

## Curriculum Vitae

**Name:** J. Philip Saul, MD

**Office Address:** 165 Ashley Ave, POBox 250915, Charleston, SC 29425

**Education** (Beginning with Baccalaureate Degree):

<u>Institution/Location</u>	<u>Years</u>	<u>Degree / Date</u>	<u>Field of Study</u>
Duke University	1974-1978	BS 06/78	Physics
Duke University Medical School	1978-1982	MD 06/82	Medicine

**Internship:**

(Place)	(Dates)
The Children's Hospital, Boston (Pediatrics)	1982-1983

**Residencies or Post Doctoral:**

(Place)	(Dates)
The Children's Hospital, Boston (Pediatrics)	1983-1984
The Children's Hospital, Boston (Clin.Fellowship, Cardiology)	1984-1985
Harvard Medical School (Fellow, Pediatrics)	1984-1987
The Children's Hospital, Boston (Res.Fellowship, Cardiology)	1986-1987
Children's Memorial Hosp, Chicago (Clin.Fellowship, Cardiac EP)	1987

**Specialty/Board Certification:** Pediatrics **Date:** 1987, 1995  
 Pediatric Cardiology 1988, 1995

**Faculty Appointments** (Begin with initial appointment):

<u>Years</u>	<u>Rank</u>	<u>Institution</u>	<u>Department</u>
1985-87	Visiting Scientist	Massachusetts Institute of Technology	
	Health Sci & Technology		
1987-89	Research Scientist	Massachusetts Institute of Technology	
	Health Sci & Technology		
1987-89	Instructor	Harvard Medical School	
	Pediatrics		
1989-94	Assistant Professor	Harvard Medical School	
	Pediatrics		
1989-97	Assistant Professor	Harvard-MIT Division of HST	
	Health Sci & Technology		
1994-97	Adjunct Professor	Boston University	
	Biomedical Engineering		
1994-97	Associate Professor	Harvard Medical School	Pediatrics
1997-	Professor (and Chief, Ped.Cardiol.)	Medical University of South Carolina	
	Pediatrics		
1997-	Professor	Medical University of South Carolina	Cell
	Biology & Anatomy		

**Hospital Appointments/Privileges:**

<u>Years</u>	<u>Active/Inactive</u>	<u>Institution</u>
1987-1991	X	Assistant in Cardiology, Children's Hospital, Boston
1987-1992	X	Massachusetts Institute of Technology Infirmary, Cambridge
1991-1994	X	Associate in Cardiology, Children's Hospital, Boston
1994-1997	X	Senior Associate in Cardiology, Children's Hospital, Boston
		Director, Cardiology Physiological Research Laboratories
1997-	X	Chief, Pediatric Cardiology, Medical University of South Carolina

1997-2001	X	Director, Cardiac Arrhythmia Service
1997-	X	Director, The Children's Heart Program of South Carolina
1998-	X	Consultant, Greenville Hospital Systems, Greenville, SC
1999-	X	Consultant, Roper Hospital, Charleston, SC
2000-	X	Consultant, Palmetto Baptist Hospital, Columbia, SC
2000- SC	X	Provisional Associate, Palmetto Richland Memorial Hospital, Columbia, SC
2001-	X	Consulting Staff, Carolinas Hospital System, Florence, SC
2001-	X	Medical Director, Children's Hospital at MUSC
2003-2004	X	Secretary Medical Staff, Medical University Hospital Authority
2004-2006	X	Vice President Medical Staff, Medical University Hospital Authority
2006-2008	X	President Medical Staff, Medical University Hospital Authority

**Membership in professional/scientific societies (include offices held):**

National Societies

1985-1987	Board of Directors, Longwood Symphony Orchestra
1986-	American Heart Association
1988-	Institute of Electrical and Electronic Engineers
1989-	Fellow, American College of Cardiology
1993-	Society for Pediatric Research
1993-	American Heart Association, Council on Heart Disease in the Young
1994-	American Heart Association, Council on Basic Science
1994-1996	American College of Sports Medicine
1997-	International Society for Holter & Noninvasive Electrocardiology
1998-	Chairman, Scientific Advisory Board, Boston Medical Technologies
2000-	Chairman, Medical Advisory Board, CliNETic
2000-	Scientific Advisory Board, The Heart of Pediatric Electrophysiology (HOPE)

Local Societies

1998-	Charleston County Medical Society
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Journal Peer Review

