

CURRICULUM VITAE

Khanh H. Nguyen, M.D.

<u>ACADEMIC APPOINTMENTS:</u>	Assistant Professor Department of Cardiothoracic Surgery Mount Sinai Medical Center New York, New York	7/96-3/07.
	Associate Professor Department of Cardiothoracic Surgery Mount Sinai Medical Center New York, New York	3/07-pres
<u>HOSPITAL APPOINTMENT:</u>	Assistant Attending Department of Cardiothoracic Surgery Mount Sinai Medical Center New York, New York	7/96-pres.
	Attending Surgery – Cardiothoracic Surgery St. Joseph's Hospital and Medical Center Paterson, New Jersey	7/97-pres.
	Attending - Maria Fareri Children's Hospital Westchester Medical Center Valhalla, New York	6/06pres.
<u>ADMIN. APPOINTMENT:</u>	Chief, Division of Pediatric of Cardiac Surgery	7/02 - pres.
<u>EDUCATION:</u>	B.A., Chemistry, University of California, San Diego	1980
	B.A., Biology, University of California, San Diego	1981
	M.D., University of California Irvine	1985

POSTGRADUATE TRAINING:

Internship: Internal Medicine, VA Med Ctr 7/85-6/86
University of California
Irvine, California

Residency: General Surgery 7/87-6/92
Flushing Hospital Medical Center
Flushing, New York

Cardiothoracic Surgery 7/92-6/95
Mount Sinai Medical Center
New York, New York

Senior Registrar, Pediatric Cardiac 7/95-6/96
Surgery
Great Ormond Street Hospital for Children
London, England

CERTIFICATION: American Board of Surgery 1993
American Board of Thoracic Surgery 1997&2007
UNOS 1997

LICENSURE: New York - #188828 1992
New Jersey - # 65145 1997

AWARDS:

Best Resident in Laparoscopic Surgery, Society of Laparoscopic Surgery - New York	1989
Humanitarian Award by the Rotary Club - N.J.	2006

RESEARCH:

Orthotopic Mitral Valve Replacement using Pulmonary Valve.
Mount Sinai Medical Center – 2001-2005

Assessment of Cardiac Output using Skeletal muscle Near Infra Red Oxymetry.
Mount Sinai Medical Center – 2006

Aortic valve repair using an extracellular scaffold 2008-now

Berlin hear assist device data center 2009

Anomalous Aortic Origin of a Coronary Artery (AAOCA) in Pediatric and Young Adult Patients: A Study by the Congenital Heart Surgeons' Society 2009. IRB approved 2010.

The Axillary Incision in Congenital Cardiac Surgery. PI. IRB approved 2011.

PROFESSIONAL SOCIETIES/MEMBER:

New York Society for Thoracic Surgery

The Society of Thoracic Surgeons

The Congenital Heart Surgeon's Society

Member of Pediatric Cardiology-Pediatric Cardiothoracic Surgery Sub-Committee
Task Force for Transition of Care for Young Adult with Chronic Diseases of Childhood

