

## CURRICULUM VITAE

Raymond H. M. Schaerf, MD

Place of birth Bucharest, Romania

Citizen of USA

College: Columbia College New York City  
Graduated with B.A. 1968  
Majors—Psychology and German

Medical School: New York Medical College  
Graduated M.D. 1972

Residencies: Yale-New Haven Medical Center, Connecticut  
General Surgery 1972-1974

University of Miami, Florida  
General Surgery 1974-1977

University of Miami and Mount Sinai Medical Center  
Cardiothoracic Surgery 1977-1979

Practice: Private practice of Cardiothoracic Surgery in Burbank  
1979-present

Staff Privileges: Cedars-Sinai Medical Center

Providence Saint Joseph Medical Center, Burbank

Providence Tarzana Medical Center

Positions/Medical Staff Leader at Providence Saint Joseph Medical Center	
2016	Physician Director Clinical Documentation
2015-2016	Chief of Staff Providence St Joseph Medical Center(fourth time)
2012-2014	Vice Chief of Staff PSJMC
2012-present	Chairman Quality Committee PPH
2012-present	Board Member PPH
2011-2012	Chairman Quality Assurance Committee Member (and board member) of Providence Southern California Medical System Clinical Integration Group(PPH) Chairman Quality Committee PPH
2004-present	Instructor Providence St Joseph Medical Center to nurses on reading and assessment of chest Xrays
2002-present	Instructor Providence St Joseph Medical Center to nurses on interpretation of defibrillators and pacemakers
2006-present	Chairman Physician Information Systems
2009-2010	Chief of Staff
2007 and 2008	Vice Chief of Staff
2006 and 2007	Chairman Quality Assurance Committee
2005	Chief of Surgery
2005 and 2006	Chairman, Quality Assurance Committee
2003 and 2004	Chief of Staff
2001 and 2002	Vice Chief of Staff
1999 and 2000	Chairman, Quality Assurance Committee
1997 and 1998	Chief of Staff
1995 and 1996	Vice Chief of Staff
1994	Secretary/Treasurer of Medical Staff
1990	Chief of Surgery
1991 to present	Chief of Thoracic Surgery
1984 to 1990	Chief of Cardiovascular Surgery Committee

Practice:

### Cardiothoracic Surgery

Thoracic Surgery and Thoracic Oncologic Surgery

Endoscopic Thoracic Surgery

Insertion and Follow Up of Pacemakers

Insertion and Follow Up of Automatic Internal Cardioverter Defibrillators

Lead extractions with history of Phase One FDA Trials for both Cook Company and Spectranetics

Transthoracic Lead Extractions

Minimally Invasive Thoracic Surgery

Venous Access Devices Including Portacaths, Hickmans, and Tesios( for renal dialysis)

Management of complex complications of pacemaker and defibrillator systems

Percutaneous extractions of pacemaker and defibrillator vegetations

### Miscellaneous

Insertion of Vagus Nerve Stimulators for Epilepsy

Insertion of Intrathecal Morphine and Baclofen Pumps

Follow up of Intrathecal Pumps and Vagus Nerve Stimulators

Insertion of Phrenic Nerve Pacemakers

## Other Training:

Microvascular Surgery June 1975  
Tokyo Metropolitan Police Hospital

Mitral Valve Surgery 1988  
Hospital Broussais Paris, France

Laser Bronchoscopy and Resection 1986  
Long Beach Memorial Hospital

Physician Administrator Course 1997  
Wharton School of Business

Robotic Surgery with DaVinci Robot 2006  
San Jose, California

Endoscopic thoracic surgery (Covidien) Las Vegas 2008  
Endoscopic thoracic surgery (Covidien) Seattle 2012

