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CURRICULUM VITAE

GIDEON KOREN

Rhode Island Hospital,
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Education:

1969-1977	M.D., Hebrew University, Hadassah Medical School, Jerusalem, Israel

Postdoctoral Training:

Internships and Residencies:

1976-1977	Rotating Internship, Hadassah Medical Center, Jerusalem
1981-1982	Residency Program, Department of Medicine A, Hadassah Medical Center, Jerusalem

Fellowships:

1983-1985	Fellow in Cardiology, Department of Cardiology, Hadassah Medical Center, Jerusalem
1985-1987	Research Fellow in Pediatrics, Harvard Medical School, Boston
1985-1989	Research Fellow, (Molecular Biology), Department of Cellular and Molecular Physiology and the Department of Cardiology, Children's Hospital

Postgraduate Honors and Awards:

1969-1976	Prizes for "excellence in studies", Hebrew University, Hadassah Medical School
1976	Elected class representative for medical student exchange program, Mount Sinai School of Medicine, New York
1978	Faculty Prize for M.D. Thesis: "Semiquantitative determination of liver specific antigens in the urine of rats with toxic hepatic necrosis"
1985-1987	Fogarty International Fellow
1985-1987	Fulbright Scholar
1987-1988	Bugher Fellow
1989	Milton Award
1994-1999	American Heart Association Established Investigator Award
1995	Ad hoc Reviewer - Program Project Review Committee, NHLBI
2006-2010	Member of the ESTA NIH Study Section

Military Service:

1977-1978	I.D.F. - Physician of a Tank Regiment
1979-1980	I.D.F. - Director of the training course for military physicians
1980-1981	I.D.F. - R & D
1981-1985	I.D.F. - Chief Physician of a Tank Brigade

Professional Licenses and Board Certification:

1977	Israel License Registration
1983	Israel Board of Internal Medicine (Part A)
1984	Israel Board of Cardiology (Part A)
1985	Israel Board of Cardiology (Part B)
1988	Massachusetts License 59321
2003	Board eligible in Internal Medicine, Special Pathway
2006	Rhode Island License

Academic Appointments:

1982-1985	Instructor in Medicine, Hebrew University Hadassah Medical School, Jerusalem
1985-1987	Lecturer in Medicine, (Cardiology), Hebrew University Hadassah Medical School, Jerusalem
1987-1988	Instructor in Medicine, Harvard Medical School, Boston
1988-2001	Assistant Professor of Medicine, Harvard Medical School, Boston
2001-2005	Associate Professor of Medicine, Harvard Medical School, Boston
2005-	Professor of Medicine, Brown University Medical School

Hospital Appointments:

1986-1987	Staff Physician, Department of Cardiology, Hadassah Medical Center, Jerusalem
1987-2005	Associate Physician, Brigham and Women's Hospital

Other Appointments:

1989-2005	Director, Bioelectricity laboratory
1991-1994	Member of Research Peer Review Committee, American Heart Association, Massachusetts Affiliate
1993-1997	Member of Research Peer Review Committee, American Heart Association, Dallas, Texas
1996	Ad hoc Reviewer - Charles Hood Foundation
1998-2001	Member of Cellular Cardiovascular Physiology & Pharmacology Study Section. AHA, Dallas, Texas.
1999-	AHA scientific session abstract selection committee
2000-	Ad hoc Reviewer – VA Merit Award

2001	Ad hoc Reviewer for NIH Study Sections (CVA and ESTA)
2004	Program Committee, Gordon Research Conference
2006	Dean's Taxonomy Committee
2006-	BCC Steering Committee

Hospital Committees:

2000-2001	Internal Review Board, BWH/Partners
2005-	Director of CVRC, RIH, Brown University Medical School

Membership in Societies:

American Association for the Advancement of Science
American Heart Association - Council of Basic Science
Biophysical Society
North American Society for Pacing and Electrophysiology

Original Publications in Peer-Reviewed Journals:

1. Koren G. Semiquantitative determination of liver specific antigens in the urine of rats with toxic hepatic necrosis. M.D. Thesis, Department of Pathology, Hadassah Medical School, Jerusalem, 1976.

