
FAYAZ SHAWL, MD, FACP, FACC, FSCAI, FCCP
Curriculum Vitae

SURNAME: Shawl

FIRST NAME: Fayaz

NATIONALITY: United States Citizen

PRINCIPLE *Director, Interventional Cardiology*

ADDRESSES: Washington Adventist Hospital
7600 Carroll Avenue
Takoma Park, Maryland 20912
Tel: 301-891-5900
Fax: 301-891-6365

Out-Patient Office

7620 Carroll Ave., Suite 200
Takoma Park, Maryland 20912
Tel: 301-891-8570
Fax: 301-891-0630

*Clinical Professor of Medicine (Cardiology) &
Director of Interventional Cardiovascular Medicine*

George Washington University Hospital
901 23rd Street, N.W.
Washington, DC 20037

EMAIL ADDRESSES: fas777@aol.com fshawlmd@aol.com

WEBSITE ADDRESS: www.Fayazshawl.com / www.Shawltechnique.com

MEDICAL SCHOOL: Government Medical College, Srinagar, Kashmir,

MEDICAL DEGREES: M.B., B.S. 1973

POSTGRADUATE QUALIFICATIONS

ECFMG	1974
Amer. Board of Internal Medicine (Specialist)	1979
Amer. Board of Cardiovascular Diseases (Specialist)	1981

SOCIETIES & ORGANIZATIONS

American College of Physicians (Fellow)
 American College of Cardiology (Fellow)
 American College of Chest Physicians (Fellow)
 American College of Angiology (Fellow)
 American Medical Association (Member)
 International Andreas Gruentzig Society (Member)
 Southern Medical Association (Member)
 Society for Cardiac Angiography & Interventions (Fellow)
 Society for Cardiac Angiography & Interventions
 (Member - Interventional Committee)
 International Academy of Cardiology
 (Member – Scientific Advisory Board 2006 – 2008)
 World Congress on Heart Disease
 (Member – Scientific Advisory Board 2006 – 2008)

LICENSURE

State of Maryland #D0022639 (USA)
 State of Maryland Radioactive Material License #MD-31-259-01 (USA)
 District of Columbia (Washington DC) #MD13335 (USA)

POSTGRADUATE EDUCATION

Resident Rotating Internship S.M.H.S. Hospital Srinagar, Kashmir, India	5/12/72 to 5/11/73
Resident House Officer Internal Medicine S.M.H.S. Hospital Srinagar, Kashmir, India	5/12/73 to 11/6/73
Medical Officer Internal Medicine Shahadara Sharief Hospital Jammu, India	12/15/73 to 7/15/74
Clinical Assistant - Internal Medicine Pinderfields General Hospital, England (UK)	7/28/74 to 9/10/74

Senior House Officer 9/10/74 to 10/3/75
 Internal Medicine
 Clayton General Hospital
 Wakefield, England (U.K.)

Senior House Officer/Registrar 10/4/75 to 6/28/77
 Internal Medicine
 Pinderfields General Hospital
 Wakefield, England (U.K.)

Resident in Internal Medicine 7/1/77 to 6/30/78
 Prince George's General Hospital and Medical Center
 Cheverly, Maryland 20785-USA

Based on previous experience in England as well as my performance, my training was shortened by two years – thus, Declared Board Eligible by American Board of Internal Medicine – (01/78)

Fellow in Cardiology (First Year) 7/1/78 to 6/30/79
 Prince George's General Hospital and Medical Center
 And Walter Reed Army Medical Center
 Washington, D.C. 20012

Fellow in Cardiology (2nd Year) 7/1/79 to 6/30/80
 Walter Reed Army Medical Center
 Washington, D.C. 20012

MILITARY ASSIGNMENTS

Cardiology Fellow, CPT. MC USA 7/79 to 6/80
 Walter Reed Army Medical Center
 Washington, D.C. 20012

Staff Cardiologist MAJ. MC USA 7/80 to 6/82
 Walter Reed Army Medical Center
 Washington, D.C. 20012

HOSPITAL PRIVILEGES

Consultant Cardiologist 12/1981 to Present
 Washington Adventist Hospital
 Takoma Park, Maryland 20912 USA

Consultant Cardiologist 6/82 to 8/2006
 Prince George's General Hospital and Medical Center
 Cheverly, Maryland 20785

	Consulting Cardiologist Doctors Hospital Lanham, Maryland 20706	7/82 to 1996
	Consulting Interventional Cardiologist National Heart, Lung & Blood Institute Bethesda, Maryland 20892	9/88 to 1999
	Attending Cardiologist The George Washington University Hospital 901 23 rd Street, N.W. Washington, DC 20037	11/01 to Present
	Consulting Interventional Cardiologist Washington Hospital Center 110 Irving Street, N.W. Washington, DC 20016	10/03 to 12/2009
	Consulting Interventional Cardiologist National Heart, Lung & Blood Institute Bethesda, Maryland 20892	04/08 to Present
ACADEMIC APPOINTMENTS	Instructor in Medicine USUHS School of Medicine Bethesda, Maryland 20814	7/79 to 1980
	Assistant Professor of Medicine (Cardiology) USUHS School of Medicine Bethesda, Maryland 20814	7/80 to 10/84
	Clinical Assistant Professor of Medicine (Cardiology) Georgetown University School of Medicine Washington, D.C. 20007	10/81 to 11/83
	Clinical Assistant Professor of Medicine (Cardiology) George Washington University School of Medicine Washington, D.C. 20052	7/88 to 5/90

