CURRICULUM VITAE

Andy Christopher Kiser, MD

Professor of Surgery and Chief, Division of Cardiothoracic Surgery
Center for Heart and Vascular Care
The University of North Carolina at Chapel Hill

Address: Division of Cardiothoracic Surgery
University of North Carolina at Chapel Hill
3034 Burnett-Womack Building, CB# 7065
Chapel Hill, NC 27599-7065

Phone: 919-966-3381 (work)
919-966-3475 (fax)

E-mail: andy_kiser@med.unc.edu

Web: www.uncheartandvascular.org

Postgraduate Training

1999-2000 Cardiac Fellow, Cardiothoracic Surgery, University of North Carolina

1998-1999 Thoracic Fellow, Cardiothoracic Surgery, University of North Carolina

1997-1998 Research Fellow, Cardiothoracic Surgery, University of North Carolina

1996-1997 Chief Resident, General Surgery, University of North Carolina

1993-1996 Resident, General Surgery, University of North Carolina

1992-1993 Intern, General Surgery, University of North Carolina

Education

May 1992 M.D. with Honors, University of North Carolina School of Medicine, Chapel Hill, NC

May 1988 B.S. with Honors and Distinction (Biology), University of North Carolina at Chapel Hill, Chapel Hill, NC

Professional Experience

July 1, 2011-present	Chief, Division of Cardiothoracic Surgery, University of North Carolina at Chapel Hill, Chapel Hill, NC
Nov. 1, 2010-present	Professor of Surgery, Division of Cardiothoracic Surgery, University of North Carolina at Chapel Hill, Chapel Hill, NC
June 2010-Nov. 1, 2010	Chief of Cardiovascular and Thoracic Surgery, FirstHealth Moore Regional Hospital, Pinehurst, NC.
Jan. 1, 2008-Nov. 1, 2010	Cardiac, Thoracic and Vascular Surgery, FirstHealth Moore Regional Hospital, Pinehurst, NC
Jan.1, 2008-Nov.1, 2010	Medical Director, FirstHealth Arrhythmia Centers, Pinehurst, NC.
Jan. 1, 2007-present	Clinical Assistant Professor of Surgery, Brody School of Medicine, East Carolina University, Greenville, NC.
Jan. 1, 2005-Nov. 1, 2010	Medical Director, Chest Center of the Carolinas, FirstHealth Moore Regional Hospital, Pinehurst, NC.
Aug. 2000-Jan. 2008	Cardiac and Thoracic Surgery, Pinehurst Surgical Clinic, Pinehurst, NC

Licensure

North Carolina #93-00501 (Sept. 18, 1993)

Board Certification

American Board of Thoracic Surgery
Diplomate, June 7, 2002 (expires December 31, 2012)
Recertified Sept. 22, 2010 (expires Dec. 31, 2022)
Certificate # 6655

American Board of Surgery
Diplomate, February 12, 1998 (expired December 31, 2008)
Recertified November 26, 2007 (expires July 1, 2018)
Certificate # 42928

Professional Memberships

American College of Surgeons: Fellow, 2003-present; member, 1992-present

American College of Cardiology: Fellow, 2003-present; member, 1997-present

American College of Chest Physicians: Fellow, 2003-present; member, 2002-present

Heart Rhythm Society, 2007-present

International Society of Minimally Invasive Cardiac Surgery, 2006-present

Nathan A. Womack Surgical Society, 1997-present

North Carolina Medical Society, 1997-present

Society of Thoracic Surgeons, 2003-present

Southern Thoracic Surgical Association, 2003-present

Professional Associations:

KL Medical, 2010-present

Advanced Cardiac Arrhythmia Training Institute (ACATI), 2007-present

nContact Surgical, Consultant, Stockholder and Surgical Device Developer, 2005-present

Honors

2009 Moore County (NC) Schools' "Graduate Hall of Fame"

1999 Founding Chair, Residents and Associates Society, American College of Surgeons

1997 Nathan A. Womack Scholar (Given by the residents to an outstanding house officer in the UNC Department of Surgery)

1997 Christopher C. Fordham Award (Given by UNC School of Medicine's graduating class to resident who most contributed to their educational experience)

1996-97 Administrative Chief Resident, General Surgery, UNC Hospitals

1996-97 House Staff Council Co-President (Governing body of the residency programs at UNC Hospitals)