2. Boss JH, Koren G, Rosenmann E. Semiquantitative determination of liver specific antigens in the urine of rats with toxic necrosis. Acta Hepatogastroenterology 1979; 26(61):457-462.

3. Gross DJ, Braverman A, Koren G, Rabinowitz SY, Gordon R, Okon E. Functional asplenia in immunoblastic lymphoma. Arch. Intern. Med. 1982; 142:2213-2215.

4. Halon DA, Koren G, Kriwisky M, Appelbaum A, Gotsman MS. Constrictive pericarditis following coronary artery bypass grafting in a patient with asymptomatic pericardial disease. Cardiology 1983; 70:280-283.

5. Zylber-Katz E, Koren G, Granit L, Levy M. Bioavailability of nifedipine, a comparison between two preparations. Biopharmacol. Drug Dispos. 1984; 5:109-115.

6. Koren G, Appelbaum D, Hasin Y, Weiss AT, Mosseri M, Lotan H, Rozenman Y, Ben David Y, Freiman I, Gotsman MS. Intravenous infusion of streptokinase in acute myocardial infarction. Harefuah 1985; 108:573-576.

7. Koren G, Weiss AT, Hasin Y, Applebaum A, Rozenman Y, Welbe S, Lotan C, Mosseri M, Saoznikov D, Luria H, Gotsman MS. Prevention of myocardial damage by very early treatment with intravenous streptokinase. New Engl. J. Med. 1985; 313:1384-1389.

8. Koren G, Hasin Y. Orthostatic induced ventricular tachycardia in a patient with long QT syndrome. Harefuah 1985; 109:230-232.

9. Koren G, Okon E, Zlotnick A. Coexistence of Kaposi's Sarcoma and chronic lymphocytic leukemia in the same lymph node. Acta Haematol. 1985; 74:234-235.

10. Koren G, Polachek I, Kaplan H. Invasive mucormyocosis in a non-immuno-compromised host. J. Infection 1986; 12:165-167.

11. Koren G, Zylber-Katz E, Levy M. Pharmacokinetic studies of nifedipine and digoxin co-administration. Clin. Pharmacol. Ther. Toxicol. 1986; 24:39-42.

12. Koren G, Weiss AT, Ben David Y, Hasin Y, Luria MH, Gotsman MS. Bradycardia and hypotension following reperfusion with streptokinase (Bezold-Jarisch reflex) - a sign of coronary thrombolysis and myocardial salvage. Am. Heart J. 1986; 112:462-471.

13. Fine GD, Weiss AT, Welber S, Sapoznikov D, Applebaum D, Lotan C, Hasin Y, Ben David Y, Koren G, Gotsman MS. Importance of early initiation of intravenous streptokinase for first acute myocardial infarction. Am. J. Cardiol. 1986; 58:411-417.

14. Koren G, Luria MH, Weiss AT, Kriwisky M, Mosserri M, Lotan C, Applebaum D, Welber S, Sopozmikov D, Ben David Y, Hasin Y, Gotsman MS. A high risk syndrome following early treatment of acute myocardial infarction with intravenous streptokinase. Arch. Intern. Med. 1987; 147:237-240.

15. Izumo I, Lompre AM, Matsuoka R, Koren G, Schwartz K, Nadal-Ginard B, Mahdavi V. Myosin heavy chain mRNA and protein isoform transitions during cardiac hypertrophy. J. Clin. Invest. 1987; 79:970-977.

16. Koren G, Liman ER, Logothetis DE, Nadal-Ginard B, Hess P. Gating mechanism of a cloned K^+ channel expressed in frog oocytes and mammalian cells. Neuron 1990; 4:39-51.