Clinical Associate Professor of Medicine 5/90 to 6/98
(Cardiology)
George Washington University School of Medicine
Washington, D.C. 20052

Clinical Professor of Medicine (Cardiology) 6/98 to Present
George Washington University School of Medicine
Washington, D.C. 20052

C0- Program Director, Interventional Fellowship Program

George Washington University
At Washington Adventist Hospital 2002- Present

**ADMINISTRATIVE
ASSIGNMENTS:**

Director, Non-Invasive Cardiac Laboratory 7/80 to 6/81
Walter Reed Army Medical Center
Washington, D.C. 20012

Medical Student Coordinator 7/81 to 6/82
Walter Reed Army Medical Center
Washington, D.C. 20012

Director, Interventional Cardiology 9/80 to 6/82
Coronary Angioplasty Program
Walter Reed Army Medical Center
Washington, D.C. 20012

Director Interventional Cardiology 08/82 to Present
Washington Adventist Hospital
Takoma Park, Maryland 20912

Director 9/88 to 12/98
Cardiac Catheterization Laboratory &
Interventional Cardiology
Prince George's Hospital Center
Cheverly, Maryland 20785

Executive Director 9/91 to 12/2009
Interventional Cardiology Research Institute
7620 Carroll Ave, Suite 200
Takoma Park, MD 2091

**C0- Program Director,
Interventional Fellowship Program**
George Washington University
At Washington Adventist Hospital 2002 to Present

Associate Director 2001 to Present
Center for Cardiac & Vascular Research
Washington Adventist Hospital
Takoma Park, Maryland 20912

HONORS & AWARDS

Commendation Medal, U.S. Army (1982)
For outstanding achievements in echocardiography

Commendation Medal, U.S. Army (1982)
*For outstanding Staff Cardiologist, and
For introduction of innovative technique,
Coronary angioplasty to the U.S. Army*

Best Attending Physician (1983-1984)
(Teaching) Award. House Staff
Prince George's Hospital and Medical Center

Recognition Award, Board of Trustees March 1989
Washington Adventist Hospital
For developing the "*Shawl Technique*"
(Percutaneous Cardiology Bypass Support - Technique)

Recognition Award from C.R. Bard, Inc. April 1989
For developing "Percutaneous Cardiopulmonary Bypass Insertion
Technique"

Recognition Award February 1989
Maryland House of Delegates
For "Dramatic Advances in Cardiac Care through Pioneering Non-
Surgical Technical Development"

Recognition Award from USCI 1989
For developing "New Probe Angioplasty Catheter"

- Scientific Award from AMSECT 1989
For "Percutaneous Cardiopulmonary (Bypass) Support in the Cardiac Catheterization Laboratory: A New Application of Perfusion"
- Recognition from US House of Representatives 1992
(United States Congress)
For Innovator of percutaneous CPS (Cardiopulmonary Support)
- Recognition Award from USCI 1992
For services rendered to the cause of Interventional Cardiology in India
- First Place Award in Case Study Play Off 1992
Sponsored by SciMed Medical Advisory Board
- Recognition Award from 1992
National Institute of Heart Diseases
Armed Forces Institute of Cardiology
Rawalpindi, India
- Recognition Award from 1992
American Heart Association, Prince George's Division
For Dedicated Leadership & Commitment to Improving Quality of Life
- Recognition from Board of Directors October, 1993
Washington Adventist Hospital
For significant contribution to Interventional Cardiology
- Recognition Award 1994, 1995, 1996
From Indian Society of Cardiology
- Recognition Award 1997
From Pakistan Society of Cardiology
- Washington Adventist Hospital November 1998
Dedication of the Fayaz Shawl
Advanced Interventional Catheterization Laboratory
- Recognition from **Maryland State Senate** November 1998
For exceptional contributions in Medicine
And the *Dedication of the Fayaz Shawl*
Advanced Interventional Catheterization Laboratory

- Recognition from **Governor of Maryland**
 For exceptional contributions in Cardiology November 1998
 And *the Dedication of the Fayaz Shawl*
Advanced Interventional Catheterization Laboratory
- Recognized as “One of the world’s most talented Interventionists”
 Interview with The Journal of Interventional Cardiology April 2001
- Recognized by International Andreas Gruentzig Society
 As performing most Interventional procedures
 As a single operator than any other interventionist in the world
 The Journal of Interventional Cardiology April 2001
- Alliance of Cardiovascular Professionals (ACVP)
 Innovators Award March 2002
- Recognition from **Maryland State Senate**
 For contributions in Interventional Cardiology April 2002
 And for Innovators Award from the Alliance of
 Cardiovascular Professionals
- Honorary Fellowship
 Indian College of Interventional Cardiology 2003
- International Health Professional of the Year Award 2003
- Top Cardiologist – Washingtonian Magazine 2002 – 2005
- Recognition from **Maryland State Senate**
 For exceptional contributions in Medicine and November 2006
 For International Health Professional of the Year