PUBLICATIONS

Original Peer-Reviewed Articles

1. Waxman, K., Soliman, M.H., and **Nguyen, K.H.**: Absorption of insulin in the peritoneal cavity in a diabetic animal model. *Artif Organs* 17(11): 925-8, 1993.
2. Jacobs, J.P., **Nguyen, K.H.**, and Stevens, J.H.: American cardiothoracic trainees want longer hours too. *BMJ* 311(7018): 1508, 1995.
3. Griep, R.B., Ergin, A.E., Lansman, S.L., Galla, J.D., **Nguyen, K.H.**, and McCullough, J.N.: Looking for the Artery of Adamkiewicz: A Clinicophysiological Quest. *J. Thorac Cardiovasc Surg* 112: 1202-15 - Nov 1996.
4. **Nguyen, K.H.**, Ergin, M.A., Galla, J.D., Lansman, S.L., McCullough, J.N., and Griep, R.B.: The Bentall procedure in patients with Marfan's Syndrome. *J. Cardiac Surg* 2(Suppl.): 142-46, 1997.
5. Galla, J.D., Ergin, M.A., Lansman, S.L., De Asla, R.A., **Nguyen, K.H.**, McCullough, J.N., and Griep, R.B.: Identification of risk factors in patients undergoing thoracoabdominal aneurysm repair. *J. Cardiac Surg* 2(Suppl.): 292-99, 1997.
6. Griep, R.B., Ergin, M.A., McCullough, J.N., **Nguyen, K.H.**, Juvonen, T., Chang, N., and Griep, R.B.: Use of hypothermic circulatory arrest for cerebral protection during aortic surgery. *J. Cardiac Surg* 2(Suppl.): 312-21, 1997.
7. Juvonen, T., Ergin, M.A., Galla, J.D., Lansman, S.L., **Nguyen, K.H.**, McCullough, J.N., Levy, D., De Asla, R.A., Bodian, C.A., and Griep, R.B.: A prospective study of the national history of thoracic aortic aneurysms. *Annals of Thoracic Surg* 63: 1533-45, 1997
8. Davies, M.J., **Nguyen, K.H.**, Gaynor, J.W., and Elliott, M.J.: Modified ultrafiltration improves left ventricular systolic function in infants after cardiopulmonary bypass. *J. Thorac Cardiovasc Surg* 115: 361-370, 1998.
9. Blaufox, A.D., Lai, W.W., Lopez, L., **Nguyen, K.H.**, Griep, R.B., and Parness, I.A.: Survival in neonatal biventricular repair of left-sided cardiac obstructive lesions associated with hypoplastic left ventricle: *Amer. J. of Card* 82: 1138-1140, 1998.
10. Spitz, L., Kimber, C., **Nguyen, K.H.**, Yates, R., and de Leval, M.: Perforation of the heart by a swallowed open safety-pin in an infant. *J. R. Coll. Surg. Edinb*, 43(2): 114-6, 1998.
11. Rossi, A.F., Seiden, H.D., Sadeghi, A.M., **Nguyen, K.H.**, Quintana, C.S., Gross, R.P., and Griep, R.B.: The outcome of cardiac operations in infants weighing two kilograms or less. *J. Thorac Cardiovasc Surg*, 116(1): 28-35, 1998.
12. Juvonen, T., Ergin, M.A., Galla, J.D., Lansman, S.L., McCullough, J.N., **Nguyen, K.H.**, Bodian, C.A., Ehrlich, M.P., Spielvogel, D., Klein, J.J., and Griep, R.B.: Risk Factors for Rupture of Chronic Type B Dissections. *J. Thorac Cardiovasc Surg*, 117: 776-86 - April 1999.