1996 "Resident of the Year" Award (Awarded for outstanding contributions to medical education at Wake Medical Center)

1994 Alpha Omega Alpha

1993 "Intern of the Year" Award (Selected by third-year medical students as the intern

who was most helpful during their clinical rotations)

1992 Henry C. Fordham Award (Awarded to the student who most demonstrated leadership qualities during medical school at UNC)

1992 Commencement speaker, University of North Carolina School of Medicine

1991 Southern Medical Association Student Fellow/Grant Recipient

1990-92 Class President, University of North Carolina School of Medicine

1990 The Medical Foundation of North Carolina Student Fellow/Grant Recipient

1987-88 University of North Carolina Honors Program
Honors Thesis: Monoclonal Antibodies Against a Vitellogenic Peptide in *Leucophaea madearae*: Vitellogenic Processing During Development

PUBLICATIONS

Books

Kiser AC, Landers MD: The convergent procedure: a co-disciplinary approach for atrial fibrillation. Tuttlingen, Germany: Endo:Press; July 2010.

Book Chapters

Kiser AC, Landers MD, Boyce K, Cockfield W. Pericardioscopic biatrial ablation: A collaborative approach. In: Cardiothoracic Surgery Review. Franco KL and Thourani VH, eds. New York: Lippincott Williams & Wilkins, Dec. 16, 2011, pages 823-828.

Detterbeck FC, **Kiser AC:** T3 disease (Stage IIb/IIIa). In: Diagnosis and Treatment of Lung Cancer: An Evidence-Based Guide for the Practicing Clinician. Detterbeck FC, Rivera MP, Rosenman JG, Socinski MA (eds). New York: W.B. Saunders Company; 2001.

Kiser AC, Detterbeck FC: Carcinoid and mucoepidermoid tumors. In: Diagnosis and Treatment of Lung Cancer: An Evidence-Based Guide for the Practicing Clinician. Detterbeck FC, Rivera MP, Rosenman JG, Socinski MA (eds). New York: W.B. Saunders Company; 2001.

Journal Articles

Bartuś K, **Kiser AC**, Majewski J, Kapelak B, Konstanty-Kalandyk J, Lelakowski J, Bednarek J, Bartuś S, Wierzbicki K, Sobczyński R, Sadowski J. Thoracoscopic epicardial ablation of left and right atrium: beating heart procedure in patients with atrial fibrillation. Pol Arch Med Wewn 2012; 122(5): 189-94. (May 25, 2012) PMID: 22495053

Gersak B, **Kiser AC,** Bartus K, Sadowski J, Harringer W, Knaut M, Wimmer-Greinecker G, Pernat A. Importance of evaluating conduction block in radiofrequency ablation for atrial fibrillation. Eur J Cardiothorac Surg 2012 (Jan.); 41 (1): 113-8. PMID: 21680193

Kiser AC, Landers M, Boyce K, Sinkovec M, Pernat A, Gersak B. Simultaneous catheter and epicardial ablations enable a comprehensive atrial fibrillation procedure. Innovations: Technology and Techniques in Cardiothoracic and Vascular Surgery 2011 (July/August); 6(4): 243-247. PMID: 22437982

Kiser AC, Mounsey JP, Landers MD. The Convergent procedure is a collaborative atrial fibrillation treatment. Journal of Innovations in Cardiac Rhythm Management 2011 (May); 2: 289-293.

Kiser AC, Cockfield W. Paracardioscopic ex-maze procedure for atrial fibrillation. MMCTS. http://mmcts.ctsnetjournals.org/cgi/content/full/2010/0201/mmcts.2008.003863

Kiser AC, Landers M, Horton R, Hume A, Natale A, Gersak B. The convergent procedure: a multidisciplinary atrial fibrillation treatment. Heart Surgery Forum. 2010 (Oct); 13(5):283-288. PMID: 20961832

Kiser AC. Paracardioscopy Provides Endoscopic Visualization of the Heart. Innovations. 2009; 4:233-235. PMID: 22437127

Dumas III JH, Himel IV HD, **Kiser AC**, Quint SR, Knisley SB. Myocardial electrical impedance as a predictor of the quality of RF-induced linear lesions. Physiol Meas. 2008 (Oct); 29(10):1195-1207. PMID: 18799837