EDITORIAL TASKS
EDITORIAL BOARDS

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|--|-----------------|
| <i>Journal of Invasive Cardiology</i> | Editorial Board |
| <i>Journal of the American College of Cardiology</i> | Reviewer |
| <i>Catheterization and Cardiovascular Diagnosis</i> | Reviewer |
| <i>American Journal of Cardiology</i> | Reviewer |
| <i>Journal of Invasive Cardiology</i> | Reviewer |
| <i>Circulation</i> | Reviewer |
| <i>European Heart Journal</i> | Reviewer |
| <i>Vascular Disease Management</i> | Reviewer |

RESEARCH PROJECTS: *PRINCIPAL INVESTIGATOR*

1. Effect of Paradoxical Septal Motion on Mitral E-point Septal Separation after Coronary Artery Bypass Surgery--FA Shawl, RD Slama, JE Davia (1979)
2. Technetium 99M Pyrophosphate Myocardial Scintigraphy and Cardiac Amyloidosis--FA Shawl, DV Nostraud, JE Davia (1979)
3. Coronary Angioplasty Followed by Low Dose Intracoronary Streptokinase Infusion in Acute Evolving Myocardial Infarction (Short and Long Term Restenosis)--FA Shawl
4. Sequential [Pack-man Technique] Coronary Angioplasty in Long Coronary Lesions (Short and Long Term Follow-up)--FA Shawl
5. Percutaneous Aortic Balloon Valvuloplasty in Aortic Valve Stenosis
6. Percutaneous Mitral Balloon Valvuloplasty in Mitral Stenosis
7. Fluosol DA-20% in Acute Myocardial Infarction (Randomized Multicenter Study)
8. Percutaneous Cardiopulmonary Bypass Support System in High Risk PTCA
9. Percutaneous Cardiopulmonary Bypass in High Risk CABG/Inoperable Patients
10. Echo/Doppler Findings in patients During Cardiopulmonary Bypass
11. Low Requirements During CPS Required to Support Patients During Supported PTCA/Valvuloplasty
12. Cardiopulmonary Bypass Support in Cardiogenic Shock and Multi-vessel Coronary Artery Disease
13. Cardiopulmonary Bypass Support in Cardiac Arrest
14. Distal Coronary Perfusion Technique during Supported PTCA
15. Myocardial Protection in the Catheterization Laboratory: Role of Arrest Coronary Perfusion
16. Percutaneous Left Ventricular Venting Technique to Prevent LV Dilatation/Decrease Myocardial Wall Tension in Cardiac Arrest
17. Percutaneous Bypass Cannulae Insertion Technique

18. Percutaneous Decimalization of Stenotic Human Coronary Arteries with Balloon Expandable Stents
19. "Rescue Angioplasty" (randomized multicenter study)
20. Role of Antiproliferative Drugs (Combination Cocktail) to Prevent Restenosis Following PTCA
21. USCI Probe™ III Catheter: Balloon-on-a-Wire Dilatation System
22. Marcator (multicenter study on restenosis)
23. SCIMED ACE -- PTCA using the (1 or 2 cm) Flexible Tip Balloon (multicenter-study)
24. SCIMED UBY Percutaneous Transluminal Coronary Angioplasty Catheter (multicenter study)
25. ORION II Steerable PTCA Balloon Catheter (multicenter study)
26. Excimer Laser Saline Perfusion Coronary Angioplasty
27. National Registry for Emergency Cardiopulmonary Bypass
28. National Registry for Cardiopulmonary Bypass Supported Coronary Angioplasty
29. Leocor, Inc.: Pico-Runner ST II Balloon Catheter Study (multi-center study)
30. PAS 0.10 Catheter for PTCA (multi-center study)
31. Pericardial Balloon Window (PBPW)
32. SCIMED *Domino* PTCA balloon catheter study (multi-center study)
33. SCIMED Postmarketing ADAPT study
34. CORDIS Balloon material comparison study (multi-center study)
35. ClinTrials/Biogen "BG8967" (Hirulog) vs. Heparin during PTCA in Patients with Unstable Angina
36. Intracoronary Activase Trial (A0422g)
37. Rotational atherectomy versus balloon angioplasty in the prevention of restenosis (ROTATE trial)
38. Impact of myocardial ischemia on endothelial function (#9414--0099 IMD391SK)

