., Wilcox, B.R. Isolated lung transplantation for end-stage lung disease: a viable therapy. Respiratory Diseases Digest (April 1993), pp 20-21.

Egan, T.M., Paradowski, L.J., Detterbeck, F.C., Mill, M.R. Is bronchial omentopexy helpful in human lung transplantation? Chest 102 (Suppl):74S, 1992.

Egan, T.M., Westerman, J.H., Thompson, J.T., Mill, M.R., Keagy, B.A.: Double lung transplantation for end stage CF: a viable therapy. Pediatric Pulmonology Supplement 6:289, 1991.

Miles, M.V., Zaritsky, A.L., Lawless, S.T., Mill, M.R., Dupuis, R.E., Nocera, M.A. Digoxin monitoring in critically-ill pediatric patients. Journal of Clinical Pharmacology 31:851, 1991.

Other Abstracts

Bohling S, Willis TS, Mill MR, Buck S. Project TICKER: Caring for kids' hearts. 2013 ANCC (American Nurses Credentialing Center) National Magnet Conference, Orlando, FL, Oct. 2-4, 2013.

Hanson CC, Yorke D, Johnson JK, Mill MR, Brown KJ, Barach P. Pediatric cardiac surgery teams and families: How well do we communicate? (Poster presentation) 2012 AcademyHealth Annual Research Meeding, Orlando, FL, June 23, 2012.

Willis TS, Mayer C, Purdy A, Burgess E, Massie S, Brown K, Yip T, Christy C, Buck S, McNaull P, Valley R, Mill M. Improved teamwork in a paediatric cardiac surgery operating suite. (Poster presentation) International Forum on Quality and Safety in Healthcare (IFQSH), Paris, France, April 17, 2012.

Lucas CN, Ketner ME, Steele B, Mill MR, Sheridan B, Lucas WJ, Pekkan K, Yoganathan AP. Importance of respiration in Fontan circulations: A study of time delays. Biomedical Engineering Society, Chicago, Illinois, Oct. 14, 2006.

Ketner ME, Lucas CH, Mill MR, Sheridan B, Lucas WJ, Yoganathan AP, Steele B. In-vivo hemodynamic analysis of Fontan circulations in lambs under varying ventilation parameters. Biomedical Engineering Society, Chicago, Illinois, Oct. 14, 2006.

Lucas C, Ketner M, Steele B, Mill MR, Sheridan B, Lucas WJ, Pekkan K, Yoganathan A. Importance of respiration and graft compliance in Fontan circulations: Experimental and computational studies. 5th World Congress of Biomechanics, Munich, Germany, Aug. 3, 2006.

Ketner ME, Lucas CN, Sheridan B, Mill MR, Lucas WJ. Respiration influences and time offsets in normal and Fontan circulations in lambs. Biomedical Engineering Society. Oct. 1, 2005, Baltimore, Md.

Lucas CN, Ketner M, Steele B, Mill MR, Sheridan B**,** Lucas WJ, Pekkan K, Yoganathan AP. Toward an understanding of the effects of graft compliance in Fontan repairs. Biomedical Engineering Society. Sept. 30, 2005, Baltimore, Md.

Ketner ME, Lucas CN, Mill MR, Sheridan B, Lucas WJ, Yoganathan AP. Energy, hemodynamics, and respiration effects in lambs with various Fontan circulations. Platform presentation, Biomedical Engineering Society, Oct. 15, 2004, Philadelphia, Pa.

Steele BN, Ketner ME, Sundaresearan K, Lucas WJ, Sheridan B, Yoganathan AP, Lucas CN. Energy losses due to graft compliance under steady and pulsatile flow in the extracardiac TCPC. Platform presentation, Biomedical Engineering Society meeting, Oct. 15, 2004, Philadelphia, Pa.