14. Lansman, S.L., McCullough, J.N., **Nguyen, K.H.**, Spielvogel, D., Klein, J.J., Galla, J.D., Ergin, M.A., and Griep, R.B.: Subtypes of Acute Aortic Dissections. *Ann Thorac Surg*, 67: 1976-79, June 1999.
15. Griep, R.B., Ergin, M.A., Galla, J.D., Lansman, S.L., McCullough, J.N., **Nguyen, K.H.**, Klein, J.J., and Spielvogel, D.: Natural History of Descending Thoracic and Thoracoabdominal Aneurysms. *Ann Thoracic Surg*, 67: 1927-1930 - June 1999.
16. Galla, J.D., Egin, M.A., Lansman, S.L., McCullough, J.N., **Nguyen, K.H.**, Spielvogel, D., Klein, J.J., and Griep, R.B.: Use of Somatosensory Evoked Potentials for Thoracic and Thoracoabdominal Aortic Resections. *Ann Thorac Surg*, 67: 1947-52 - June 1999.
17. Lansman, S.L., McCullough, J.N., **Nguyen, K.H.**, Spielvogel, D., Klein, J.J., Galla, J.D., Ergin, M.A., and Griep, R.B.: Subtypes of Acute Aortic Dissections. *Ann Thorac Surg*, 67: 1976-79, 1999.
18. **Nguyen, K.H.**: Congenital Heart Surgery Database and Nomenclature Project: Aortic Valve Disease. *Ann Thorac Surg*, 69: S118-31 - 2000.
19. Lai, W.W., Ravishankar, C., Gross, R.P., Kamenir, S.A., Lopez, L., **Nguyen, K.H.**, Griep, R.B., Parness, I.A.: Juxtaposition of the Atrial Appendages: A Clinical Series of 22 Patients. *Pediatr Cardiol* 22: 121-127 - 2001.
20. Nielsen J.C., Seiden H.S., **Nguyen, K.H.**, Vlahakis, S.A., and Ravishankar, C.: Extracorporeal Membrane Oxygenation for Pneumonitis after a Glenn Palliation. *Perfusion*, 17(6): 457-8 November 2002.
21. **Nguyen, K.H.**, Strauch, J.T., Srivastava, S., Lauten, A., Haldenwang, P., Zhang, N., Vlahakis, S.A., and Adams, D.H.: Orthotopic mitral valve replacement using autologous pulmonary valve. *J Thorac Cardiovasc Surg*. 2004 May;127(5):1527-9
22. McMurtry, K., Srivastava, S., and **Nguyen, K.H.**: Description of a new technique for re-implanting the anomalous right pulmonary artery. *Ann Thorac Surg*, 76(2) 628-30 - 2003.
23. **Nguyen, K. H.**: Repair of Anomalous Origin of Right Pulmonary Artery From Ascending Aorta: Double Trap-Door or Double-Flap, *Ann Thorac Surg*, 80(3):1160 - September 2005
24. Khan, S., Gelb, B., **Nguyen, K. H.**, Evaluation of Pulmonary Artery Banding in the Setting of Ventricular Septal Defects and Severely Elevated Pulmonary Vascular Resistance. *Congenital Heart Dis* 2006;1:244-250
25. Wu Ih., **Nguyen K.H.**, Redirection of hepatic drainage for treatment of pulmonary arteriovenous malformations following the Fontan procedure. *Pediatr Cardiol* 2006,27:519-522.

26. Katz, J., Chakracarti, S., Lytrivi, I., Ko, H., Srivastava, S., Lai, W., Parness, I., **Nguyen, K.H.**, J. Nielsen. Common Origin of the Inominate and Carotid Arteries: Prevalence, Nomenclature and Surgical Implications. J Am Soc Echocardiogr, 2006 Dec; 19(12):1446-8.
27. Ramaswamy P., Lytrivi I., **Nguyen K.H.**, Gelb B., Neonatal Marfan Syndrome: In Utero Presentation with Aortic and Pulmonary Artery Dilatation and Successful Repair of An Acute Flail Mitral Valve Leaflet in Infancy. Pediatr Cardiol. 2006 Nov-Dec; 27(6): 763-5.
28. Mittnacht A., Joashi U., **Nguyen K.**, Chin C., Srivastava S., Hollinger H., Continuous Positive Airway Pressure and Lung Separation during Cardiopulmonary Bypass to Facilitate Congenital Heart Surgery via the Right Thorax in Children. Pediatric Anesthesia. 2007, 17:693-696
29. **Nguyen K.**, Chin C, Lee D S , Mittnacht A, Srivastava S, Umesh J , Walker S, Adams D. The Axillary Incision: A Cosmetic Approach in Congenital Cardiac Surgery. J Thorac Cardiovasc Surg. 2007. November, 134(5):1358-60.
30. Profitlich L., Weismann C., Srivastava S., Gelb B., **Nguyen K.**, Joashi U., Multiple Thoracic Aortic Aneurysms Following Mediastinitis in an Infant after Repair of Coarctation of the Aorta. J Thoracic Cardiovasc Surg 2008. February, 135(2):444-5,445.e1.
31. Mittnacht AJ, Wax DB, Srivastava S, **Nguyen K.**, Joashi U. Development and implementation of a pediatric cardiac anesthesia/intensive care database. Semin Cardiothorac Vasc Anesth. 2008 Mar;12(1):12-7
32. Mittnacht AJ, Thanjan M, Srivastava S, Joashi U, Bodian C, Hossain S, Kin N, Hollinger I, **Nguyen K.** Extubation in the operating room after congenital heart surgery in children. J Thorac Cardiovasc Surg. 2008 Jul;136(1):88-93. Epub 2008 May 27.
33. **K Nguyen.** A technique for implanting outflow cannulas for Excor Berlin Heart ventricular assist device in small pediatric patients. J Thorac Cardiovasc Surg. 2011.July;142(1):223-224.
34. Kin N, Weismann C, Srivastava S, Chakravarti S, Bodian C, Hossain S, Krol M, Hollinger I, **Nguyen K.**, Mittnacht AJ. Factors Affecting the Decision to Defer Endotracheal Extubation After Surgery for Congenital Heart Disease: A Prospective Observational Study. Anesth Analg 2011 Apr 13.
35. Mahadin Dr, Srivastava S, Parness IA, **Nguyen K.**, Walsh RF, Geiger MK, Nielsen JC. Outcomes of mitral regurgitation associated with large ventricular septal defect and a normal mitral valve apparatus. Does intact atrial septum have an impact? Pediatric Cardiology (Epub April 2011.