39. Carotid Protocol - Percutaneous Transluminal Angioplasty for Symptomatic Carotid and Vertebral Artery Stenosis
40. J & J STARS - Stent Anticoagulation Regimen Study (multicenter randomized trial)
41. Abbott Laboratories Protocol #M95-283 - r-UK - Initial Recanalization of Occluded Vein Bypass Grafts with Intracoronary Infusion of Urokinase (Recombinant, Human)
42. B.Braun Med. Inc. The E-Cath PTCA Dilation Catheter sizes 2.0mm, 2.5mm, 3.0mm, and 3.5mm. (IDE – multi-center study)
43. ClinTrials Research Inc. Study #453. Study of CY-1503 in Prevention of Myocardial Reperfusion Injury in Patients with Acute Myocardial Infarction Treated with Primary Angioplasty
44. PAS (Progressive Angioplasty Systems) Act One Trial (randomized trial)
45. AVE (Arterial Vascular Engineering) Micro Stent SMART Trial. IDE#: 950126
46. Scimed Life Systems Inc. The Radius Stent SCORES Trial. IDE#: G-960117
47. CORDIS, a Johnson & Johnson Company. CSSA (Carotid Stent) Registry IDE#: 960158
48. C.R. Bard. EXTRA Trial. Evaluation of the XT Stent For Restenosis in Native Arteries IDE#: G960255
49. Eclipse Surgical. Percutaneous Transluminal Myocardial Revascularization, Training Cases, Phase I. IDE#: G970063
50. Eclipse Surgical. Percutaneous Transluminal Myocardial Revascularization, Phase II. IDE#: G970063
51. Arterial Vascular Engineering, Inc. SMART: GFX™ / GFX™ XL Acute or Threatened Closure Registry. IDE# G950126
52. Boston Scientific Corporation. Integra Carotid Feasibility Protocol. IDE#: G970063
53. Cordis, Johnson & Johnson. A Multi-center Clinical Evaluation of the Cordis Nitinol Stent Delivery System. Protocol # P98-3601
54. Eclipse Surgical Technologies, Inc. A Randomized Study of the Safety and Effectiveness of Percutaneous Transluminal Myocardial Revascularization (PTMR) as an Adjunct to Percutaneous Coronary Intervention - Phase I and Training Cases. IDE# G970182

55. Eclipse Surgical Technologies, Inc. A Randomized Study of the Safety and Effect of Percutaneous Transluminal Myocardial Revascularization (PTMR) - Phase II - 012 - A&B IDE#G970182
56. Guidant. ACS Multi-link and ACS Multi-link Duet Coronary Stent System with or without Adjunctive Directional Coronary Atherectomy (DCA). IDE# G980052
57. Open-Label, Randomized Trial Comparing Clinical Outcome with Hirulog and Provisional Abciximab Versus Planned Abciximab and Low-dose Heparin in Patients undergoing Percutaneous Intervention. IND# 35.756, Protocol # 97.02
58. Proctor & Gamble Pharmaceuticals/Alexion Pharmaceuticals, Inc. Complement And ReDuction of Infarct size after Angioplasty or Lytics, Protocol 1999052 (COMPLY) and Protocol 1999053 (COMMA) (2000 – 2002)
59. Guidant, UMDNJ-New Jersey Medical School, NINDS/NIH. Carotid Revascularization Endarterectomy vs. Stent Trial (CREST), Protocol # P99-705, IDE# G 000080 (2000 – present)
60. The Medicines Company. A Randomized Evaluation in PCI Linking Angiomax™ to reduce Clinical Events, Protocol #TMC-BIV-00-01 - U.S. IND No. 35,756 (2000)
61. Cordis/Johnson & Johnson Company. Stenting and Angioplasty with Protection in Patients at High Risk for Endarterectomy (SAPPHIRE), Protocol # 98-5201 (2000 – 2005)
62. A comparison of Theophylline vs. Acetylcysteine in the Prevention of Contrast Nephrotoxicity in Patients Undergoing Cath Lab Procedures (TAPConN)
63. Perclose, An Abbott Laboratories Company. A Registry Study to Evaluate the NeuroShield™ Bare Wire Cerebral Protection System and the X-act™ Stent in Patients at High Risk for Carotid Endarterectomy (SECURITY), IDE # G010262 (2002 – 2005)
64. Guidant Corporation. CAPTURE: A post-approval study of the Guidant Carotid Stent Systems and Embolic Protection Systems, IDE# K042218 (2004 – 2006)
65. Guidant Corporation. CAPTURE II: Second phase of Carotid RX ACCULINK/RX ACCUNET Post-Approval Trial (CAPTURE) to Uncover Unanticipated or Rare Events (2006 – present)
66. Abbott Vascular. CHOICE: Carotid stenting for high surgical risk patients; evaluating outcomes through the collection of clinical evidence (2006 – present)
67. Abbott Vascular. PROTECT: Protected Carotid Artery Stenting in Subjects at High Risk for Carotid Endarterectomy (CEA) (2007 – present)

68. CardioMEMS. CHAMPION: CardioMEMS Heart Sensor Allows Monitoring of Pressure to Improve Outcomes in NYHA Class III Heart Failure Patients (2007 – present)
69. Cordis/a Johnson & Johnson Company. SAPPHIRE WW: Stenting and Angioplasty with Protection in Patients at High-Risk for Endarterectomy (2007 – present)