Lucas C, Yoganathan A, Mill M, Sharma S, Lucas W, Dean D, Masters J, Ketner M, Ensley A, Healy H. The Fontan circulation: a coupling/uncoupling challenge, 14th Congress of the Cardiovascular System Dynamics Society, Baltimore, MD, September 15-17, 2000.

Lucas C, Yoganathan A, Sharma S, Mill M, Lucas W, Dean D, Masters J, Ketner M, Ensley A, Healy T. Modeling the Fontan circulation: from the surgical pathway to the entire cardiovascular system. PLE Symposium, The Children's Hospital of Buffalo, September 22, 2000.

Ketner M, Lucas C, Masters J, Mill M, Lucas W, Sadoff J, Kiser A, Hoffman S, Yoganathan A, Ensley A. Energy gains/losses of normal and Fontan circulations in lambs under varying respiration parameters. Final Program and Abstract Book of the First Joint Meeting of BMES & EMBS p 50, 1999.

Lucas C, Mill M, Lucas W, Sadoff J, Hoffmann S, Ketner M, Masters J, Wilcox B, Ensley A, Yoganathan A. Modeling the Fontan circulation: a computer simulation of the effects of respiration. Final program and Abstract Book of the First Joint Meeting of BMES & EMBS p 64, 1999.

Lucas C., Mill, M., Lucas, W., Kiser, A., Ha, B., Henry, G.W., Yim, P., Hoffmann, S., Ketner, M., Masters, J., Wilcox, B., Yoganathan, A. Hemodynamic perspectives of Fontan circulations. Invited abstract for Third World Congress of Biomechanics, Sapporo, Japan, 1998.

Lucas C, Mill M, Jones D, Lucas W, Yim P, Ba B. Energy losses in a lamb model of the Fontan Circulation. BME Annual Research Review: p 21, 1997.

Other Publications

Mill, M.R.: Living, autologous pulmonary artery conduits tissue engineered from human umbilical cord cells. (Commentary). Annals of Thoracic Surgery 74: 46-52, 2002.

Mill, M.R.: Lung donors: how to maximize a scarce resource. South-Eastern Organ Procurement Foundation Newsletter 18:12-13, 1993.

PRESENTATIONS

National

Positioning during residency (how to be a good mentee). STS Residents Symposium, Society of Thoracic Surgeons, 46th Annual Meeting, Fort Lauderdale, Florida, Jan. 24, 2010.

Surgical approaches to ventricular remodeling. Heart Failure Management 2004: Established Therapy and New Frontiers, Amelia Island, Florida, July 16, 2004.

Session/Panel moderator for: Devices and surgical approaches in the management of heart failure. Heart Failure Management 2004: Established Therapy and New Frontiers, Amelia Island, Florida, July 16, 2004.

Surgical approaches to ventricular remodeling. Heart Failure Management 2003: Established Therapy and New Frontiers, Amelia Island, Florida, July 18, 2003.

Session/Panel moderator for: The role of pacers, devices and surgical approaches in the current management of heart failure. Heart Failure Management 2003: Established Therapy and New Frontiers, Amelia Island, Florida, July 18, 2003.

Session moderator, Pediatric Surgical Forum, Society of Thoracic Surgeons, San Diego, California, January 2003.

Session/Panel moderator for: The role of surgery and devices in the heart failure patient. Heart Failure Management Conference, Amelia Island, Florida, July 2001.

Session/Panel moderator for: The role of surgery and devices in the heart failure patient. Heart Failure Management Conference, Amelia Island, Florida, July 2000.

Panel moderator for: The role of surgery and devices in the heart failure patient. Heart Failure Management Conference, Amelia Island, Florida, July 1998.

Evolving role of cardiac assist devices in end-stage heart failure. Heart Failure Management Conference, Amelia Island, Florida, July 1998.

Panel moderator for: The role of surgery and devices in the heart failure patient. Heart Failure Management Conference, Amelia Island, Florida, July 1997.

Evolving role of cardiac assist devices in end-stage heart failure. Heart Failure Management Conference, Amelia Island, Florida, July 1997.