Kiser AC, Wimmer-Greinecker G, Kapelak B, Bartus K, Streitman JS, Knaut M, Sadowski J. Achieving Metrics during Beating Heart Ex-Maze Procedures Improves Outcomes. Heart Surgery Forum. 2008; 11:E237-E242. PMID: 18782703

Kiser AC, Nifong LW, Raman J, Kasirajan V, Campbell N, Chitwood, Jr. WR. Evaluation of a Novel Epicardial Atrial Fibrillation Treatment System. Ann Thorac Surg 2008 (Jan); 85:300-303. PMID: 18154827

Abashian SM, **Kiser AC**, Himel HD, Dumas JH, Knisley SB. Effect of Ablation on Local Activation Intervals and Dominant Frequencies of Fibrillation. Computers in Cardiology 2007; 34:781-783.

Kiser AC, Wimmer-Greinecker G, Chitwood WR. Totally extracardiac Maze procedure performed on the beating heart. Ann Thorac Surg 2007 (Nov);84:1783-85. PMID: 17954121

Himel IV HD, Dumas III JH, **Kiser AC**, Knisley SB: Translesion stimulus-excitation delay indicates quality of linear lesions produced by radiofrequency ablation in rabbit hearts. Physiol. Meas. 2007 (June); 28:611-623. PMID: 17664616

Egan TM, Thomas Y, Gibson D, Funkhouser W, Ciriaco P, **Kiser AC**, Sadoff J, Bleiweis M, and Davis CE: Trigger for intercellular adhesion molecule-1 expression in rat lungs transplanted from non–heart-beating donors. Ann. Thorac Surg. 2004 (March); 77:1048–1055. Discussion 1044. PMID: 14992925

Kiser AC, Egan TM. Metastatic melanoma to the pleural space. Ann Thor Surg 2002(Oct); 74:1257. PMID: 12400790

Kiser AC, Ciriaco P, Hoffmann SC, Egan TM. Lung retrieval from non-heart beating cadavers with the use of a rat lung transplant model. J Thor Cardiovasc Surgery 2001 (July); 122:18-23. PMID: 11436032

Kiser AC, O'Brien S, Detterbeck FC: Blunt tracheobronchial injuries: treatment and outcomes. Ann Thor Surg 2001 (June); 71:2059-2065. PMID: 11426809

Kiser AC, Roberts CS. Spontaneous hemopneumothorax in women: S Med Jour. 2000 (Dec); 93:1209-1211. PMID: 11142459

Kiser AC. In their own words. The college chapter visit program: becoming involved in the political process. Bull Am Coll Surg. 2000 (Oct); 85:19-20. PMID: 11351851

Kiser AC. Society for surgical residents continues its rapid growth. Gen Surg News 2000 (Aug); 27:10.

Kiser AC. CAS-ACS. College addresses needs of young surgeons. Bull Am Coll Surg. 2000 (April); 85:44-46.

Kiser AC, Meyer AA. Pacemakers and intraoperative cardiac interactions: Implications for surgeons. Bull Am Coll Surg Mar. 2000 (March); 85:18-20. PMID: 11349560

Kiser AC, Inglis G, Nakayama DK: Primary percutaneous endoscopic button gastrostomy: a modification of the "push" technique. J Am Coll Surg 1999 (June);188:704-706. PMID: 10359366

Kiser AC, Lentz CW, Peterson HD: Subcutaneous injection of donor sites for split-thickness skin grafts. J Am Coll Surg 1996 (March);182:265-267. PMID: 8603249

Kiser AC, Hennington MH, Fidler ME, Detterbeck FC: Chondrosarcoma of the posterior chest wall: a case report and review of the literature. Surg Rounds 1994 (Nov):637-644.

Abstracts

Kiser AC, Landers MD. Surgical and Electrophysiological Collaboration Improves Care Delivery and Supports Practice Growth. Innovations 2010;5:243.

Kiser AC, Landers MD, Sinkovec M, Pernat A, Gersak B. Simultaneous Catheter Ablations Enable a Comprehensive Epicardial Procedure for Persistent Atrial Fibrillation. Innovations 2010;5:189-190.

Bailey S, Horton R, **Kiser AC**, Di Biase L, et al. Short term results of the convergent endo-epicardial ablation procedure for the treatment of lone long standing persistent atrial fibrillation. Circulation. 2009;120:S707.