American Journal of Cardiology  
 American Journal of Physiology: Heart and Circulation, Respiratory, Regulation  
 Annals of Noninvasive Electrocardiology  
 Cardiovascular Research  
 Circulation  
 Circulation Research  
 Clinical Science  
 Early Childhood Development  
 Hypertension  
 IEEE Transactions on Biomedical Engineering  
 Journal Ambulatory Monitoring  
 Journal of the American College of Cardiology  
 Journal of Applied Physiology  
 Journal of the Autonomic Nervous System  
 Journal of Cardiovascular Electrophysiology  
 Journal of Hypertension  
 Journal of Physiology  
 Medical and Biological Engineering & Computing  
 New England Journal of Medicine  
 Pacing and Cardiac Electrophysiology (PACE)  
 Pediatrics

## Pediatric Research

### Abstract Review

American Heart Association, 1992-1995, 1997, 1999  
American College of Cardiology,  
NASPE, 1995, 1998-  
American Pediatric Society, 2000

### **Extramural Grants/award amount (current and past):**

#### As Principal Investigator (% time)

1986-1987	American Heart Assn. Training Grant - <b>PI</b> "Closed-Loop Evaluation of the Baroreceptor Reflex" (\$48,000)
1987-1989	NIH/Individual Research Fellowship, NRSA – <b>PI</b> (\$87,000)
1988-1994	Bristol-Myers Squibb - <b>PI</b> , "Investigational Use of d,l-sotalol for Refractory Supraventricular and Ventricular Arrhythmias in Children" (\$4,800)
1990-1995	NIH/KO8 - <b>PI</b> , "Short Term Modulation of Autonomic Function" (\$350,000)
1990-1994	Whitaker Foundation Biomedical Research Grant – <b>PI</b> (\$180,000)
	"Linear Systems Analysis of the Human Circulation: Assessment of Cardiovascular Stability for the Cardiac Intensive Care Unit"
1990	Pfizer Visiting Professorship in Cardiovascular Medicine – <b>PI</b> , Dr. Jonathon Langberg, UCSF, "Radiofrequency Catheter Ablation" (\$6000)
1991-1994	Implemed – <b>PI</b> (\$15,000) "Thermodynamic Assessment of Catheter Directed Cryoablation in Sheep"
1992-1994	Bard Electrophysiology - <b>PI</b> , "Evaluation of New Catheter for Radiofrequency Ablation of Myocardial Tissue" (\$35,000)
1992-1993	Milton Fund Award - <b>PI</b> , "Autonomic Reactivity as an Infant Pain Measure" (\$5,000)
1993	Angeion -- <b>PI</b> , "Tip Cooling to Enhance Radiofrequency Lesion Formation" (\$56,000)
1998-2001	NIH-R01 PA-96-070 Chronic Fatigue Syndrome Pathophysiology, <b>PI</b> "Circulatory Control in Young People with Chronic Fatigue" \$1,010,692
1998	Pfizer Visiting Professorship in Cardiovascular Medicine – <b>PI</b> , Dr. Jonathon Seidman, Harvard Medical School, "Molecular Genetics" (\$6000)
1998-1999	NIH-T32 – <b>PI</b> – Fellowship Training in Pediatric Cardiology, "Multidisciplinary Research in Developmental Cardiology" (\$185, 499)
1999-2000	Berlex Laboratories – <b>PI</b> – "Pharmacokinetics and Pharmacodynamics of Sotalol in a Pediatric Population with Ventricular and Supraventricular Tachyarrhythmias" (\$51,113)
1999-2000	Berlex Laboratories – <b>PI</b> – "Pharmacokinetics of Sotalol in a Pediatric Population with Ventricular and Supraventricular Tachyarrhythmias" (\$39,956)
1999-2000	Cordis-Webster – <b>PI</b> - "Evaluation of the Cordis-Webster Ablation Catheter in Conjunction with the Stockert EP Shuttle Radiofrequency Generator" (\$16,512)
1999-2003	NIH-R01 – <b>Investigator, Local PI</b> - "Prospective Assessment after Pediatric Cardiac Ablation" (\$90,000)
1999-2000	Pfizer, Inc. – <b>Investigator, Local PI</b> – "Pediatric Use of Amlodipine in the Treatment of Hypertension, PATH-1" (\$147,380)
2000	Pfizer, Inc. - - <b>Investigator, Local PI</b> – "Pediatric Use of Amlodipine in the Treatment of Hypertension-2, A Population Pharmacokinetic Trial, PATH-2" (\$34,604)
2001	Baxter Pharmaceuticals – <b>Investigator, Local PI</b> – "Pharmacokinetics, Efficacy and Safety of Brevibloc (Esmolol Hydrochloride) for Control of Supraventricular Arrhythmias in Children and Adolescents 2-16 years if Age (ESCAPE)" (\$34,779.50)
2001	Wyeth-Ayerst Pharmaceuticals – <b>PI (World-Wide)</b> – "A Dose Response Study of the Safety and Pharmacodynamics of Intravenous Amiodarone Hydrochloride in Pediatric Patients 30 Days of Age to Sixteen Years of Age with Critical Arrhythmias" (\$87,000)
2001-2005	NIH-R01 – <b>PI</b> – "Mechanisms of Myocardial Radiofrequency Scar Expansion" (\$700,000 – 11 <sup>th</sup> percentile score, funding to start June 15 <sup>th</sup> )