Evolving role of cardiac assist devices in end-stage heart failure. Heart Failure Management Conference: Established Therapy and New Frontiers. Myrtle Beach, South Carolina, June 1996.

The role of cardiac surgery in the management of heart failure. Heart Failure Management Conference: Established Therapy and New Frontiers. Myrtle Beach, SC, June 1995.

End stage congestive heart failure and transplantation (Case Discussion). Heart Failure Program: New Concepts in Heart Failure Management. Wrightsville Beach, North Carolina, June 1992.

Heart transplantation as a clinically indicated procedure in 1989. Conference on Heart Failure: New Strategies for Management, Chapel Hill, North Carolina, January 1989.

Regional

Assessment and inpatient management and follow-up of patients with heart and heart-lung transplants. Part of "The cutting edge: Focus on transplant care," a UNC Hospitals and UNC Nursing School continuing education conference. Chapel Hill, N.C., April 3, 2003.

Pediatric Heart Transplantation for the Primary Care Pediatrician, The Pediatric Heart Transplant Conference, Raleigh, NC, June 2002.

Cardiac Transplantation: Perioperative Management, Surgical Cardiology Update Conference, UNC School of Nursing, Chapel Hill, NC, October 2001.

Cardiac transplantation program at UNC: an overview. 23rd Annual Internal Medicine Conference, Chapel Hill, North Carolina, April 1999.

Issues related to heart transplantation. The Cutting Edge: Focus on Heart Failure Management (UNC Hospitals and UNC Nursing School continuing education conference). Chapel Hill, North Carolina, October 1998.

Cardiac transplantation and mechanical assist devices. Wake AHEC, Raleigh, North Carolina, March 1996.

Experience with cardiothoracic transplantation at UNC. Society of Clinical Surgeons, Chapel Hill, North Carolina, November 1994.

Predictors of anxiety after heart transplant. North Carolina Psychological Association, Atlantic Beach, North Carolina, May 1994.

Lung donors: how to maximize a scarce resource. Tri-annual Meeting of the South-Eastern Organ Procurement Foundation, Myrtle Beach, South Carolina, September 1993.

Nursing considerations following cardiopulmonary bypass. Conference on Advances in Pediatric Cardiac Nursing, Chapel Hill, North Carolina, November 1990.

Pediatric heart transplantation: selection of recipients, long term prognosis, future trends. Conference on Advances in Pediatric Cardiac Nursing, Chapel Hill, North Carolina, November 1990.

Experience with cardiac transplantation. Sixth Annual Cardiology Update, Gulf South Heart Center, New Orleans, Louisiana, October 1987.

Local Presentations

Avoiding heart block in congenital heart surgery. Tricks of the Trade. Division of Cardiothoracic Surgery conference. UNC School of Medicine. Nov. 6, 2009.

Pediatric Cardiothoracic Surgery, UNC Hospitals Surgical Services Orientation Program, Chapel Hill, NC, December 2002.

Cardiac Transplantation and Mechanical Assist Devices, Co-Founders Club, UNC School of Medicine and UNC Hospitals, Chapel Hill, NC, May 2002.

Mechanical circulatory assistance as a bridge to cardiac transplantation: the UNC experience. Nathan Womack Surgical Society, Chapel Hill, North Carolina, January 1997.

The teaching portfolio—a case study of one. 1995 Teaching Scholars' Symposium, Chapel Hill, North Carolina, June 1995.

Experience with pediatric cardiothoracic transplantation at UNC. Nathan Womack Surgical Society, Chapel Hill, North Carolina. February 1995.

Cardiac transplantation, 1995. Cardiology Grand Rounds, Mission Memorial Hospital, Asheville, North Carolina, February 1995.

Pediatric heart transplantation. Pediatric Grand Rounds, Wake Medical Center, Raleigh, North Carolina. November 1994.

Heart transplantation: indications and results 1993. Grand rounds, Randolph Memorial Hospital, Asheboro, North Carolina, May 1993.