EMEDICINE PUBLICATIONS:

1. Corrected Transposition of the Great Arteries: Surgical Perspective: Prema Ramaswamy, M.D., **Khanh Nguyen, M.D.**, eMedicine Journal - December 9 2005, VOLUME 6, Number 12.
2. Pulmonary Artery Banding. Mark Plunkett, M.D., Hillel Laks, M.D., **Khanh Nguyen, M.D.** eMedicine Journal - February 28 2005, VOLUME 6, Number 2.
3. Organ Procurement. Mary Mancini, M.D., Ph.D., **Khanh Nguyen, M.D.**, eMedicine Journal December 31 2005, VOLUME 6, Number 12.

SURGICAL MISSIONS ABROAD

Pediatric Cardiac Surgery Mission to Shenyang, China – October 1998.
Set up and assist ShenYang Chest Hospital for Pediatric Open Heart Surgery.
Performed successful 12 pediatric heart surgeries.

Pediatric Cardiac Surgery Mission to Cluj, Romania – May 2000.
As part of Humana Mission Program to Eastern Block Nation. Performed
14 pediatric cardiac operations including atrial switch and Fontan operation.

Pediatric Cardiac Surgery Mission to Cluj, Romania – May 2001.
Continuation of the above with more complex pediatric open heart surgery.
Also utilized cardiac catheterization for preoperative evaluation.

Pediatric Cardiac Surgery Mission to Cluj, Romania – January 2004.
Performed 12 complex pediatric open heart surgeries, included TOF-canal repair,
Arterial switch operation, Ross procedure, Fontan procedure in infants and children.

Pediatric Cardiac Surgery Mission to Hue, Vietnam - January 2006.
Donated surgical equipments to Hue Central Hospital. Provided didactic lectures
to local surgeons and performed successfully 16 operations in infants and children.

Pediatric Cardiac Surgery Mission to San Pedro Sula, Honduras. 11/9/ 2007.
17 open heart surgeries in infant and children.

Pediatric Cardiac Surgery Mission to Hue, Vietnam - January 2009.
Donated surgical equipments to Hue Central Hospital.
Performed successfully 15 operations in infants and children including
Mitral valve repair and arterial switch operation

INVITED LECTURES/PRESENTATIONS/TEACHING FILMS

Primary Sarcoma of Pulmonary Artery: Pulmonary Artery Reconstruction and Pneumonectomy
The American College of Surgeons Motion Picture Exhibition, 74th Clinical Congress
San Francisco, California - October 1996

Therapy for Pulmonary Atresia and Major Aortopulmonary Collaterals
Medical Grand Rounds Great Ormond Street Hospital, London, UK - November 1995

Indication for Left Ventricular Assist Device and Intra Aortic Balloon Pump
Neonatal and Adult Critical Care Seminar. Great Ormond Street Hospital, London,
UK - January 1996