2001-2006 NIH-R01, HL-00-013 – **PI** – “Randomized Clinical Trials for Pediatric Heart Disease Clinical Research  
 2002-2004 CDC U50/CCU416008-04 – **Contract PI (PI – Dr. Roger Stevenson, Greenwood Genetics Center)** – “Enhanced State-Based Birth Defect Surveillance and Use of Surveillance Data (\$190,000) Subcontract at \$70,000/year total costs  
 2004 Pfizer Visiting Professorship in Cardiovascular Medicine – **PI**,  
 Dr. Stephen Daniels, MD, PhD, Cincinnati Children’s Hospital, (\$7500)  
 2006-2011 NIH-R01, HL-00-013 – **PI** – “Randomized Clinical Trials for Pediatric Heart Disease” in NIH Pediatric Heart Disease Clinical Research Network –(\$1,394,060)  
 2008 Pfizer Visiting Professorship in Cardiovascular Medicine – **PI**,  
 Dr. Marc deLavalley, Great Ormond Street, “” (\$7500)

Multicenter Trials – Primary Principal Investigator:

1999-2000 Berlex Laboratories - “Pharmacokinetics and Pharmacodynamics of Sotalol in a Pediatric Population with Ventricular and Supraventricular Tachyarrhythmias,” – First industry sponsored controlled trial of an antiarrhythmic agent in children. FDA approval, January 2000.  
 1999-2000 Berlex Laboratories - “Pharmacokinetics of Sotalol in a Pediatric Population with Ventricular and Supraventricular Tachyarrhythmias,” FDA approval, January 2000.  
 2000-2002 Wyeth-Ayerst Laboratories “A Dose Response Study of the Efficacy, Safety and Pharmacodynamics of Amiodarone Aqueous I.V. Injection in Pediatric Patients Neonatal to Sixteen Years of Age with Critical Arrhythmias”  
 2005- Sanofi-Synthelabo – **PI** – Platelet Aggregation Inhibition in Children on Clopidogrel: Dose Ranging Pharmacodynamic assessment of Platelet Aggregation with Clopidogrel in Children of Blalock-Taussig Shunt Age Categories,

As Co-Investigator (% time)

1989-1994 NIH/RO1 - **Co-Investigator**, Beat-to-Beat Variability of Hemodynamic Parameters  
 1992-1996 NIH/RO1 - **Co-Investigator (Project Director)** (\$150,000) "Cardiac Autonomic Control in Children of HIV+ Mothers"  
 1992-1997 Medtronic/CardioRhythm - **Co-Investigator** (\$120,000) "Transcatheter Electrical Ablation of Arrhythmia Foci and Pathways in the Atrium or Ventricle: Evaluation of the Atakr RF Catheter Ablation System"  
 1995-1998 Behavioral Pain Responses in Former Low Birthweight Babies” - British Columbia HRF/**Co-Investigator**  
 1997-1999 NIH/R21 – **Co-Investigator** – “Spatial Mapping of Endocardial Electrical Activation” (\$150,000)  
 1997-2000 NIH/RO1 – **Co-Investigator** – “Rehabilitative Care of Children with Neuropathic Pain” (\$32,000)  
 1999-2004 NIH-T32 –**Co-PI** - Fellowship Training in Ped Cardiol, “Multidisciplinary Research in Developmental Cardiology” (\$920,000)

As Consultant

1998-2000 NIH/RO1 – **Consultant** – “Investigations of Pathophysiology of Orthostatic Intolerance in Chronic Fatigue Syndrome” (\$8,000)  
 1999 Phase I / SBIR – **Consultant** – “Benefits of Nonlinear Measures of Heart Rate Variability”

**Intramural Grants/amount of award:**

**Awards, Honors, Membership in Honorary Societies:**

1982 Speaker, Hippocratic Oath Ceremony  
 1986 Research Fellowship Award, American Heart Association  
 1987 Individual Research Fellowship, National Research Service Award, NIH  
 1988 Young Investigators Award, American Academy of Pediatrics, Subsection on Pediatric