## General Topics of Publications and Previous Research

First US cardiac MRI of patient with Accent MRI device

World's first implant of St Jude Optisure defibrillator lead  
First use of Cook One Tie tool for lead extractions  
First use of new Cook RL extraction tool  
First US Implant of Cardiac full MRI conditional pacemaker  
Evaluation of defibrillator thresholds for right sided automatic internal cardioverter defibrillator systems(Tilt and Tune Study SJMed)  
Multicenter study of safety of Cook Evolution tools  
Use of New extraction system (Cook Evolution)  
Accent MRI study for St Jude MRI compatible permanent pacemakers  
ADAPT study of defibrillator leads (St Jude)  
Use of MRI with Pacemaker and Defibrillator patients  
MagnaSafe Study for MRI studies in patients with pacers and ICDs  
Excimer laser for extractions of chronic pacemaker and defibrillator leads (Spectranetics)  
Electrocautery device for extraction of chronic pacemaker leads and chronic coronary sinus leads (Cook)  
Combined extraction of chronic infected, pacemaker and defibrillator systems with simultaneous placement of new systems  
Port access, minimally invasive placement of epicardial defibrillator systems  
Thoracotomy, Critical Pathway, and Clinical Outcomes  
Atrial Lead Implant Techniques  
Methods of Inserting Leads for Dual Chamber Implants  
Amniotic Fluid Embolism  
Burn Wound Sepsis  
Acute Glomerulonephritis  
Results of New Epicardial Leads for Resynchronization  
Leadless ECGs in Pacemaker and Defibrillator Follow up  
Use of Electrocautery in Defibrillator and pacemaker lead management  
Atrial Autocapture (Medtronic)  
Metastatic benign leiomyomas  
Intrapericardial pacer electrodes and placement (Periflex St Jude Med)  
Extraction of leadless permanent pacemaker for Medtronic  
Sonic powered leadless permanent pacemaker system (EBR systems)  
Epicardial lead development (Myofast study for St Jude Medical)  
International Left Ventricular Lead Extraction database for Medtronic(Star Fix Extraction Study)

Largest series in world of percutaneous extraction of pacer and defibrillator infected vegetations with Angiodynamics right heart bypass system

#### Associations past and present

Society of Thoracic Surgeons  
Fellow Heart Rhythm Society (formerly NASPE)  
Association for Academic Surgery  
American Heart Association  
Los Angeles County Medical Association  
American Medical Association  
International College of Surgeons  
Southwestern Surgical Congress  
Certified Cardiac Device Specialist(HRS)  
AAMI(Association for Advancement of Medical Instrumentation)  
Author HRS 2009 Consensus Panel for Lead Management  
Providence Thoracic Surgery Initiative(Executive Committee)  
Providence System Thoracic Oncology Group  
Providence Cardiac Rhythm Management System Group  
Providence Partners For Health Executive Committee

#### Board Certifications

American Board of Surgery	1980(first try)
American Board of Thoracic Surgery	1981(first try)
ABTS recertification	1990(first try)
ABTS recertification	2000(first try)
ABTS recertification	2011(first try)

## Other Certifications

Certificate of Special Competency in cardiac pacing and cardioversion  
defibrillation (NASPE ExAM Testamur)  
Fellow HRS and Certified Cardiac Device Specialist(CCDS)

## Clinical Investigator

Medtronic, Inc Pacemakers	Versatrax 7000 Symbios 7005, 7006, 7008 Activitrax Synergist 7026,7027,7070,7071 External DDD 5345 Elite 7074, 7075, 7076 Thera 7084, 7085, 7086 DDD 7960,7961,7962 DPDT Pacemaker Extraction MICRA device
Medtronic, Inc Leads	4592, 4092, 5092, 4074, 4574 Extraction left ventricular leads (Starfix Study)
Medtronic, Drug Delivery	Algomed Intrathecal System
Medtronic, Inc	Programmers 2090 Star Fix extraction study
Pacesetter Systems	Synchrony 2020

AFP

St Jude Medical

Merlin Programmer  
Myofast epicardial lead  
Locator lead placement tool  
Intrapericardial pacing leads  
SJ4 Defibrillator lead  
Tilt defibrillator study  
Chronic lead study  
P-R Wave Amplitude Study  
Accent MRI pacer (phase I)

Intermedics, Inc

Cosmos 283-01  
Relay 294-03

Cardiac Pacemakers, Inc

Delta Pacemaker

Biotronik

Galaxy Study(defibrillator lead)

Sorin

ISIS ICD defibrillator study

Phase One Clinical Investigator for FDA  
Spectranetics, Inc.

Excimer laser lead extraction

Cook, Inc.