Surgical and Medical Options in the Management of Supraventricular Tachycardias
Mount Sinai Medical Center
New York, New York - April 1998

Surgical Treatment of Constrictive Pericarditis
Mount Sinai Hospital
New York, New York - October 1997

Aortic Stenosis, Aortic Insufficiency, IHSS
Symposium on Nomenclature and Database Issues
O'Hare Hyatt Hotel
Chicago, Illinois - September 1998

Surgery in Congenital Cardiac Disease
Pediatric Cardiology Symposium, Maimonides Medical Center
New York, New York - April 2001

Current Therapy on Congenital Cardiac Disease
Vietnamese Physician Association Conference
New Jersey - August 2001

Congenital Cardiac Surgery
Queens Hospital Center/Dept. of Pediatrics
Pediatrics Grand Rounds
New York, New York - May 2002

Surgery for Left-sided Obstruction
Mount Sinai Medical Center
New York, New York - June 2002

Mount Sinai Medical Center
Cardiac Transplantation in Children
New York, New York - May 2003

Recent Advances in Pediatric Cardiac Surgery
Pediatric Cardiology Symposium
Maimonides Medical Center
New York, New York - November 2003

Pediatric Cardiac Surgery

Pediatric Grand Rounds
Mount Sinai Medical Center
New York, New York - November 2005

Techniques and Indications in Pediatric Cardiac Surgery

As part of the medical mission to Central Hospital
Hue, Vietnam - January 2006

Current Issues in Congenital Cardiac Surgery

Pediatric Grand Rounds
St Joseph Children's Hospital
Paterson, New Jersey. September 2006

The Axillary Incision in Congenital Cardiac Surgery

New York Society for Thoracic Surgery
New York, New York. April 2007

Pediatric Cardiac Surgery: Lessons to learn in medical missions to third world countries

Vietnamese American Medical Association National Convention.
Atlanta, Georgia. 11/4/ 2007

Basic Science Lecture, General Surgery Residency program

Moderator
Mount Sinai Medical Center , yearly since 2008

Issues in Congenital Cardiac Defects and Corrective Surgery

The 1st Annual Alfiero & Lucia Palestroni Birth Defects Center Educational Symposium
Stony Hill Inn, Hackensack, NJ
June 5, 2008.

Pediatric Cardiac Surgery Mission

Cardiothoracic Surgery Department grand round
Mount Sinai Medical Center. June/3/2009

Hybrid Procedures in Pediatric Cardiac Surgery

Pediatric Grand Rounds
St Joseph Children's Hospital
Paterson, New Jersey. Feb 2011

Congenital Cardiac Surgery: An Evolution

Obstetrics & Gynecology Department Grand Rounds
Lennox Hill Medical Center
New York, New York. November 2011.

NATIONAL & INTERNATIONAL MEETING PRESENTATIONS

Frater, R. and **Nguyen, K.H.**: Stentless Mitral Valve Bioprosthesis. Presented at the Society of Thoracic Surgeons, San Antonio, TX - 1993.

P. Trigo, M.D., M. Thanjan, M.D., C. Bodian, Ph.D., **K. Nguyen**, M.D., A. Mittnacht, M.D. Transient respiratory depression following extubation in the operating room after congenital heart surgery. ESA annual meeting 4/ 2006 Madrid

Mittnacht AJC, Thanjan M, Hossain S, **Nguyen K**, Hollinger I.: Rapid operating room extubation after congenital heart disease surgery in children. ASA annual meeting 2006 Chicago poster presentation on 10/18/2006 (Anesthesiology 2006;105:AI 709)

MittnachtAJC, Joashi U., Bodian C, **Nguyen K**, Hollinger I.: Incidence and time course of transient respiratory depression following extubation in the operating room after congenital heart surgery. PGA 2006, poster presentation on 12/9/2006

Barry Love , Shubhika Srivastava , **Khanh Nguyen** , Protean “off-label” uses of the Amplatzer Duct Occluder and Amplatzer Septal Occluder :.PICS: World Congress, Buenos Aires 2006