17. Matsubara H, Liman ER, Hess P, Koren G. Pre-translational mechanisms determine the type of potassium channels expressed in the rat skeletal and cardiac muscles. J. Biol. Chem. 1991; 266:13324-13328.

18. Liman ER, Hess P, Weaver FW, Koren G. Voltage gating of a mammalian K^+ channel. Nature 1991; 353:752-756.

19. Mori Y, Matsubara H, Folco E, Siegel A, Koren G. The transcription of a mammalian potassium channel is regulated by cAMP in a cell-specific manner. J. Biol. Chem. 1993; 268:26482-26493.

20. Babila T, Moscucci A, Wang H, Weaver FW. Koren G. Assembly of mammalian voltage-gated K^+ channels: evidence of a critical role for the first transmembrane domain. Neuron 1994; 12:615-626.

21. Babila T, A, Wang H, Waver FW. Koren G. Assembly of mammalian voltage-gated K^+ channels: evidence of a critical role for the first transmembrane domain. Neuron (Correction) April 1, 1996.

22. Levy AP, Levy NS, Loscalzo J, Calderone A, Takahashi N, Yeo K-T, Koren G, Colucci WS, Goldberg MA. Regulation of vascular endothelial growth factor in cardiac myocytes. Circ. Res. 1995; 76:758-766.

23. Mori Y, Folco E, Koren G. GH3 cell-specific expression of Kv1.5 gene. Regulation by a silencer containing a dinucleotide repetitive element. J. Biol. Chem. 1995; 270:27788-27796.

24. Folco E, Mathur R, Mori Y, Buckett P, Koren G. A cellular model for long QT syndrome: trapping of heteromultimeric complexes consisting of truncated Kv1.1 potassium channel polypeptides and native Kv1.4 and Kv1.5 channels in the endoplasmic reticulum. J. Biol. Chem. 1997; 272:26505-26510.

25. Folco E, Koren G. Degradation of the inducible cAMP repressor (ICER) by ubiquitin proteasome pathway. Biochem. J. (London) 1997; 328:37-43.

26. Mitchell G.F, Jeron A, Koren G. Measurement of heart rate and QT interval in the conscious mouse. American Journal of Physiology 1998; 274: H747-H751.

27. London B, Jeron A, Zhou J, Buckett P, Han X, Mitchell G.F, Koren G. Long QT and ventricular arrhythmias in transgenic mice expressing the N-terminus and first transmembrane segment of a voltage-gated potassium channel. Proc. Natl. Acad. Sci. 1998; 95: 2626-2931.

28. Zhou J, Jeron A, London B, Han X, Koren G. Characterization of a slowly inactivating outward current in adult mouse ventricular myocytes. Circulation Research 1998; 83:806-814.

29. Mathur R, Zhou J, Babila T, Koren G. Ile177 and Ser180 in the S1 segment are critically important in Kv1.1 function. J. Biol. Chem. 1999; 274:11487-11493.

30. Valverde P, Koren G. Purification and preliminary characterization of a Kv1.5 repressor element binding factor. Circulation Research 1999; 84:937-944.

31. Baker LC, London B, Chio BR, Koren G, Salama G. Enhanced dispersion of repolarization and refractoriness in transgenic mice hearts promotes reentrant ventricular tachycardia. Circulation Research 2000; 86: 396-407.

32. Jeron A, Mitchell GF, Zhou J, Murata M, London B, Buckett P, Wiviott SD, Koren G. Inducible polymorphic ventricular tachycardia in a transgenic mouse model with a long QT phenotype. American Journal of Physiology 2000; 278: H1891-H1898.

33. Brunner M, Guo W, Mitchell GF, Buckett P, Nerbonne J, Koren G. Characterization of mice with a combined suppression of I_{to} and $I_{K,slow}$. American Journal of Physiology 2001; 281: H1201-H1209.