#### Cardiology, Finalist

1990 Clinical Investigator Award, National Institutes of Health  
1990 Whitaker Foundation Biomedical Research Award  
1993 Election to Society for Pediatric Research  
2001 Promotion to tenure, MUSC  
2001- Who's Who in America  
2004- Who's Who in Medical Sciences Education  
2005- Who's Who in American Education  
2002- Best Doctor in America, Best Doctors, Inc, Boston, MA  
2002-2004 America's Top Pediatrician's, Listing of Consumer Research Council of America  
2003 Elected to European Academy of Sciences, Brussels  
2003 Distinguished Alumnus Award, Westminster Schools  
2006 Distinguished Service Achievement Award, MUSC  
2006 Paul Harris Fellow of the Rotary Foundation International  
2007- Who's Who of Executives and Professionals  
2007 Inducted into the Thompson Science and Technology Hall of Fame, Westminster Schools, Atlanta, GA

#### **Academic Committee Activities (past 5 years):**

##### University

1990-2007 Board of Academic Advisors, Harvard-MIT, Division of Hlth Sci and Tech  
1995-2007 Chairman, Fellowship Appointment Committee, Dept of Pediatrics, Harvard Med School  
1996-2007 Information Services Executive Committee, Children's Hospital, Boston, MA  
1998- Emerald, Electronic Medical Record Committee, MUSC  
1998- Managed Care Task Force Committee, MUSC  
1999- Compliance Physician Liaison Committee, MUSC  
2001-2003 Faculty Senate  
2001- Clinical Council of MUSC Hospital Authority  
2001- Medical Executive Committee, Medical University Hospital Authority  
2003-2004 Co-Chair, Billing & Collections Task Force, IDX Implementation, UMA  
2003-2006 Supply Chain Steering Committee, MUHA  
2002- Financial Advisory Committee, College of Medicine  
2002-2004 Chair, Children's Hospital Advisory Board  
2003- Contracts Committee, MUSC/UMA  
2004- Quality and Safety Committee, MUSC Children's Hospital  
2005-2007 Chairman, Peer Review Committee, MUHA  
2005- Quality Council, MUHA  
2007-2009 Chairman, Medical Executive Committee, MUHA  
2007- MUSC Excellence Leadership Development Committee

##### College

2001 Search Committee Member – Anesthesia Chair  
2003-2007 Promotions & Tenure Committee, College of Medicine, MUSC

##### Department

1998- Pediatric Research Committee, Department of Pediatrics, MUSC  
1998- Heart Center Steering Committee, Children's Hospital, MUSC  
1999- Children's Healthcare System Medical Executive Committee, MUSC  
1999- Children's Hospital Fund Advisory Board, MUSC  
2000- Chairman, Promotions and Tenure Committee, Department of Pediatrics

##### Division

2000- Clinical Information Systems Steering Committee, Pediatric Cardiology, MUSC

##### Non-MUSC

2002-2003 Birth Defects Task Force, Appointed by Governor of South Carolina

**Major Teaching Responsibilities (Current):**

Undergraduate Medical Education

Graduate Medical Education

Graduate Studies Education

Continuing Medical Education

**Major Clinical Interests and Responsibilities:**

1987-1997 Attending Physician, Cardiac Arrhythmia Service, The Children's Hospital, Boston  
1987-1991 Fellowship Selection Committee, Department of Cardiology, The Children's Hospital, Boston  
1987-1997 Team Member, Blackfan Medical Service, The Children's Hospital, Boston  
1989-1997 Committee of Advisors, Cardiology Fellowship Program, The Children's Hospital, Boston  
1991-1997 Director, Cardiology Physiological Research Laboratories, The Children's Hospital, Boston  
1998- Director, Pediatric Cardiology, MUSC, Charleston, SC  
1998- Director, Pediatric Electrophysiology, MUSC, Charleston, SC

**Lectures and Presentations** during the last 3 years – Identify the name and location of the meeting/conference. List presentations under the following headings:

Invited lectures and presentations

- 2005 Co-Chair, "Issues in Arrhythmia Management", Symposium, ACC, Orlando, FL, March 8.
- Speaker, Pediatric Grand Rounds, "Sudden Death in the Pediatric Patient: Focus on Long QT Syndrome". Lexington, KT, March 17.
- Director, Co-Organizer and Speaker, 3<sup>rd</sup> Charleston Symposium on Interventional Pediatric Electrophysiology, Kiawah Island, SC, May 1-3. Overall Rating 3.71/4.00.
- Speaker, 3<sup>rd</sup> Charleston Symposium on Interventional Pediatric Electrophysiology, *Cryoablation of atrioventricular nodal reentrant tachycardia*, Kiawah Island, SC, May 1-3.
- Speaker, *Third Qatari International Pediatric Conference*, "Acute Management of Pediatric Cardiac Arrhythmias in the Emergency Room", Doha, Qatar, April 9.
- Workshop, *Third Qatari International Pediatric Conference*, "Pediatric Cardiac Rhythm", Doha, Qatar, April 9.
- Session Chair, Mini-Course, "Ablation Techniques for Treating Tachyarrhythmias in Congenital Heart Disease", Heart Rhythm Society, New Orleans, LA, May 4.
- Invited Speaker, "Arrhythmias in the Adult with Congenital Heart Disease", *Adult Cardiology Grand Round*, Charleston, CS, June 16.
- Faculty Speaker. "The Evaluation and Management of Syncope", Paediatric Cardiac Society of South Africa, 6<sup>th</sup> Annual Congress of the South African Heart Association, Drakensberg, SA, October 17.
- Faculty Speaker. "The Pharmacologic Management of Paediatric Arrhythmias", Paediatric Cardiac Society of South Africa, 6<sup>th</sup> Annual Congress of the South African

Heart Association, Drakensberg, SA, October 17.

Faculty Speaker. "Antagonist – All patients with SVT need electrophysiology study and ablation". 6<sup>th</sup> Annual Congress of the South African Heart Association, Drakensberg, SA, October 17.

Plenary Speaker. "Arrhythmias after Surgery for Congenital Heart Disease". 6<sup>th</sup> Annual Congress of the South African Heart Association, Drakensberg, SA, October 18.

Faculty Speaker. State-of-the-Art lecture. "Evolution and Revolution in Pediatric Cardiac Electrophysiology"., Paediatric Cardiac Society of South Africa, 6<sup>th</sup> Annual Congress of the South African Heart Association, Drakensberg, SA, October 17.

Faculty Speaker. "Sudden Death in the Young: Focus on Sports Participation and Prevention". Fifteenth Annual Cardiology Symposium 2005. Columbia, SC, November 5<sup>th</sup>. Rating 4.8/5.0.

Faculty Speaker, Eighth Annual Frontiers in Pediatrics, *Palpitations and Pediatric Arrhythmia Basics, What a Pediatrician Needs to Know*. Charleston, SC, December 3.

2006 Co-Chair, "Issues in Arrhythmia Management", Symposium, ACC, Orlando, FL, March 8.

Visiting Professor and Speaker, Department of Pediatrics, Rikshospitalet, Oslo, Norway. *Supraventricular Tachycardia in Pediatrics, Evaluation and Management*, Oslo, Norway. January 16-19<sup>th</sup>.

Speaker, Faculty, American College of Cardiology Training Forum, "*Tracks and Promotion, Making Good Choices*", Atlanta, GA, March 13.

Speaker, Core-Curriculum Session - "New Technologies in Fetal Arrhythmia Diagnosis", *Heart Rate Variability*., Heart Rhythm Society, Boston, MA, May 18.

Speaker, Meet the Experts Luncheon, "Cardiovascular Screening in the Athlete", *Pediatric Issues*. Heart Rhythm Society, Boston, MA, May 18.

Visiting Professor and Speaker, Department of Cardiology, Nairobi Hospital. "Sudden Death in the Young: Focus on Sports Participation and Prevention". Nairobi, Kenya. July 3-4<sup>th</sup>.

Speaker, Annual Meeting of the South Atlantic Society of Electrophysiology for Allied Professionals (SASEAP). "Supraventricular Tachycardia in the Pediatric Patient: Mechanisms, Evaluation and Management.", Myrtle Beach, SC, Sept 30.

Speaker, Faculty. Arrhythmias: From Neonate to Adult. "Role of Catheter Ablation in Post-Operative Arrhythmias". Groningen, Netherlands. October 12-13,

2007 Visiting Professor and Pediatric Cardiology Program Reviewer, Department of Pediatrics, Rikshospitalet, Oslo, Norway. Oslo, Norway, January 15-18<sup>th</sup>.

Visiting Professor and Research Consultant, Columbia University, Department of Psychiatry & Behavioral Sciences. "Update on Heart Rate Variability: What's Old, What's New". February 21-22

Speaker, Faculty, American College of Cardiology Training Forum, "Tracks and Promotion, Making Good Choices", Atlanta, GA, March 26.