RESEARCH PROJECTS: CO-INVESTIGATOR (Sub- Principal Investigator)

70. The Medicines Company. APPROVE: Angiomax Peripheral Procedure Registry of Vascular Events): A study to assess the safety of replacing heparin with Angiomax® (bilvalirudin) in patients undergoing percutaneous peripheral (non-cardiac) interventional procedures. Protocol No. TMC-BIV-03-01, US IND# 35756
71. EndiCOR Medical, Inc. X-SIZER for Treatment of Thrombus and Atherosclerosis in Coronary Interventions Trial - Randomized and AMI Registry (X-TRACT), IDE# G980258
72. Boston Scientific Corporation. TAXUS IV-SR: Treatment of De Novo Coronary Disease Using a Single Paclitaxel-Eluting Stent
73. Boston Scientific Corporation. SYMBIOT™ III: A Prospective Randomized Trial Evaluating the Symbiot™ III Covered Stent System in Saphenous Vein Grafts, IDE# G000169
74. Boston Scientific Corporation. TAXUS V: A Randomized, Double-blind Trial to Assess TAXUS™ Paclitaxel-Eluting Coronary Stents, Slow-Release Formulation, in the Treatment of High Risk De Novo Coronary Lesions; Version 01; December 6, 2002
75. Cordis Corporation/Johnson & Johnson Company. GUARD: Saphenous Vein Graft Intervention Using AngioGuard™/AngioGuard XPT™ and PercuSurge® GuardWire® for Reduction of Distal Embolization, Protocol #P99-6001
76. Boston Scientific Corporation. TAXUS V ISR: A Prospective, Randomized Trial Evaluating the Slow-Release Formulation TAXUS™ Paclitaxel-Eluting Coronary Stent in the Treatment of In-Stent Restenosis
77. Cordis Corporation/Johnson & Johnson Company. E-CYPHER™ Post-Market Surveillance, Protocol #P03-6321
78. Cordis Corporation/Johnson & Johnson Company. SIRIUS-2.25mm: A Multicenter, Non-Randomized Study of the 2.25mm SIROLIMUS-Eluting BX Velocity™ Balloon-Expandable Stent in the Treatment of Patients with De Novo Native Coronary Artery Lesions, Protocol #P03-6320

79. Velocimed, Inc. The PROXIMAL TRIAL: **P**roximal Protection during Saphenous Vein Graft Intervention using the Proxis™ Embolic Protection System: A Randomized, Prospective, Multi-center, Clinical Trial
80. ev3, Inc., An Endovascular Company. SPIDER: SVG Protection In a Distal Embolic Protection Randomized Trial, IDE #020248
81. Sanofi-Synthelabs Inc. CAMPER: Clopidogrel and Aspirin in the Management of Peripheral Endovascular Revascularization. Effect of Clopidogrel vs. Placebo, on a background of Standard Care Including Aspirin, in Maintaining the Patency of Lower Limb Arteries After Angioplasty; IND #34,663
82. The Medicines Company. The ACUITY Trial: A randomized comparison of Angiomax® (bivalirudin) versus Lovenox ®/Clexane® (enoxaparin) in patients undergoing early invasive management for acute coronary syndromes without ST-segment elevation, Protocol #TMC-BIV-02-08: US IND #35,756
83. Medtronic AVE. Amethyst: The Assessment of the Medtronic AVE Interceptor Saphenous Vein Graft Filter System, IDE #G010197
84. Pfizer Inc. Phase 3, Multi-Center Double-Blind, Randomized, Parallel Group, Coronary Artery Intravascular Ultrasound Evaluation of the Anti-Atherosclerotic Efficacy, Safety, and Tolerability of Fixed Combination CP-529,414/Atorvastatin, Administered Orally, Once Daily (QD) for 24 Months, Compared with Atorvastatin Alone, in Subjects with Angiographically Documented Coronary Heart Disease, Protocol #A5091005: US IND #66,458
85. AngioScore, Inc. Angiosculpt: AngioSculpt Scoring Balloon Catheter Multi-Center Clinical Investigation, IDE #G040049
86. Boston Scientific. Atlas: A multi-center, single arm study of the TAXUS Liberte SR Stent for the treatment of patients with de novo coronary artery lesions, IDE #G040100
87. Conor Medsystems, Inc. CoStar II: Cobalt Chromium Stent and Antiproliferative for Restenosis II, IDE #G010247
88. ev3, Inc. An Endovascular Company. Create: Carotid Revascularization with ev3 Technology Evolution, IDE #G030115
89. Pathways Medical Technologies, Inc. CStaarr: CardioPath Saphenous Vein Graft Treatment for Active Atherothrombotic Debris Removal, IDE #G010247 (2005)