Electrocautery lead extraction

St Jude Medical

Accent MRI pacemaker system

## Other Appointments and Consultant Positions in Past and Present

Board of Directors Lakeside Medical Group 1996-2008

Consultant Medtronic Drug Delivery Systems

Consultant Medtronic Bradycardia Lead Group and Member of World Wide Lead Symposium

Original Member of Medtronic Physician Review Board

Consultant St Jude Medical

Member, HRS International Lead Management Group (2008-present)

Consultant EnPath, Inc. for epicardial leads

Teaching Faculty for St Jude Medical

Reviewer Lumetra(formerly California Medical Review, Inc) for vascular, thoracic, and cardiac surgery

Lecturer and Designated Explanter for Telectronics, Inc

Instructor for Karl Storz, Inc in USA and Germany for Thoracoscopy

Instructor for US Surgical Corp for Thoracoscopy in US and Canada

Instructor and Advisor for Pacemaker Implantations for Mexican Red Cross(Guadalajara) and for Biotronik, GMBH

Lecturer for ELA (Sorin Medical)

Instructor (St Jude) for fellows implant workshops

Instructor(Sorin) for transiliac lead insertions

Member Physician Panel for LeadEXX Corporation

Consultant Wilson Greatbatch for Epicardial Leads

Key Opinion Leader for Angiodynamics

Consultant and lecturer for Spectranetics Corporation

Consultant and lecturer for Cook Medical Extraction Corporation

Medical Advisory Board for St Jude Medical

Languages Spoken:

English, French, German, Spanish

Other Noteworthy Information:

Paper pending New England Journal of Medicine concerning MRI studies in over 1500 patients(Russo, et al)Feb 23,2017

Paper accepted Heart Rhythm Society on safety of left ventricular lead extraction (accepted and published in Journal of Heart Rhythm Society)

Poster at Cardiostim(Nice 2016) Treatment of Vegetative Endocarditis

Tilt and Tune Study (right sided automatic internal cardioverter defibrillators) accepted for publication in Europace(Varma, Schaerf, et al)2016

St Jude MRI study(current) in nonconditional MRI devices and leads

Lecturer and Instructor SJM 2016 on LV lead management, troubleshooting problems in CRT and defibrillators, use and interpretations of Cardiomems, lead extraction in China (Shanghai, Changsha, and Zhengzhou)  
Lecturer and Instructor Cook Extraction Symposium(2016)

Heart Rhythm Society (2016) Presentation of Percutaneous Right Heart Bypass for Pacer and Defibrillator Endocarditis

Poster at ACC(Chicago 2016) Minimally Invasive Treatment of Vegetative Endocarditis

Lecturer at Korean Heart Rhythm Society(2015)on Defibrillator lead malfunction, on programming of ICDs, and management of defibrillators

Lecturer at Berlin(2015) International Lead Extraction Expert Meeting on Surgical Management of Vegetative Endocarditis and on Development of Extraction Tools for Medtronic Leadless Pacemaker

Abstract at Europace Milan(2015) Use of percutaneous right heart bypass to remove vegetations on infected leads during extractions

Speaker on Lead Management for Biotronik San Diego

Live Broadcast of Laser Extraction to Biotronik Fellows Program

Investigator Spectranetics Non Laser Extraction System

2014 HRS abstract Extraction of Leadless Pacemakers(Medtronic)

2014 HRS abstract Right sided defibrillator threshold studies

Member Providence Health and Services Thoracic Surgery Initiative

Member Providence Health and Services Cardiac Rhythm Forum

Presenter HRS 2013 Mechanism and Diagnosis of Defibrillator lead failure

Presenter HRS 2013 MRI exams of Pacers and Defibrillators

Presenter HRS 2013 Right sided defibrillator thresholds

AHA 2013 MRI Risks in Pacers and Defibrillators

Presenter Menifee Valley Cardiology Symposium of Lead Extractions

Presenter HRS 2012 New bidirectional lead extraction system

Presenter HRS 2012 Epicardial lead placement for biventricular systems

Presenter Cardiostim 2012 MRIs of pacemaker and defibrillator patients

Presenter Cardiostim 2012 Optimizing epicardial lead placement

Presenter Cardiostim (Nice) What improvements are needed in leads?