Speaker, Faculty, American College of Cardiology Training Forum, "What is the Right Job?", Atlanta, GA, March 13.

Speaker, Faculty and Conference Moderator, Cardiology in the Young, The Bonham Carter Lecture, "Sudden Death in the Young: Focus on Congenital Heart Disease". London, April 18.

Speaker, Faculty and Conference Moderator. Cardiology in the Young, Debate Protagonist, "There is no longer a place for surgery in the treatment of cardiac arrhythmias". London, April 19.

Speaker, Faculty and Conference Moderator. Cardiology in the Young, "Investigation and Treatment of Syncope". London, April 20.

Speaker, Faculty. 15<sup>th</sup> Charleston Symposium on Congenital Heart Disease. "Ablating In The Surgeon's Footsteps: 3D Electrical And Anatomic Mapping". Charleston, SC. May 2.

Speaker, Faculty. 15<sup>th</sup> Charleston Symposium on Congenital Heart Disease. "Early Postoperative Arrhythmias: Illustrative Cases". Charleston, SC. May 4

Speaker, Faculty. 15<sup>th</sup> Charleston Symposium on Congenital Heart Disease. "Early Postoperative Heart Block: Considerations For Pacing". Charleston, SC. May 4

Speaker, Faculty. 15<sup>th</sup> Charleston Symposium on Congenital Heart Disease. "15 Years After the First Pediatric RF Ablation: Where Are We Headed?" Charleston, SC. May 4

Faculty, Moderator. Sudden Cardiac Death in the Young Satellite Symposium. "Disease Based Review". Denver, CO. May 8.

Faculty, Moderator. "Treatment Strategies for Arrhythmias in Single Ventricle Patients". Heart Rhythm Society. Denver, CO. May 9.

Ross Visiting Professor in Pediatrics. Pediatric Grand Rounds. "Sudden Death in the Young: Mechanisms, Sports Participation and Prevention". University of Miami. Miami, FL. May 15.

Ross Visiting Professor in Pediatrics. Cardiology Conference. "Evolution and Revolution in Pediatric Cardiac Electrophysiology: Ablation and Devices". University of Miami. Miami, FL. May 15.

Ross Visiting Professor in Pediatrics. Coulter Weekly Research Conference. "Setting up a Regional Pediatric Cardiology Program and Clinical Research Environment:" University of Miami. Miami, FL. May 16.

Visiting Professor, Department of Pediatrics, Rikshospitalet, Oslo, Norway. Oslo, Norway, June 20-22<sup>nd</sup> .

Faculty, Speaker, 3<sup>rd</sup> International PediRhythm Congress, "Cryoablation of AV Node Reentry Tachycardia". Istanbul, Turkey. October 4<sup>th</sup>.

Faculty, Moderator, 3<sup>rd</sup> International PediRhythm Congress, "3-D Mapping and Navigation" Istanbul, Turkey. October 4<sup>th</sup>.

Faculty, Moderator, 3<sup>rd</sup> International PediRhythm Congress, "Sudden Death in Congenital Heart Disease" Istanbul, Turkey. October 5<sup>th</sup>.

Speaker, Pediatric Lecture Series, "Sudden Death in the Young". Roper Hospital, Charleston, SC, October 25.

Thompson Science and Technology Hall of Fame Inductance Award Lecture, "A Journey of Discovery, A Paradigm for Change". Westminster Schools, Atlanta, GA, November 1.

Session Chair, American Heart Association, "Improving Outcomes After Surgery for Congenital Heart Disease", Orlando, FL, November 5.

Director, Co-Organizer and Speaker, 4<sup>th</sup> Charleston Symposium on Interventional Pediatric Electrophysiology, Charleston, SC, Dec 2-4. Overall Rating 3.74/4.00.

Faculty Speaker, 4<sup>th</sup> Charleston Symposium on Interventional Pediatric Electrophysiology, "AVNRT, Fire vs Ice". Charleston, SC, Dec 2.

Faculty Speaker, 4<sup>th</sup> Charleston Symposium on Interventional Pediatric Electrophysiology, "Competency Guidelines for Pediatric and Congenital Device Implantation". Charleston, SC, Dec 3.

2008 Faculty Speaker, Cardiology 2008, "Screening for and Minimizing the Risk of Late Post-operative Arrhythmias". Scottsdale AZ, Feb 7

Faculty Speaker, Cardiology 2008, "Ablative Therapy, Post-Operative Arrhythmias". Scottsdale AZ, Feb 8.