90. Medtronic AVE. Endeavor: A Randomized, Controlled Trial of the Medtronic Endeavor Drug Eluting Stent System versus the Cypher Sirolimus-Eluting Coronary Stent System in De Novo Native Coronary Artery Lesions (2005)
91. NIH/National Heart Lung and Blood Institute. FREEDOM: Future Revascularization Evaluation in Patients with Diabetes Mellitus: Optimal Management of Multi-Vessel Disease, IDE #G040164 (2006)
92. Advanced Cardiovascular Systems, Inc. SPIRIT IV: A Clinical Evaluation of the EIENCET V Everolimus Eluting Coronary Stent System (EECSS) in the Treatment of Subjects with de novo Native Coronary Artery Lesions (2006 – present)
93. Boston Scientific. PERSEUS: A prospective evaluation in a randomized trial of the safety and efficacy of the use of the TAXUS[®] ElementT Paclitaxel-Eluting Coronary Stent System for the treatment of de novo coronary artery lesions (2007 – present)
94. Sanofi-Aventis. CURRENT: Randomized, multi-national, double-blind study, comparing a high loading dose regimen of clopidogrel versus standard dose in patients with unstable angina or non-ST segment elevation myocardial infarction managed with an early invasive strategy (2007 – present)
95. Cordis Corporation/A Johnson & Johnson Company. ELITE: A Prospective, Single-blind, Randomized, Multi-center Study Comparing The CYPHER[®] ELITET to The CYPHER[®] Bx VELOCITY[®] Sirolimus-Eluting Stent Systems (2007 – present)
96. Schering Plough. TRACER: A Multi-center, Randomized, Double-blind, Placebo-controlled Study to Evaluate the Safety and Efficacy of SCH 530348 in Addition to Standard of Care in Subjects With Acute Coronary Syndrome: Thrombin Receptor Antagonist for Clinical Event Reduction in Acute Coronary Syndrome (2007 – present)
97. Lumen Biomedical. EPIC Pivotal: Evaluating the Use of the FiberNet[®] Embolic Protection System in Carotid Artery Stenting: The EPIC US Pivotal Study (2007 – present)
98. Abbott Vascular. SPIRIT SV/LL: A Clinical Evaluation of the ABT Everolimus Eluting Coronary Stent System (2008 – present)
99. Portola. ERASE MI: Safety and Efficacy Study of Adjunctive Antiplatelet Therapy Prior to Primary Percutaneous Intervention in Patients with ST-Elevation Myocardial Infarction (2008 – present)
100. Astra Zeneca. SATURN: A 104-week, randomized, double-blind, parallel group, multi-center Phase IIIb study comparing the effects of treatment with rosuvastatin 40 mg or atorvastatin 80 mg on atherosclerotic disease burden as measured by intravascular ultrasound in patients with coronary artery disease (2008 – present)

101. Accumetrics. GRAVITAS: Gauging Responsiveness with a VERIFY Now Assay-Impact on Thrombosis and Safety (2008 – present)
102. Jewish General Hospital/McGill University. ZESCA: Zyban as an Effective Smoking Cessation Aid for Patients Following an Acute Coronary Syndrome (2008 – present)
103. AngioScore. BIFURCATION: AngioSculpt® Scoring Balloon Catheter Multi-center Coronary Bifurcation Study (2008 – present)
104. Abiomed. PROTECT II: A Prospective, multi-center, randomized, controlled trial of the IMPELLA RECOVER LP 2.5 System versus Intra Aortic Balloon Pump (IABP) in Patients Undergoing Non-Emergent High Risk PCI (2008 – present)
105. EPIC: Evaluating the Use of the FiberNet Emboli Protection Device in Carotid Artery Stenting. The EPIC US Feasibility Study. Lument BioMedical, 2006.
106. SPIRIT IV: A Clinical Evaluation of the XIENCET V Everolimus Eluting Coronary Stent System (EECSS) in the Treatment of Subjects with de novo Native Coronary Artery Lesions. Sponsor: Advanced Cardiovascular Systems, Inc. 2006-Present
107. CHOICE: Carotid stenting for high surgical risk patients; evaluating outcomes through the collection of clinical evidence. Sponsor: Abbott Vascular. 2006-Present
108. COOL RCN: Cooling to Prevent Radiocontrast Nephropathy in Patients Undergoing Diagnostic or Interventional Catheterization. Sponsor: Radiant Medical. 2006-2008
109. ACCELA: A randomized, double-blind, placebo-controlled, parallel group trial of HMR1766 assessing the efficacy and safety of 3 doses of HMR1766 (25, 100, 200 mg OD) versus placebo with cilostazol, 100 mg BID as a calibrator, administered for 26 weeks in patients with Peripheral Arterial Disease (PAD) Fontaine stage II. Sponsor: Sanofi Aventis. 2007-2008
110. SONOMA: Post approval study of the NexStent Carotid System and the FilterWire EZ Embolic Protection System. Spenser: Boxtton Scientific. 2007-2009
111. PERSEUS: A prospective evaluation in a randomized trial of the safety and efficacy of the use of TAXUS® ElementT Paclitaxel-Eluting Coronary Stent System for the treatment of de novo coronary artery lesions. Sponsor: Boston Scientific. 2007-Present.
112. CURRENT: Randomized, multinational, double-blind study, comparing a high Loading dose regimen of clopidogrel versus standard dose in patients with unstable angina or non-ST segment elevation myocardial infarction managed with an early invasive strategy. Sponsor: Sanofi-aventis. 2007-2009