Shubhika Srivastava, Umesh Joashi, **Khanh Nguyen**, Alexander Mittnacht. Age, weight, and weight percentile influence immediate extubation in the operating room following surgery for congenital heart diseases in infants. 25th Annual Symposium: Clinical Update in Anesthesiology, Surgery, and Perioperative Medicine. 1/16/2007:

J. Katz, S. Chakravarti, A. Mittnacht, **K. Nguyen**, U. Joashi, B. Love, S. Srivastava. Optimal Sites for the Assessment of Global Tissue Perfusion Using Near Infrared Spectroscopy in Children Following Cardiac Surgery. (2nd Prize abstract competition) 25th Annual Symposium: Clinical Update in Anesthesiology, Surgery, and Perioperative Medicine. 1/16/2007

S. Chakravarti, J. Katz, A. Mittnacht, **K. Nguyen**, U. Joashi, B. Love, S. Srivastava. Near infrared spectroscopy predicts hyperlactatemia in children following cardiac surgery. 56th Annual Scientific Session of the American College of Cardiology, March 2007.

S. Chakravarti, J. Katz, , A. Mittnacht, **K. Nguyen**, U. Joashi,, B. Love, S. Srivastava. Near Infrared Spectroscopy Predicts Blood Lactate Level in Children Following Cardiac Surgery. Eastern Society for Pediatric Research Annual Meeting, April 2007, and Pediatric Academic Societies Annual Meeting, May 2007.

S. Chakravarti, J. Katz, A. Mittnacht, **K. Nguyen**, U. Joashi, B. Love, S. Srivastava. Near infrared spectroscopy predicts intra-operative hyperlactatemia in congenital heart surgery. 5th World Congress on Pediatric Critical Care, June 2007.

J. Katz, S. Chakravarti, A. Mittnacht, **K. Nguyen**, U. Joashi, B. Love, S. Srivastava. Arterial pH is an important determinant of cerebral oxyhemoglobin saturation 5th World Congress on Pediatric Critical Care, June 2007.

BA Love , L. Profitlich, **K.Nguyen** . Making periventricular closure of an apical muscular VSD a “cinch” International Symposium on the Hybrid Approach to Cardiology, May 2008

K. Nguyen. Repair of an Atrial Septal defect using an Axillary Incision. Video presentation Congenital Heart Surgeon Society and The European Congenital Heart Surgeon Association Meeting . Warsaw, Poland. Sept 2008.

K. Nguyen. Norwood/Sano repair in a patient with hypoplastic left heart syndrome using antegrade cerebral perfusion. Video presentation . Congenital Heart Surgeon Society Chicago Nov 2009.

K. Nguyen. A preliminary report in the application of an extra-cellular matrix patch in congenital cardiac surgery. Congenital Heart Surgeon Society Chicago Nov 2009.

K.Nguyen. The Right Axillary Incision as the Optimal Approach in the Repair of A Sinus Venosus ASD. Congenital Heart Surgeon Society Chicago Nov 2010.

K.Nguyen. The Axillary Incision for Congenital Cardiac Surgery, Techniques and Applications. 3rd Vietnam National Congress of Cardiovascular and Thoracic Surgery. Hue, Vietnam. Dec 2010.

K Nguyen. Chairperson, Congenital Cardiac Surgery Session, 3rd Vietnam National Congress of Cardiovascular and Thoracic Surgery. Hue, Vietnam. Dec 2010.

Mahadin Dr, Srivastava S, Parness IA, **Nguyen K**, Walsh RF, Geiger MK, Nielsen JC. Outcomes of mitral regurgitation associated with large ventricular septal defect and a normal mitral valve apparatus. Does intact atrial septum have an impact? 15th Annual Update on Pediatric and Congenital Cardiovascular Disease, Scottsdale, Arizona. February 2-6th, 2011.

GUEST REVIEWER

The Annals of Thoracic Surgery

The Journal of Thoracic and Cardiovascular Surgery

Congenital Heart Disease

European Journal of Cardio-Thoracic Surgery