Faculty Speaker, Cardiology 2008, "Who Should Get an Ablation? When is it Too Late to Outgrow an Arrhythmia?". Scottsdale AZ, Feb 8.

Faculty Speaker, Cardiology 2008, "What I'm Looking For When Hiring New Staff: Perspectives from Physicians in Private Practice and Program Chiefs from Around the World". Scottsdale AZ, Feb 6.

Session Chair, Heart Rhythm Society, "Ventricular Tachycardia in the Young and those with Congenital Heart Disease", San Francisco, CA. May 15.

Invited Speaker, Cardiostim, "Ablation in Infants and Small Children, Tips and Tricks", Nice, France, June 19

Submitted presentations (e.g., abstract or paper presentations)  
(see "Publications, Other Publications")

#### **Extramural Professional Activities:**

1985-1987	Board of Directors, Longwood Symphony Orchestra
1986-	American Heart Association
1988-	Institute of Electrical and Electronic Engineers
1988-	North American Society of Pacing and Electrophysiology/Heart Rhythm Society
1989	Fellow, American College of Cardiology
1993-	Society for Pediatric Research
1993-	American Heart Association, Council on Heart Disease in the Young
1993-	American Heart Association, Council on Basic Science
1994-1996	American College of Sports Medicine
1997-	International Society for Holter & Noninvasive Electrocardiology
1998-	Pediatric Electrophysiology Society (Pediatric and Congenital EP Society)
1998-	Charleston County Medical Society

1998-2003	Chairman, Scientific Advisory Board, Boston Medical Technologies
2000-2002	Chairman, Medical Advisory Board, CliNETic
2002-	Scientific Advisory Board, The Heart of Pediatric Electrophysiology (HOPE)
2002	Intl Scientific Organizing Committee, 1st Virtual Congress of Heart Rate Variability
2003	Intl Scientific Organizing Committee, 2nd Virtual Congress of Heart Rate Variability
2003-2005	American Heart Assoc, Executive Database Steering Committee
2003-	Member, Scientific Advisory Board, Eplerenone Trial in Children, Pfizer Inc.
2004-	American College of Cardiology, Coding and Nomenclature Committee
2004-	Council Member, International Society of Bioelectromagnetism
2005-2007	Treasurer, Pediatric and Congenital Electrophysiology Society
2005-	Heart Rhythm Society, Membership Committee
2006-	Heart Rhythm Society, Chair Pediatric ICD/CRT Training Guidelines Taskforce
2006-	Chair, Ancillary Studies Committee, Pediatric Heart Network, NIH/NHLBI
2007-	American College of Cardiology, Electrophysiology Committee
2007-2009	Secretary, Pediatric and Congenital Electrophysiology Society
2007-	Chair, Finance Committee, Pediatric Heart Network, NIH/NHLBI
2008-	Sudden Arrhythmic Death Syndrome Foundation, Scientific Advisory Board
2008-	Syncope Trust and Reflex Anoxic Seizures - US, Board of Directors
2008-	Syncope Trust and Reflex Anoxic Seizures - International, Medical Advisory Committee

**Publications:** Number and list in chronological order publications under the following headings in the order shown.

Peer Reviewed Journal Articles: Published or accepted for publication in final form