34. Murata M, Buckett P, Zhou J, Brunner M, Folco E, Koren G. SAP97 Interacts with Kv1.5 in Heterologous Expression Systems. American Journal of Physiology 2001; 281: H2575-H2584.

35. Zhou J, Kodirov S, Murata M, Buckett P, Nerbonne JM, Koren G. Apical upregulation of Kv2.1-encoded current, $I_{k,slow2}$ in Kv1DN mice is abolished by crossbreeding with Kv2DN mice. American Journal of Physiology 2003; 284: H491-H500.

36. Brunner M, Kodirov S, Mitchell G, Buckett P, Shibata K, Folco E, Baker L, Salama G, Chan D, Zhou J, Koren G. In vivo gene therapy of Kv1.5 normalizes action potential duration and shortens QT interval in mice with Long QT phenotype. American Journal of Physiology 2003; 285: H194-H203.

37. Pang L, Koren G, Wang Z, Nattel S. Tissue-specific expressions of two human $Ca_v1.2$ isoforms under the control of distinct 5'-flanking regulatory elements. FEBS Letters 2003; 543:349-354.

38. Kodirov SA, Brunner M, Busconi L, Koren G. Long-term restitution of 4-aminopyritidine-sensitive currents in Kv1DN ventricular myocytes using adeno-associated virus-mediated delivery of Kv1.5. FEBS Letters 2003; 550: 74-78.

39. Folco EJ, Roder K, Mitchell GF, Koren G. "Cardiac Memory" a struggle against forgetting (Editorial). Circ. Research, 2003; 93: 384-386.

40. Kodirov SA, Brunner M, Nerbonne JM, Buckett P, Mitchell G, Koren G. Attenuation of $I_{K,slow1}$ and $I_{K,slow2}$ in Kv1DN mice prolongs the APD and QT intervals but does not prevent spontaneous or inducible arrhythmias. American Journal of Physiology 2004; 286: H368-374.

41. Liu G-X, Zhou j, Nattel S, Koren G. Single-channel recordings of a rapid delayed rectifier current in adult mouse ventricular myocytes: basic properties and effects of divalent cations. J Physiology (London) 2004; 556: 401-413.

42. Folco E, Liu G-X, Koren G. Caveolin-3, Kv1.5 and SAP97 form a tripartite protein complex that regulates channel function, American Journal of Physiology 2004; 287(2): p. H601-H607.

43. Roder K, Koren G. The K+ channel gene, Kcnb1: genomic structure and characterization of its 5'-regulatory region as part of an overlapping gene group. Biological Chemistry 2006; In Press.

Other Peer-Reviewed Publications:

1. Nadal-Ginard B, Breitbart RE, Andreadis A, Gallego M, Yu Y-T, Koren G, White G, Bouvagnet P, Mahdavi V. Generation of complex contractile protein phenotypes through promoter selection and alternative pre-mRNA splicing. In: Advances in Gene Technology: The Molecular Biology of Development. Voellmy RW, Ahmad F, Black S, Burgers DR, Rotundo R, Scott WA, Whelan WJ (eds). ICSU Short Reports, 1987; 7:62-63.

2. Nadal-Ginard B, Gallego M, Andreadis A, Breitbart RE, Yu Y-T, Koren G, White G, Bouvagnet P, Endo T, Izumo S, Mahdavi V. A very complex sarcomeric contractile phenotype is produced through developmentally regulated promoter selection and alternative pre-mRNA splicing. In: Molecular Neuroscience: Expression of Neural Genes. Wong F, Eaton D, Konkel D, Perez-Polo JR (eds). New York: Alan R. Liss, Inc., 1987, pp 41-50.

3. Nadal-Ginard B, Gallego M, Andreadis A, Breitbart RE, Yu Y-T, Koren G, White GE, Bouvagnet P, Endo T, Mahdavi V. Promoter selection and alternative pre-mRNA splicing are used to generate complex contractile protein phenotypes. In: Calcium Binding Proteins in Health and Disease. Means AR, Norman AW, Vanaman TC (eds). 1987.