Pediatric heart and lung transplantation. Association of Operating Room Nurses, Chapel Hill, North Carolina, February 1993.

Thoracic organ transplantation at UNC: the first 100 patients. Nathan Womack Surgical Society, Chapel Hill, North Carolina, January 1993.

Heart transplantation. Orange County Chapter, American Heart Association, Chapel Hill, North Carolina, November 1992.

Cardiac transplantation: modern results and follow-up. North Carolina State University School of Veterinary Medicine, Raleigh, North Carolina, September 1992.

Heart and heart-lung transplantation: state of the art, 1992. Triangle Chapter, American Association of Critical Care Nurses, Durham, North Carolina, November 1991.

Heart transplantation: patient selection, operative considerations, and long term results. Surgery Grand Rounds, New Hanover Memorial Hospital, Wilmington, North Carolina, September 1990.

Cardiac transplantation -1990. Co-founders Club, UNC School of Medicine, Chapel Hill, North Carolina, April 1990.

Heart transplantation - 1990. Triangle Chapter, American Association of Critical Care Nurses, Durham, North Carolina, November 1989

The impact of surgery and bypass techniques in the postoperative period. Cardiopediatric Conference (sponsored by UNC Pediatric Cardiology and Cardiothoracic Surgery), Chapel Hill, North Carolina, July 1989.

Heart transplantation - 1989. Medical Alumni Meeting, UNC School of Medicine, Chapel Hill, North Carolina, April 1989.

The "perfect" heart valve. Surgical Resident Teaching Conference, University of Colorado School of Medicine, Denver, Colorado, March 1985.

Carotid conundrums: selected topics in cerebrovascular disease. Surgery Grand Rounds, University of Colorado School of Medicine, Denver, Colorado, November 1984.

Asymptomatic carotid bruits. Surgical Resident Teaching Conference, University of Colorado School of Medicine, Denver, Colorado, August 1984.

TEACHING ACTIVITIES

Faculty member, TSDA Cardiothoracic Surgery Residents Boot Camp, Chapel Hill, NC, July 31-Aug. 2, 2009

Directed didactic lecture series and preoperative conference 1 day/week for UNC Division of Cardiothoracic Surgery. 2000-2011

Directed Thoracic Surgery Directors Association (TSDA) Curriculum Review Course, 1 day/month. 2000-2012

Directed Cardiothoracic Surgery M&M conference, 1 day/month. 2000-2013

Directed Tricks of the Trade conference, 1 day/month. 2000-2011

Directed SESATS conference, 1-2 days/month. 2000-2011

Directed Cardiothoracic Surgery journal club, 1 day/month. 2000-2012

Member, PhD Committee for Mark E. Ketner, Department of Biomedical Engineering, UNC School of Medicine, 10/2005 – 7/2006.

Adviser for UNC Surgery resident Jennifer S. Nelson, 7/2005-6/2010. (Also served as her mentor during medical school at UNC and during her senior year of college.)

Member, PhD Committee for Jonathan Masters, Department of Biomedical Engineering, UNC School of Medicine, 2001-2002.

ATLS instructor for American College of Surgeons, 1992-1995, 1997.

Course director and moderator, 31st Postgraduate Program, The Society of Thoracic Surgeons, New Orleans, Louisiana, January 1998.

Teaching Scholar, UNC School of Medicine, 1993-95

Faculty Adviser, UNC School of Medicine, 1988-97

Head Teaching Assistant, "Introduction to Medical Sciences" Curriculum, University of Colorado School of Medicine, Summer Quarter, 1978

Teaching Assistant, Department of Anatomy, University of Colorado School of Medicine, Summer Quarter, 1977

RESEARCH

Grants

Current**:**
05-R18 H5019636-01-02 (Schade Willis, PI) 9/30/2010 – 9/29/2013 2%
Agency for Healthcare Research and Quality $574,553
Improving patient safety in a pediatric service line
The goal of this project is to implement a family-centered safe practice infrastructure including teamwork training (TeamSTEPPS) and integrated clinical pathways (ICPs) to improve the quality and safety of care in a pediatric congenital heart disease service line.
Role: Co-investigator