1. **Saul JP.** A Journey's End (Address to Hippocratic Oath Ceremony) *Duke University Medical Center Perspectives* **3 No. 1:** 1982.
2. **Saul JP,** Rea RF, Berger RD, Eckberg DL, Cohen RJ. Spectral analysis of peroneal nerve sympathetic activity and heart rate in man. *Comput Cardiol* 1986;13:423-6.
3. Chen MH, Berger RD, **Saul JP,** Stevenson K, Cohen RJ. Transfer function analysis of the autonomic response to respiratory activity during random interval breathing. *Comput Cardiol* 1986;13:149-52.
4. **Saul JP,** Keane JF, Fellows KE, Lock JE. Balloon dilation angioplasty of postoperative aortic obstructions. *Am J Cardiol* 1987;59:943-8.
5. **Saul JP,** Albrecht P, Berger RD, Cohen RJ. Analysis of long-term heart rate variability: Methods, 1/f scaling and implications. *Comput Cardiol* 1987;14:419-22.
6. Sadeh D, Shannon DC, Abboud S, **Saul JP,** Akseled S, Cohen RJ. Altered cardiac repolarization in some victims of sudden infant death syndrome. *N Engl J Med* 1987;317:1501-5.
7. **Saul JP,** Arai Y, Berger RD, Lilly LS, Colucci WS, Cohen RJ. Assessment of autonomic regulation in chronic congestive heart failure by heart rate spectral analysis. *Am J Cardiol* 1988;61:1292-9.
8. **Saul JP,** DT Kaplan, Kitney RI. Nonlinear interactions between respiration and heart rate: A phenomenon common to multiple physiologic states. *Comput Cardiol* 1988;15:299-302.
9. Pongiglione G, **Saul JP,** Dunnigan A, Strasburger JF, Benson DW Jr. Role of transesophageal pacing in evaluation of palpitations in children and adolescents. *Am J Cardiol* 1988;62:566-70.
10. Berger RD, **Saul JP,** Cohen RD. Transfer function analysis of autonomic regulation: I. Canine atrial rate response. *Am J Physiol* 1989;256:H142-52.
11. **Saul JP,** Berger RD, Chen MH, Cohen RJ. Transfer function analysis of autonomic regulation: II. Respiratory sinus arrhythmia. *Am J Physiol* 1989;256:H153-61.
12. Arai Y, **Saul JP,** Albrecht P, Hartley LH, Lilly LS, Cohen RJ, Colucci WS. Modulation of cardiac autonomic activity during and immediately after exercise: investigation with heart rate spectral analysis. *Am J Physiol* 1989;256:H132-41.
13. Berger RD, **Saul JP,** Cohen RJ. Assessment of autonomic response by broad-band respiration. *IEEE Trans Biomed Eng* 1989;36:1061-5.
14. Appel ML, Berger RD, **Saul JP,** Smith JM, Cohen RJ. Beat-to-beat variability in cardiovascular variables: Noise or music? *J Am Coll Cardiol* 1989;14:1139-48.
15. **Saul JP,** Berger RD, Cohen RJ. A simple analytical model mimics complex physiological behavior. *Comput Cardiol* 1989;16:335-8.

16. Berger RD, Fogaca MF, **Saul JP**, Cohen RJ. Transfer function analysis of cardiovascular regulation in an open-loop animal model. *Comput Cardiol* 1989;16:339-42.
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**(b) Abstracts Presented - not Published**

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2. Laohakunakorn P, Lu P, Balaji S, Saul JP, Benson DW. A G626S missense mutation in the pore region of HERG causes severe long QT syndrome. Meeting of Southeastern Pediatric Cardiology Society, Kiawah Island SC, 10/99.
3. Knick B, Balaji S, Leman RB, Saul JP, Janes JL. Impact of electrophysiology catheter reuse on procedure cost. Meeting of Southeastern Pediatric Cardiology Society, Kiawah Island SC, 10/99.
4. Blafox AD, Denslow S, Felix GL, **Saul JP**, and the participating members of the Pediatric RF Ablation Registry. Radiofrequency catheter ablation in Registry infants: When is it done and how do they fare? Meeting of Southeastern Pediatric Cardiology Society, Charlotte NC, 9/00.
5. Saul JP, Numan M, Blafox A, Laohakunakorn P, Knick B. Intra-atrial reentry tachycardia in a pediatric population: evolving substrate, techniques, and outcomes. Meeting of Southeastern Pediatric Cardiology Society, Charlotte NC, 9/00.
6. Dilawar M, Balaji S, Stroud M, Saul JP, Bradley SM. Arrhythmias and sinus node dysfunction after

- intra-atrial lateral tunnel versus extracardiac conduit Fontan procedures. Presented at The 3<sup>rd</sup> World Congress of Pediatric Cardiology and Cardiac Surgery (PCCS), Toronto, Canada, 5/01.
7. Blaurox AD, Numan M, Knick BJ, Saul JP. Sino-atrial node reentrant tachycardia: an under-recognized clinical entity in infants with congenital heart disease. Presented at The 3<sup>rd</sup> World Congress of Pediatric Cardiology and Cardiac Surgery (PCCS), Toronto, Canada, 5/01.
  8. Numan MT, Blaurox A, Knick B, Laohakunakorn P, Saul JP. Tip cooling techniques improve success for intra-atrial reentrant tachycardia (IART) ablation. Presented at The 3<sup>rd</sup> World Congress of Pediatric Cardiology and Cardiac Surgery (PCCS), Toronto, Canada, 5/01.
  9. Numan MT, Blaurox A, Knick B, Saul JP. Effect of respiration on intracardiac electrograms and radiofrequency ablation parameters. Presented at The 3<sup>rd</sup> World Congress of Pediatric Cardiology and Cardiac Surgery (PCCS), Toronto, Canada, 5/01.

**(c) Proceedings of Meetings**

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