Kiser AC, Wimmer-Greinecker G, Kapelak B, Bartus K, Sadowski J. Paracardioscopic ex-maze procedure for atrial fibrillation. Innovations 2008; 3:117.

Kiser AC, Sadowski J, Kapelak B, Bartus K, Wimmer-Greinecker G. Paracardioscopic Creation of a Comprehensive Biatrial Lesion Pattern During Minimally Invasive Atrial Fibrillation Treatment. JACC 2008; (Supplement) 51:A12.

Kiser AC, Wimmer-Greinecker G, Kapelak B, Bartus K, Chitwood WR, Sadowski J. Clinical evaluation of the extra-cardiac (Ex-Maze) procedure. Innovations 2007; 2:29.

Dumas JH, Himmel HD, **Kiser AC**, Knisley SB. Translesion myocardial impedance as an indicator of lesion production by RF ablation. Circulation 2006; 114(Suppl):II-654.

Himmel HD, Dumas JH, **Kiser AC**, Knisley SB. Translesion stimulation-excitation delay rapidly indicates lesion completeness and increased conduction path length around ablated tissue. Circulation 2006; 114(Suppl):II-352.

Lucas C, Mill M, Lucas W, **Kiser AC**, Ha B, Henry GW, Yim P, Hoffmann SC, Ketner M, Masters J, Wilcox B, Yoganthan A, Ensley A, Lynch P, Chatzina-vroudis G, Sharma S: Hemodynamic perspectives on Fontan circulations. Chest 2000; 115(Suppl).

Thomas YM, Paik HC, Hoffmann SC, Ciriaco P, Funkhouser WK, Bleiweis MS, **Kiser AC**, Egan TM: Are adhesion molecules upregulated after lung transplant from non-heart beating donors? Chest 1998; 114(Suppl):398S.

Paik HC, Hoffmann SC, **Kiser AC**, Egan TM: Pulmonary preservation solutions: effects on endothelial function and pulmonary energetics. Chest 1998; 114(Suppl): 396S.

Kiser AC, Cascio WE: Relationship of post-operative volume loading to changes in the amplitude and duration of the QRS complex measured with a standard 12-lead electrocardiogram. PACE(Suppl), 1993.

Kiser AC, Jain A, Gilliam DM, Kaplan SH, Cascio WE: Possible mechanisms of intracoronary electrogram amplitude change during coronary angioplasty (PTCA). Circulation 1991; 84(Suppl):237.

PRESENTATIONS

International:

Technical considerations during mini VAD placement. Department of Thoracic and Cardiovascular Surgery, University of Göttingen, Germany. Aug. 27, 2012.

Technical considerations during mini VAD placement. University of Leuven, Belgium. July 2, 2012.

Hybrid surgical and catheter ablation: The new paradigm for surgeon and EP collaboration. ISMICS Lunch Symposium. International Society of Minimally Invasive Surgery, June 1, 2012, Los Angeles, CA.

Different surgical lesion sets and end-points in concomitant and lone AF ablation: Rationale, techniques and pitfalls. International Society of Minimally Invasive Surgery, May 30, 2012, Los Angeles, CA.

Surgical and Electrophysiological Collaboration Improves Care Delivery and Supports Practice Growth. International Society of Minimally Invasive Cardiac Surgery, June 18, 2010. Berlin, Germany.

Simultaneous Catheter Ablations Enable a Comprehensive Epicardial Procedure for Persistent Atrial Fibrillation. International Society of Minimally Invasive Cardiac Surgery, June 18, 2010. Berlin, Germany.

Convergent Procedure for Persistent Atrial Fibrillation Decreases Fluoroscopy and Procedure Times. 7th Annual Meeting of the Euro-Asian Bridge. Portoroz, Slovenia. May 22, 2010.

Regardless of Surgical Access, a Comprehensive, Biatrial Lesion Pattern Enables Treatment of Long-Standing Persistent Atrial Fibrillation. International Society of Minimally Invasive Cardiac Surgery, San Francisco, CA. June 5, 2009.

Paracardioscopic Biatrial Ablation. Postgraduate Course: Atrial Fibrillation. International Society of Minimally Invasive Cardiac Surgery, San Francisco, CA. June 3, 2009.