Completed**:**
UNC IRB #10-1772 Hanson (PI) 2010-2012 0%
Families and pediatric cardiac surgery multidisciplinary teams: How well do we communicate?
UNC Department of Anesthesiology $2,000
Role: Co-investigator

1-F32-GM087059-01A1 (Marzluff, PI) 07/01/2009-12/31/2010 0%
National Institutes of Health (NIGMS) $47,210
TUTase mediated degradation of histone mRNA
Role: Co-Investigator

(Chang, PI) 08/04-11/06 0%
UNC Department of Medicine $12,500
Junior Faculty FY04 Multidisciplinary Research Grants Program
Evaluation of biological predictors for prevention of transplant coronary disease
Role: Co-investigator

E-17-669-G3 (Lucas, PI for UNC) 07/01/02-06/30/08 (4% 7/1/05-12/31/06; 2% 1/1/07-6/30/07; 0% 7/1/07-6/30/08)
National Institutes of Health grant BRP HL 67622 to Georgia Institute of Technology, Emory University, and Children's Hospital of Philadelphia. (UNC had subaward) $1,190,253
Understanding/improving flow dynamics of Fontan repairs.
I performed the surgery on animal models used in this project, participated in surgical planning exercises based on data from the experiments, and enrolled patients for cardiac MRIs before and after Fontan procedures under an IRB-approved protocol for which I was the institutional investigator. (One year no-cost extension)
Role: Co-Investigator (Local)

R01-HL52799 (Lucas, Yoganathan, PIs) 02/01/97-01/31/01 15%
National Institutes of Health $783,717
Fluid Dynamics of Right Heart Bypass Operations
Role: Co-Investigator

Other research experience:
Research Resident, Trauma and Resuscitation Lab, Department of General Surgery, Denver General Hospital, 1984.

Clinical Trials

Active:
NCT00991341 (N. Key, PI) 12/1/2010 to 8/31/2014 0%
National Heart, Lung, and Blood Institute
(Transfusion Medicine/Hemostasis Clinical Trials Network)
Red Cell Storage Duration Study (RECESS)
A randomized trial to determine if there is a clinically important difference between the effect of shorter storage-age red blood cells (RBCs) vs longer storage-age RBCs on clinical outcome and mortality risk.
Role: Co-Investigator

Completed:
(Selzman, PI) 2004-2007 0%
RELIANT: Heartmate versus Novacor for destination therapy LVAD clinical trial
Role: Co-investigator

CGT003-04 (Sheridan, Local PI) 02/12/03-3/29/05 0%
Society of Thoracic Surgeons/ Duke Clinical Research Institute/Corgentech
Prevent IV: A phase III, Multi-Center Randomized, Double-Blind, Placebo-Controlled Trial of the Ex Vivo Treatment with CGT003 of Coronary Vein Grafts in patients undergoing coronary artery bypass graft procedures.
Role: Co-investigator

1U01-HL69015-02 (Ohman, PI for UNC) 01/18/02-12/31/05 0%
National Institutes of Health
STICH-Surgical Treatment for Ischemic Heart Failure.
Multicenter international randomized clinical trial of therapy for patients with clinical heart failure, left ventricular dysfunction with CAD amenable to surgical revascularization.
Hypothesis (1): CABG w/ intensive medical therapy improves long-term survival compared to intensive medical therapy alone. Hypothesis (2): In patients w/ anterior LV dysfunction, surgical ventricular restoration to a more normal LV size improves survival free of subsequent hospitalization for cardiac cause in comparison to CABG alone.
Role: Primary Institutional Surgical Investigator