4. Mahdavi V, Koren G, Michaud S, Pinset C, Izumo S. Identification of the sequences responsible for the tissue-specific and hormone regulation of the cardiac myosin heavy chain genes. In: Cellular and Molecular Biology of Muscle Development. Stockdale F, Kedes L (eds). UCLA Symposia on Molecular and Cellular Biology, New Series. Vol. 93, New York: Alan R. Liss, Inc., 1988, pp 369-379.

5. Koren G. Electrical Remodeling and Arrhythmias in Long QT Syndrome: Lessons from Genetic Models in Mice (Review). Ann Med (Helsinki), 2004;36 Supp 1:22-7.

Seminars and Invited Symposia:

"Long QT and ventricular arrhythmias in transgenic mice expressing the N-terminus and first transmembrane segment of a voltage-gated potassium channel". Cardiovascular Grand Round. Krannert Institute of cardiology, Indianapolis, August 97.

Brigham/UCSD/Genentech Cardiovascular Symposium. Discussant in session 2: "Genetically engineered mouse models". Boston, October 4-5, 97.

"Long QT and ventricular arrhythmias in transgenic mice expressing the N-terminus and first transmembrane segment of a voltage-gated potassium channel". Bristol-Myers-Squibb Research Institute. NJ, October 16, 97.

Visiting Scientist, Department of cardiology, University of Freiburg Medical School. Germany, October 22-25, 97.

Moderator, AHA Session: Control of Gene Expression. AHA meeting, Orlando, Florida, November 97.

"A transgenic mouse model with prolonged QT interval: evidence for the interference with the assembly of voltage-gated potassium channels", Dep. Of Medicine, MetroHealth Medical center, Case Western Reserve University, Cleveland, June 9, 98

Visiting Scientist, Department of Cardiology, University of Freiburg Medical School. Freiburg, Germany, June 16-18, 98.

"Molecular manipulation in assessing the arrhythmogenic impact of a prolonged repolarization process". From molecules to men - molecular basis of congenital cardiovascular disorders. Gargallen, Austria, June18-21, 98.

"Cardiac Kv channels: assembly, trafficking and regulation of expression". Dep. Of Medicine, Vanderbilt University, Nashville, October 6, 98.

"Cardiac Kv channels: assembly, trafficking and regulation of expression". Dep. Of Pharmacology, University of Chicago, October 8, 98.

"Transcriptional regulation of cardiac voltage-gated potassium channels". Dep. Of Medicine and Vollum Institute, Oregon Health Science University, Portland Oregon, October 18, 1998.

"How to manipulate ion channel expression". Council on Basic Science. AHA meeting. November 11, 98.

"Models of sudden death in mice". NASPE Symposia entitled: "Prolonging survival in congestive heart failure-Basic aspects". Toronto, May 99.

International Congress on Chronobiology- Chair of Cardiovascular Chronobiology Symposium. Washington DC, September 99.

"Circadian variation in heart rate and QT-interval in conscious mice". International Symposium of Chronobiology. Washington DC, September 99.

Visiting Scientist, Department of Cardiology, University of Freiburg Medical School. Freiburg, Germany. October 12-17, 99.

"Ion channels assembly and transport". AHA Symposia entitled: "Insights into ion channels function". Atlanta, November 99.

Moderator, AHA Session: "Featured Research: Ion channels in normal and genetically altered mice". Atlanta, November 99.

"Cardiac Kv channels: assembly, trafficking and regulation of expression". Dep. Of Biomedical Engineering, Cardiac Bioelectricity Center, Case Western Reserve University, March 17, 2000.

"Cardiac Kv channels: assembly, trafficking and regulation of expression". Dep. Of Medicine, University of Regensburg, Regensburg, Germany, June 29, 2000.

Visiting Scientist, Department of Cardiology, University of Freiburg Medical School. Freiburg, Germany. July 1, 2000.