A Beating Heart Ex-Maze Procedure-live case and presentation. Advanced Techniques in Cardiac Surgery, European Association for Cardio-Thoracic Surgery, Krakow, Poland. November 22, 2008.

Evolution of a Minimally Invasive Atrial Fibrillation Treatment. Institute for Cardiac Surgery. Ljubliana, Slovenia. November 20, 2008.

A Totally Endoscopic Procedure to treat Atrial Fibrillation. Techno-College, European Association for Cardio-Thoracic Surgery, Lisbon, Portugal. September 13, 2008.

Paracardioscopic Ex-Maze Procedure for Atrial Fibrillation. International Society of Minimally Invasive Cardiac Surgery, Boston, MA. June 13, 2008.

Minimally Invasive Atrial Fibrilation Surgery – A New Technique. European Association of Cardio-Thoracic Suregery Techno College. Geneva, Switzerland. September 15, 2007.

Clinical Evaluation of the Extra-Cardiac Maze (Ex-Maze) Procedure. International Society of Minimally Invasive Cardiac Surgery, Rome, Italy. June 7, 2007.

National:

A career in cardiac surgery (video broadcast). National Youth Leadership Forum on Medicine, June 14 and June 28, 2012.

Emerging Technologies - Hybrid. New Options for Assessing Atrial Fibrillation (Medtronic), Feb. 3-4, 2012, Miami Beach, FL.

Periocardioscopy and the convergent procedure (video and talk). American College of Surgeons, San Francisco, CA. Oct 24, 2011.

Evolution of Ablation: Surgical Perspective – History, Results, Challenges and Opportunities. Second Annual Educational Masters Symposium: Minimally Invasive Surgical Ablation and Surgical/EP Procedures, Chicago, IL. Oct. 21, 2011.

Hybrid Procedures – Convergent Procedure. Second Annual Educational Masters Symposium: Minimally Invasive Surgical Ablation and Surgical/EP Procedures, Chicago, IL. Oct. 21, 2011.

Panel discussion: Simultaneous versus staged hybrid procedures – opportunities and challenges. Second Annual Educational Masters Symposium: Minimally Invasive Surgical Ablation and Surgical/EP Procedures, Chicago, IL. Oct. 21, 2011.

Faculty member, Cardiothoracic Surgery Boot Camp, Thoracic Surgery Directors Association (TSDA), July 14-17, 2011, UNC Friday Center, Chapel Hill, NC.

Live broadcast/discussion of surgery for participants in National Youth Leadership Forum on Medicine, University of North Carolina at Chapel Hill, Chapel Hill, NC, June 22, 2011.

Simultaneous Electrophysiologic Evaluation Uncovers Deficiencies of Stand-Alone Surgical Atrial Fibrillation Procedure. Boston Atrial Fibrillation Symposium. January 14, 2011. Boston, Massachusetts, USA.

Pericardioscopic Biatrial Ablations. Tech-Con, Society of Thoracic Surgeons. Fort Lauderdale, FL. January 24, 2010.

Short term results of the convergent endo-epicardial ablation procedure for the treatment of long standing persistent atrial fibrillation. (Bailey et al). Poster presentation. American Heart Association Scientific Sessions, Orlando, Fla. Nov. 18, 2009.

Convergent Ex-Maze: Simultaneous Endo and Epicardial Approach. Advanced Cardiac Techniques in Surgery. New York, New York. May 7, 2009.

Paracardioscopic Creation of a Comprehensive Biatrial Lesion Pattern During Minimally Invasive Atrial Fibrillation Treatment. American College of Cardiology Scientific Session. Chicago, IL. March 30, 2008.

Evolution of a Minimally Invasive, Off-Pump Bi-Atrial Maze Procedure. American College of Cardiology Conference at Snowmass. Snowmass, CO. January 18, 2008.

Translesion Myocardial Impedance as an Indicator of Lesion Production by RF Ablation. American Heart Association Scientific Sessions. Chicago, IL. November 14, 2007.

Translesion Stimulation-Excitation Delay Rapidly Indicates Lesion Completeness and Increased Conduction Path Length Around Ablated Tissue. American Heart Association Scientific Sessions. Chicago, IL. November 13, 2007.