2002 0%
Hemosol Corporation
A Phase III, Randomized, Double-blind, Controlled Clinical Trial to Evaluate the Efficacy and Safety of Hemolink (co-raffinase cross-linked human hemoglobin) in Patients Undergoing Primary Coronary Artery Bypass Grafting Surgery.
Role: Investigator

June 1998 0%
Genzyme Transogenics Corporation
A Phase III, Double-blind, Randomized Study Comparing Transgenic Recombinant Human Antithrombin III and Plasma Antithrombin III in Patients Undergoing Elective Cardiac Surgery Requiring Cardiopulmonary Bypass.
Role: Investigator

May 1998 0%
AGA Medical Corporation
Closure of Atrial Septal Defects with the Amplatzer® Septal Occluder.
Role: Associate Investigator

(Starek, PI) 1997-2002 0%
UNC Hospitals
Transmyocardial laser revascularization of patients with severe coronary artery disease.
Role: Investigator

September 1995 0%
UNC Hospitals
Nitric Oxide Efficacy in the Treatment of Severe Pulmonary Hypertension or Respiratory Distress Related Hypoxemia
Role: Co-Investigator

1994-1996 0%
Baxter Healthcare Corp.
Novacor Left Ventricular Assist System with Portable Controller, Baxter Healthcare Corp.
Role: Primary Institutional Investigator

1987 0%
Stanford University Medical Center/Syntex Research
Randomized, double-blind placebo controlled study of prophylactic intravenous ganciclovir in heart transplant patients with CMV infection at risk of developing CMV pneumonia.
Role: Investigator

PROFESSIONAL SERVICE

Affiliations: American Association for Thoracic Surgery
American College of Surgeons (Fellow)
Association for Academic Surgery
American College of Cardiology (Fellow)
American College of Chest Physicians (Fellow)
American Medical Association
Congenital Heart Surgeons' Society
Durham-Orange County Medical Society
International Society for Heart and Lung Transplantation
North Carolina Medical Society
Norman E. Shumway Surgical Society
Society of Thoracic Surgeons
Southern Thoracic Surgical Association
Thoracic Surgery Directors Association
UNOS (national organ procurement and transplantation network)
Nathan A Womack Surgical Society
Women in Thoracic Surgery

International:

Cardiovascular System Dynamics Society:
Member, Organizing Committee, 12th International Conference, 1996-1997

International Society for Heart and Lung Transplantation:
Member, Council on Pediatric Transplantation, 1994-present

National:

Accreditation Council for Graduate Medical Education:
Member, Residency Review Committee for Thoracic Surgery, 2005-2011

American Association for Thoracic Surgery:
Mentor for residents and medical students, 2005-present

American Board of Thoracic Surgery:
Member, Oral Examination Consultant Committee for Congenital Cardiac Boards, 2010, 2011
Member, Examination Consultant Committee, Congenital Heart Surgery Subcommittee (to help write, administer the first qualifying exam and first certifying exam for this new Certificate of Special Competency), 2009
Member, Oral Examination Consultant Committee (regular ABTS boards), 1994-1998, 2008, 2009, 2010
Member, Ad hoc Oral Examination Committee (congenital heart surgery subspecialty certification exams) 1997, 1999, 2008-2009

American College of Surgeons, Division of Education:

Mentor, Mentoring Program for Junior Faculty in Surgery, 2004-present.

American Medical Association: Diagnostic and Therapeutic Technology Assessment (DATTA) Panel: cardiothoracic surgery representative, 1990-98

Blue Cross Blue Shield:
Blue Quality Centers for Transplant (BQCT), Member, 1999-present

Congenital Heart Surgeons Society:
Member, 2008-present

Society of Thoracic Surgeons:
Member, Program Committee, 2000-2003; co-chair, 2002-2003.
Member, Continuing Medical Education Committee, 1997-99, 2000-03.
Member, Postgraduate Education Committee, 1995-98; co-chairman, 1997-98

Southern Thoracic Surgical Association:
Member, Membership Committee, 2004-2008 (chair in 2008)
Consultant to Membership Committee, 2009-2011 (to help draft bylaws changes)

STICH (Surgical Treatments for Ischemic Heart Failure) Trial:
Member, North American Surgical Therapy Executive Committee, 2003-2004.