"Cardiac Kv channels: assembly, trafficking and regulation of expression". Dep. Of Medicine, University of Lyon, Lyon, France, July 3, 2000.

State-of-the-Art talk: Potassium Channels: Assembly, trafficking and expression, AHA Meeting New Orleans, November 15, 2000.

"Gene therapy for long QT models in mice". NASPE, Boston, MA, May 3, 2001.

"Transcriptional regulation of potassium channel genes". NASPE, Boston, MA, May 3, 2001.

"Potassium Channels: Transcription, trafficking and assembly of functional channels". Cardiac Grand Round. Dep. of Cardiology, MGH, Boston, May 9, 2001.

"Cardiac Kv channels". Pfizer, Groton CT May 11, 2001.

Potassium Channels in the mouse heart". Symposium on transgenic mice models. Gene therapy for long QT syndrome: lessons from transgenic mice models" Paris, France June 1, 2001

Visiting Professor, Case Western University Metro Health Medical center. "Gene therapy for long QT syndrome: lessons from transgenic mice models". Cleveland, September 3, 2001.

American Heart Association - Sunday Morning Symposium. New molecular motifs in arrhythmogenesis. "Depolarization abnormalities in model systems". November 2001, CA.

Cardiovascular Grand Round, "Gene therapy for long QT syndrome: lessons from transgenic mice models". BWH, Boston MA, February 7, 2002.

Research Seminar, "Gene therapy for long QT syndrome: lessons from transgenic mice models". Genzyme, Framingham MA, April 1, 2002.

Cardiovascular Grand Round, "Gene therapy for long QT syndrome: lessons from transgenic mice models". Cardiovascular Division, Mount Sinai Hospital, Miami, FL, April 17, 2002.

Visiting Professor, Montreal Heart Institute, University of Montreal, Montreal May 23, 2002

"Gene therapy for long QT syndrome: lessons from transgenic mice models". Cardiostim, Nice, France, June 22, 2002

"Gene therapy for long QT syndrome: lessons from transgenic mice models". INSERM Biarritz, France, October 2002

"Regulation of Kv1.5 expression by SAP97" AHA Chicago, November 2002

"Trafficking of Potassium Channels to Caveolae: Caveolin-3, Kv1.5 and SAP97 form a Tripartite Protein Complex that Regulates Channel Function". Madrid Spain, June 2003.

"Gene therapy for long QT syndrome: lessons from transgenic mice models". Gordon Conference on Arrhythmias. NH, USA, August 2003.

"Molecular Mechanism of Ion Channel regulation" Paavo Nurmi Foundation, Helsinki Finland August 2003.

"Gene therapy for long QT syndrome: lessons from transgenic mice models". Cardiology Grand Round, NYU Medical Center, NYC, March 2004.

"Trafficking of Potassium Channels to Caveolae: Caveolin-3, Kv1.5 and SAP97 form a Tripartite Protein Complex that Regulates Channel Function". Dep. Of Medicine, MetroHealth Medical center, Case Western Reserve University, Cleveland, March, 2004.

"Trafficking of Potassium Channels to Caveolae: Caveolin-3, Kv1.5 and SAP97 form a Tripartite Protein Complex that Regulates Channel Function". Dep. of Cell Biology, UMDNJ, Newark, April, 2004.

"Transcriptional Channelopathy". AHA, New Orleans, Nov 2004.

"Animal models of LQTS". Gordon Conference on Cardiac Arrhythmias CA, Feb 2005.

"Rabbit models for LQTS", 1st BCC symposium, Providence, Jan 2006.

"PDZ domain containing proteins", HRS, Boston, June 2006

Visiting Professor, Philips Cooperation, Eindhoven, Holland, June, 2006.