Spontaneous Conversion To Sinus Rhythm During Beating Heart Extracardiac Maze Procedure Predicts Long-term Outcomes. Southern Thoracic Surgical Association. Bonita Springs, FL. November 10, 2007.

Clinical Evaluation of a Novel Vacuum Integrated Epicardial Ablation Device. NewEra Cardiac Surgery, Huntington Beach, CA. January 5-7, 2007.

The Resident In Trouble – Panel Discussion. American College of Surgeons Clinical Congress; Chicago, IL, October 24, 2000.

The organizational structure of the Candidate and Associate Society of the American College of Surgeons. Clinical Congress, American College of Surgeons; San Francisco, CA, October 10, 1999

Relationship of post-operative volume loading to changes in the amplitude and duration of the QRS complex measured with a standard 12-lead electrocardiogram. North American Society of Pacing and Electrophysiology; Boston, MA, May 4, 1995.

Increased extracellular resistance explains acute changes in local electrocardiogram amplitude during percutaneous transluminal coronary angioplasty. Abstract Forum, American Heart Association; Anaheim, CA, November 12, 1991.

Grand Rounds – UNC:

Surgical therapy for atrial fibrillation (with J. Paul Mounsey). Grand Rounds in Cardiovascular Medicine and Science. UNC, Chapel Hill, NC. April 25, 2011.

The Convergent Procedure: Successful Cardiac Surgery and Electrophysiology Collaboration. UNC Department of Surgery Grand Rounds, Dec. 1, 2010. Chapel Hill, NC.

CABG 2000: Arterial myocardial revascularization. Surgery Grand Rounds, University of North Carolina; Chapel Hill, NC, June 21, 2000.

Other UNC Presentations:

Improving Outcomes While Decreasing Fluoroscopy/Procedure Times. Womack Surgical Society. Chapel Hill, NC. June 12, 2010.

Atrial septal defects. Residents Conference, Division of Cardiothoracic Surgery; University of North Carolina, Chapel Hill, NC. June 1, 2000

Aortic insufficiency. Residents Conference, Division of Cardiothoracic Surgery; University of North Carolina, Chapel Hill, NC, August 26, 1999

Esophageal motility disorders. Residents Conference, Division of Cardiothoracic Surgery; University of North Carolina, Chapel Hill, NC, February 18, 1999

Delayed diagnosis and treatment of blunt tracheobronchial injury. Nathan A. Womack Surgical Society; Chapel Hill, NC, January 29, 1997.

State of the Department of Surgery at the University of North Carolina. Nathan A. Womack Surgical Society; Chapel Hill, NC, January 30, 1997.

Grand Rounds – Outside UNC:

Hybrid maze – where are we? East Carolina University Heart Institute, Greenville, NC, Sept. 7, 2012.

New collaborations around atrial fibrillation. Cardiology Grand Rounds, New Hanover Medical Center, Wilmington, NC April 14, 2011.

Arterial Myocardial Revascularization. Grand Rounds, Wake Medical Center; Raleigh, NC, July 28, 2000.

Other Local/Regional:

Point-counterpoint on transcatheter aortic valve implantation: Surgical aortic valve replacement will remain the gold standard. North Carolina Cardiovascular Update, Friday Center, Chapel Hill, NC, Sept. 14, 2012.

Panel discussion. North Carolina Cardiovascular Update. Friday Center, Chapel Hill, NC, Sept. 14, 2012.

Working together: UNC and Rex Heart and Vascular. Rex Hospital Board of Trustees, Raleigh, NC, June 13, 2012.

End Stage Heart Disease/LVADs (including narrated video of LVAD surgical procedure). Cardiovascular Disease Symposium, Raleigh, NC, April 21, 2012.

Convergent procedure for atrial fibrillation. Arrhythmia and Heart Failure Symposium, Charlotte AHEC, Charlotte, NC, March 17, 2012.

Convergent Procedure: A novel treatment for afib. 9th Annual The Beat Goes On Conference, UNC Hospitals Nursing Professional Development, Practice and Research, Friday Center, Chapel Hill, NC, Feb. 28, 2012.

Surgical management of cardiac arrhythmias. North Carolina Surgical Association, Fall Meeting. The Homestead, Hot Springs, VA. Sept. 23, 2011.

Hybrid cardiac surgery opportunities. Karl Storz Educational Seeminar. Houston, TX. February 9, 2011.