Thoracic Surgery Directors' Association:
Member, 1998-present;
Member, President's *ad hoc* Task Force on Outcomes Assessment, 2000-present

United Network for Organ Sharing (UNOS):
Member, Heart Transplant Review Board, UNOS Region 11, 1998 – present.
Member, Scientific Advisory Committee, 1994-96.
Member, Thoracic Organ Transplant Committee, 1989-92.
Member, Organ Procurement and Distribution Committee, 1989-92.

University Health System Consortium:
Member, 1996-present.
Member, CPAC Heart Transplant Clinician Coordinating Committee, 1999-present.
Member, CPAC Heart Transplant Clinical Benchmarking Liaisons, 1999-present.
Member, Heart Transplant Coordinating Committee, 1996-present

Women in Thoracic Surgery:
Member, 2008-present

Reviewer: *Annals of Thoracic Surgery*
Chest
Circulation
Journal of Heart and Lung Transplantation

Regional:

Carolina Donor Services (formerly Carolina Organ Procurement Agency (COPA)):
Member, Board of Directors, 1988-present.
President ,1993-95; past president, 1995-97; vice president, 1991-92.
Thoracic Organ Allocation Committee: chair, 1990-2000; member, 2001-present.

State of North Carolina Organ/Human Tissue Donation Advisory Committee:
Member, 1995-present

Triangle Chapter, Transplant Recipients International Organization (TRIO):
Member, Board of Directors, 1989-94

Institutional:

UNC Hospitals, UNC Health Care:
Member, Solid Organ Transplant Task Force, 2007-present
Member, UNC Physicians Performance Improvement Leadership Group, 2005-present
Member, Reap What You Sew Interdisciplinary AIDE Team (quality improvement), 2004
Member, Surgical Services Advisory Committee, UNC Hospitals, 2002-2005
Member, Ambulatory Operations Group, UNC Healthcare System, 2002-present
Ad hoc Member, OR Policy Committee, UNC Hospitals, 2002-2005
Co-chairman, UNC Heart Center Task Force, 1999-2000
Member, UNC Children's Hospital Operations Task Force, 1999-2003
Member, Committee on Organ and Tissue Donation, UNC Hospitals, 1998-2002
Member, Operating Room Users Group, UNC Hospitals, 1996-2002
Member, Organ Procurement CQI Team, UNC Hospitals, 1996-present

UNC School of Medicine:
Prepared RFP for exclusive cardiac services contract for Cape Fear Valley Medical System, 2006.
Chair of two faculty search committees, for congenital heart surgeon and for general thoracic surgeon, UNC Division of Cardiothoracic Surgery, 2006.
Member, Task Force on Surgical Faculty Compensation, UNC Department of Surgery, 2005-present
Member, Faculty Development Committee, UNC Department of Surgery, 2004-present.
Member, Advisory Committee for the Center for Thrombosis and Hemostasis, UNC School of Medicine, 2002-present
Member, Five-year Review of UNC Burn Center and Dr. Michael Peck, Feb. 2001
Member, Search Committee, Chief, Pediatric Critical Care, UNC School of Medicine, 1999-2000
Member, Five-year Review, Philip G. Boysen, MD, Chair, Department of Anesthesiology, 1999
Member, Graduate Medical Education Advisory Committee, UNC School of Medicine 1999-present
Elected member, Salary Policy Committee, UNC School of Medicine, 1997-98
Member, Admissions Committee, UNC School of Medicine, 1992-96

Member, Medical Student Curriculum Committee, UNC Department of Surgery, 1988-92

University of North Carolina at Chapel Hill:
Elected member, University of North Carolina Faculty Council, 1996-99
Elected alternate, UNC System Faculty Assembly Delegation, 1997-98