Grants:

1989	Milton Award (Harvard University)
1989-1992	AHA- Massachusetts Affiliate, Grant-in-Aid
1990-1993	AHA- Dallas, Grant-in-Aid
1991-1995	NIH - RO1, Gideon Koren PI, Heart and Muscle K+ channels: Assembly and regulation
1994-1999	AHA - Established Investigator Award
1996-2000	NIH-RO1, Gideon Koren PI, Heart and Muscle K+ channels: Assembly and Regulation
1996-1999	AHA - Grant-in-Aid (declined)
1999-2000	Joint Project with the University of Freiburg, Germany.
2000-2004	NIH RO1, Gideon Koren PI, Heart and muscles K+ channels: Assembly and regulation
2000-2004	NIH RO1, Gideon Koren PI, Trafficking and subcellular distribution of cardiac potassium channels

2004-2008	**NIH RO1, Gideon Koren PI, Trafficking and subcellular distribution of cardiac potassium channels.**
2005-2009	**NIH R01, Gideon Koren P.I, Heart and Muscle K+ Channels: Assembly and Regulation.**
2006-	**Predix, Gideon Koren Co-PI.**

Pending: **NIH Roadmap Grant, RIGAPB (Gideon Koren Co-PI).**
Cluster Grant to be submitted for October 1st deadline (Gideon Koren, PI).

University Teaching:

1984-1985	Organized seminars for the Department of Cardiology, Hadassah Medical School, Jerusalem.

Hospital Teaching:

1986-	Surgical Consult Service. 1 fellow 20hrs/week 4 weeks/year.
1987-	Surgical Consult Service. 1 fellow 20hrs/week 4 weeks/year.
1988-	Surgical Consult Service. 1 fellow 20hrs/week 4 weeks/year.
1989-	Surgical Consult Service. 1 fellow 20hrs/week 4 weeks/year.
1990-	Surgical Consult Service. 1 fellow 20hrs/week 4 weeks/year.
1991-	Cardiovascular services (Attending Physician) 1 resident, 2 interns and 2 students (HMS 3 and 4) 30 hrs/week 4 wks/year. Surgical Consult Service. 1 fellow 20hrs/week 4 weeks/year.
1992-	Cardiovascular services (Attending Physician) 1 resident, 2 interns and 2 students (HMS 3 and 4) 30 hrs/week 4 wks/year. Surgical Consult Service. 1 fellow 20hrs/week 4 weeks/year.
1993-	Cardiovascular services (Attending Physician) 1 resident, 2 interns and 2 students (HMS 3 and 4) 30 hrs/week 4 wks/year. Surgical Consult Service. 1 fellow 20hrs/week 4 weeks/year. Consult Service. 1 fellow 1 student (HMS 3 and 4) 20 hrs/week, 4 wks/year.
1994-	Cardiovascular services (Attending Physician) 1 resident, 2 interns and 2 students (HMS 3 and 4) 30 hrs/week 4 wks/year. Surgical Consult Service. 1 fellow 20hrs/week 4 weeks/year. Consult Service. 1 fellow 1 student (HMS 3 and 4) 20 hrs/week, 4 wks/year.
1995-	Cardiovascular services (Attending Physician) 1 resident, 2 interns and 2 students (HMS 3 and 4) 30 hrs/week 4 wks/year. Surgical Consult Service. 1 fellow 20hrs/week 4 weeks/year. Consult Service. 1 fellow 1 student (HMS 3 and 4) 20 hrs/week, 4 wks/year.

1996-	Cardiovascular services (Attending Physician) 1 resident, 2 interns and 2 students (HMS 3 and 4) 30 hrs/week 4 wks/year. Surgical Consult Service. 1 fellow 20hrs/week 4 weeks/year. Consult Service. 1 fellow 1 student (HMS 3 and 4) 20 hrs/week, 4 wks/year.
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1998-	Cardiovascular services (Attending Physician) 1 resident, 2 interns and 2 students (HMS 3 and 4) 30 hrs/week 4 wks/year. Surgical Consult Service. 1 fellow 20hrs/week 4 weeks/year.