113. ELITE: A Prospective, Single Blind, Randomized, Multi-Center, Study Comparing The CYPHER® ELITET to The CYPHER® Bx VELOCITY® Sirolimus-Eluting Stent Systems. Sponsor: Cordis. 2007-Present
114. TRACER: A Multi-center, Randomized, Double-Blind, Placebo- Controlled Study to Evaluate the Safety and Efficacy of SCH 530348 in Addition to Standard of Care in Subjects With Acute Coronary Syndrome: Thrombin Receptor Antagonist for Clinical Event Reduction in Acute Coronary Syndrome. Sponsor: Schering Plough. 2007-Present
115. TAMARIS: A randomized double-blind placebo controlled parallel group study of the efficacy and safety of 4 administrations of XRP0038/NV1FGF 4 mg at 2-week intervals on amputation or any death in critical limb ischemia patients with skin lesions. Sponsor: Sanofi-aventis. 2007-2009
116. EPIC Pivotal: Evaluating the Use of the FiberNet® Embolic Protection System in Carotid Artery Stenting: The EPIC US Pivotal Study. Sponsor: Lumen Biomedical. 2007-2008
117. SATURN: A 104-week, randomized, double-blind, parallel group, multi-center Phase IIIb study comparing the effects of treatment with rosuvastatin 40 mg or atorvastatin 80 mg on atherosclerotic disease burden as measured by intravascular ultrasound in patients with coronary artery disease. Sponsor: Astra Zeneca. 2008-2010.
118. GRAVITAS: Gauging Responsiveness with a VERIFY Now Assay-Impact on Thrombosis and Safety. Sponsor: Accumetrics. 2008-Present.
119. AGILITY: Bifurcation: AngioSculpt® Scoring Balloon Catheter Multi-Center Coronary Bifurcation Study. Sponsor: AngioScore. 2008-Present.
120. PROTECT II: A Prospective, multi-center randomized controlled trial of the IMPELLA RECOVER LP 2.5 System versus Intra Aortic Balloon Pump (IABP) in Patients Undergoing Non-Emergent High Risk PCI. Sponsor: Abiomed. 2008-Present.
121. XIENCE V: XIENCET V Everolimus Eluting Coronary Stent System (EECSS) USA Post-Approval Study. Sponsor: Abbott Vascular. 2008-Present.
122. RESOLUTE US: A Clinical Evaluation of the Medtronic Endeavor® Resolute Zotarolimus-Eluting Coronary Stent System in the Treatment of De Novo Lesions in Native Coronary Arteries with a Reference Vessel Diameter of 2.25 mm to 4.2 mm IDE #G070165. Sponsor: Medtronic. 2008-Present.
123. PLATINUM: A Prospective, Randomized, Multicenter Trial to Assess an Everolimus-Eluting Coronary Stent System (PROMUS ElementT) for the Treatment of up to two De Novo Coronary Artery Lesions. Sponsor: Boston Scientific. 2009-Present.

124. GORE Embolic Filter in Carotid Stenting for High Risk Surgical Subjects (GORE EMBOLDEN). Sponsor: Gore. 2009-Present
125. SPIRIT Small Vessel: A Clinical Evaluation of the 2.25 mm XIENCE VT Everolimus Eluting Coronary Stent System. Sponsor: Abbott Vascular. 2009.
126. ZEN: The Medtronic Zotarolimus-Eluting Peripheral Stent System for the Treatment of Erectile Dysfunction in Males with Sub-Optimal Response to PDE5 Inhibitors. Sponsor: Medtronic. 2009-Present.
127. DESERT: (Drug Eluting Stent Event Registry of Thrombosis) The National DES (Drug Eluting Stent) Thrombosis Registry. Sponsor: Washington Hospital Center. 2009-Present.
128. PARIS Registry: Patterns of Non-Adherence to Anti-platelet Regimens in Stented Patients: An Observational Single Arm Study. Sponsor: CRF. 2009-Present.
129. SPIRIT PRIME: A Clinical Evaluation of the XIENCE PRIME T and XIENCE PRIME T LinQ Everolimus Eluting Coronary Stent System. Sponsor: Abbott Vascular. 2009-Present.
130. HCRI DAPT: A prospective, multi-center, randomized, double-blind trial to assess the effectiveness and safety of 12 versus 30 months of dual antiplatelet therapy (DAPT) in subjects undergoing percutaneous coronary intervention (PCI) with either drug-eluting stent (DES) or bare metal stent (BMS) placement for the treatment of coronary artery lesions. Sponsor: HCRI. 2009-Present
131. CYPRESS: A prospective, randomized, multi-center, double-blind trial to assess the effectiveness and safety of different durations of dual anti-platelet therapy (DAPT) in subjects undergoing percutaneous coronary intervention with the CYPHER® sirolimus-eluting coronary stent (CYPHER® stent). Sponsor: Cordis. 2009-Present