Atrial Ablation: Ex-Maze. 13th Annual Cannon Heart Symposium: Setting the Pace. Concord, NC. March 21, 2009.

Evaluation of a Time-Domain Algorithm to Determine Effects of Continuous and Transmural RF Ablation Lesions on the Frequency Content of Fibrillation. Computers in Cardiology. Durham NC. Oct. 3, 2007.

Lung Cancer: Diagnosis, Staging, and Standard of Care. Association of North Carolina Cancer Registrars Annual Educational Meeting, Mid-Pines Resort, Pinehurst, NC, Sept. 12, 2006.

New Advances in Heart Surgery. Health Education Program, Sandhills Community College; Southern Pines, NC. April 3, 2001.

Coronary Surgery in the Year 2000. Zipper Club, First Health-Moore Regional; Pinehurst, NC, September 26, 2000.

Lung retrieval from non-heart beating cadavers: Assessment of gas exchange in a rat lung transplant model. Resident Forum, North Carolina Chapter, American College of Surgeons; Myrtle Beach, SC, July 9, 2000.

The organizational structure of the Candidate and Associate Society of the American College of Surgeons. Clinical Congress, American College of Surgeons; San Francisco, CA, October 10, 1999.

Risk factors and outcomes for patients with fungal infections. Resident Forum, North Carolina Chapter, American College of Surgeons; Asheville, NC, July 13, 1997.

Identification of risk factors for fungal infections in the intensive care unit. Resident Paper Competition, North Carolina Chapter, American College of Surgeons Committee on Trauma; Wilmington, NC, September 16, 1995. (Awarded First Place for Clinical Investigation)

Cervical spine injuries. Trauma/Orthopaedic Surgery Conference, Wake Medical Center; Raleigh, NC, July 7, 1995.

TEACHING, MENTORSHIP

Mentor to UNC medical student Paul McIntosh, 2012-2013

Research mentor to Hayden Pappas, M.D., UNC post-doc, 2012-2013

Mentor to North Carolina State University biomedical engineering students Alexander Verderber, Casey Haigh, Drew Brisley, Hunter Moore, Tony Voiers, 2012-2013

Preceptor, Scott Moore, UNC post-doc, 2012-2013

Holderness Distinguished Medical Scholars, UNC School of Medicine – review of TAVR literature with Rebekah Macfie (UNC medical student), 7/24/12 and 7/26/12.

RESEARCH

Current:

NCT00903370 (Kiser, PI for Satellite Site at UNC) 6/14/2011-12/31/2013
National Heart, Lung and Blood Institute (Cardiothoracic Surgery Network/Mount Sinai School of Medicine, New York, NY)
Surgical Ablation versus No Surgical Ablation for Patients with Persistent or Longstanding Persistent Atrial Fibrillation Undergoing Mitral Valve Surgery (Clinical Trial)
The purpose of the research is to determine whether treating atrial fibrillation with surgical ablation during scheduled mitral valve surgery is better than mitral valve surgery by itself without the surgical ablation.

Protocol TMH-08, Version 7.0 (N. Key, PI) 12/1/2010 - 8/31/2014
National Heart, Lung, and Blood Institute (Tranfusion 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 effct of shorter storage-age red blood cells (RBCs) vs longer storage-age RBCs on clinical outcome and mortality risk.
Role: Co-investigator

UNC IRB #09-1302 (B. Jensen, PI) 2009-present
Unfunded
UNC Human Heart Tissue Bank
Role: Co-investigator

Completed:

Carolina Medical Student Research Program (Mangum, MSII, PI) 7/1/2011 - 9/1/2011
Fluid retention and molecular and osmotic effects of ANP.
A Retrospective analysis of patients undergoing ablation therapy for atrial fibrillation to demonstrate weight gain, net fluid balance, and plasma oncotic pressure changes and directly relate these changes to the influence of atrial naturetic peptide.
Role: Advisor/Mentor

PROFESSIONAL SERVICE

Reviewer, Innovations: Technology and Techniques in Cardiothoracic and Vascular Surgery, December 2007-present
Reviewer, Journal of Atrial Fibrillation, 2012-present
Interviews, UNC Cardiothoracic Surgery residents: 1/4/12, 1/6/12, 1/13/12, 1/20/12, 2/10/12