Presenter Menifee Valley Cardiology Symposium on ICD indications 2012

Speaker UC Davis January 2012 on Challenges of Lead Management

American Heart Association 2012 MRIs in Pacers and Defibs

Presenter HRS 2011 MRI use in pacemakers and defibrillators

Presenter HRS 2011 Lead extraction techniques

Coauthor HRS 2011 Decrease of Lead Abrasion with Optim coating (SJM)

Speaker Cleveland Clinic Management of CIED Infections at HRS 2011

Coauthor on Lead Extraction of Star Fix left ventricular lead HRS 2011

Lecturer Western Update on CIED and Lead Management L.A. March 2011

Lecturer Lead Extraction at Indian HRS Hyderabad October 3, 2010

Lecturer Lead Extraction Fortis Escort Hospital Delhi INDIA

Guest Surgeon and Instructor Lead extractions at CARE Hospital  
Hyderabad, INDIA

Guest Surgeon Instructor Lead extractions at CIMS Hospital Ahmedabad,  
INDIA

Guest Surgeon Instructor Lead extraction Fortis Escort Hospital Delhi  
INDIA

Guest Surgeon Instructor Lead extraction AIIMS Hospital Delhi INDIA

Presenter HRS 2010 Venous access in thrombosed veins for pacer and  
defibrillator lead insertions

Faculty HRS 2010 Ohio State Lead Management Satellite Symposium

Poster HRS 2010 Use of Electrocautery in Defibrillator and Pacing Leads

Presenter Cardiosim 2010 Risks of Electrocautery around Leads

Presenter Cardiosim 2010 Effects of Standard Cautery on Optim Leads

Lead Extraction Lecturer at Providence Health Cardiovascular Symposium

Poster HRS 2009 MRI in Defibrillator and Permanent pacemaker Patients

Poster Europace 2009 MRI in Cardiac Device Patients

Lecturer Lead Extraction Sorin Technology Meeting Scottsdale Sept 17,  
2009

Lecturer for Sorin Technology Meeting August 2008(Lead Management)

Lecturer Menifee Valley Cardiology Symposium ICD Management(2008

Presenter Cardiosim 2008 Comparison of Different ICD Lead Sites

Presenter HRS 2008 Different Sites of ICD Leads and Performance

Author Chapter on Extraction of Transvenous Pacemaker and Defibrillator Leads in CARDIAC PACING AND DEFIBRILLATION Lu/Benditt People's Medical Publishing House 2008

Poster Experience with Evolution Extraction Sheath HRS 2008

Instructor in Defibrillator Implantations for Biotronik 2006-2009

Chair HRS 2007 Challenges in Device Management

Chair HRS 2007 Tips for tough Lead extraction cases

Chair HRS 2007 My Worst Device Nightmare

Lecturer Menifee Valley Symposium 2007 Managing Implanted Devices

Instructor for NASPEExam course for physicians Dallas Sept 2006

Chief Informaticist Providence St Joseph Medical Center 2005-present

Winner Heroes of Medicine Providence Health Foundation 2005

Chair New Hardware in Pacing and Defibrillation HRS 2006

Chair Clinical Trials in Pacing HRS(formerly NASPE)2005

Chair HRS 2005 Clinical Trials In Pacing

Lecturer 2005 Oklahoma Heart Symposium on Lead extractions(Jan 2005)

Guidant Symposium 2005 Lecturer on How to Avoid Lead extractions

Voted Top Physicians 2002,2003,2004,2005,2006,2007,2008,2009,2010, 2011,2012, 2013,2014,2015 in USA

Most Compassionate Physician 2011, 2012,2013,2014,2015

Chair Pacemaker Implanter's Worst Nightmare (NASPE 2004)

Presenter XII World Congress Hong Kong Submuscular Use of Autocapture Pacing(2003)

Chair International Symposium on Pacing and ICD Leads at Cardiostim 2002

Speaker Loma Linda Cardiac Symposium 2002

Chair of Lead Technology, Cardiostim, France, International Meeting 2002

Participant/Presenter Providence Lung Cancer Symposium Portland 2002

Participant NASPE 2002 Implanter's Worst Nightmares

Speaker Ontario Cardiology Meeting in Niagara On Lake 2000(extractions)

Presenter CHEST 2000 Simultaneous Extraction and Replacement in Infected Pacer and Defibrillator Cases

Author Lead Extraction with a Novel Locking Stylet (2000 JICE)

Thoracoscopic Implants of ICD Epicardial Patches and Leads Medtronic News May 1993

Lecturer and Instructor, Quebec Thoracoscopy Course Laval Univ 1992

Chair NASPE rate modulated pacemakers

Speaker First Mediterranean Thoracoscopy Symposium Marseilles 1994

Author Amniotic Fluid Embolism Diagnosis Anesthesiology 1977

Author Evaluation of Acute Glomerulonephritis with Electron Microscopy 1967