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123. **Shawl FA**, Efstratiou A, Lapetina F, Dukovcic A, Hoff SB, Cornell S, Dougherty KG. Elective Stent Supported Carotid Angioplasty (SSCA) in Patients with Symptomatic Coronary Artery Disease. *Cathet and Cardiovasc Diagn*:1997.
124. **Shawl FA**, Efstratiou A, Lapetina F, Hoff SB, Dougherty KG. Role of Standby Cardiopulmonary Bypass Support (CPS) for Elective Percutaneous Coronary Interventions. *Cathet and Cardiovasc Diagn*:1997.
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130. **Shawl FA**, Efstratiou A, Lapetina F, Dukovcic A, Shahab T, Hoff SB, Dougherty KG. Stent Supported Carotid Angioplasty (SSCA) in Patients With Symptomatic Coronary Artery Disease: Acute and Long Term Results. *J Am Coll Cardiol*:1998;31;454A.
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132. **Shawl FA**, Dullum M, Lapetina F, Cornell S, Hoff SB, Dougherty KG. Minimally Invasive Coronary Bypass (MIDCAB) and Percutaneous Coronary Intervention: A Hybrid Approach for Patients with Multivessel Disease. *Cathet and Cardiovasc Diagn*: 1998; 44; 123.
133. **Shawl FA**, Lapetina F, Shahab ST, Dukovcic A, Hoff SB, Cornell SL, Dougherty KG. Stent Supported Carotid Angioplasty (SSCA) In Patients with Symptomatic Coronary Artery Disease: Acute and Long Term Results. *Cathet and Cardiovasc Diagn*: 1998; 44; 125.
134. William D Knopf, Hugo Londero, Upendra Kaul, **Shawl FA**. Twelve-Month Follow-up of Patients with Refractory Class IV Angina Treated with Percutaneous Transluminal Myocardial Revascularization (PTMR). *J Am Coll Cardiol*: 1998; 82 (7A); 102S.
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137. **Shawl Fayaz**, Upendra Kabul, Vahid Saadat. Percutaneous Myocardial Revascularization Using a Myocardial Channeling Device: First Human Experience Using the AngioTrax System. *J Am Coll Cardiol*: 2000; 35(2A), 61A.

138. **Shawl FA**, Lapetina F, Kadro WY, Cornell S, Dougherty KG. Long-Term Outcome Following Carotid Artery Stenting. *J Am Coll Cardiol*: 2000; 35(2A), 69A.
139. **Shawl FA**, Kadro WY, Lapetina F, Tobar R, Cornell S, Dougherty KG. Outcome of Carotid Stenting in Symptomatic Octogenarians and Non-Octogenarians. *J Am Coll Cardiol*: 2000; 35(2A), 85A.
140. **Shawl F**, Kaul U, Mahmood S, Pollock C. Percutaneous Myocardial Revascularization Using a Myocardial Channeling Device: Procedural Results and 12-Month Outcome. *J Am Coll Cardiol*: 2001; 37(2A), 48A.
141. **Shawl F**, Hakim J, Mahmood S, Humphreys E, Pollock C. Outcome of Carotid Stenting in Octogenarians Compared to Non-Octogenarians: Acute and Long Term Outcome. *J Am Coll Cardio*: 2001; 37(2A), 51A.
142. **Shawl F**, Mahmood S, Hakim J, Pollock C, Humphreys E. Does Standby Cardiopulmonary Bypass Support Improve Survival in Patients Who Sustain a Cardiac Arrest During Elective Percutaneous Coronary Interventions? *J Am Coll Cardiol*: 2001; 37(2A), 175A.

AUDIOVISUAL MATERIAL (for teaching)

1. *Mitral Valve Diseases*, 1981.
2. *Percutaneous Transluminal Coronary Angioplasty* (patient teaching video).
3. *Percutaneous Transluminal Coronary Angioplasty* (physician teaching video).
4. *Management of the Post-operative Cardiac Patient*.
5. *Asymptomatic Left Main Coronary Artery Disease*. Discussion with Dr. William Likeoff in ACCEL, 1982.
6. *Live Demonstration Course in Aortic/Mitral Valvuloplasty*, Washington, DC, April 1987.
7. *Percutaneous Insertion Technique for Cardiopulmonary (Bypass) Support, Using the SHAWL TECHNIQUE*.
8. *I Annual Live Demonstration Course in Interventional Cardiology: Percutaneous Cardiopulmonary Bypass*, Washington, DC, November 1988.
9. *II Annual Live Demonstration Course in Interventional Cardiology: Cardiopulmonary Bypass and Stent Implantation*, Washington, DC, April 1989.

10. *Percutaneous Removal Technique for Bypass Cannulae.*
11. *III Annual Live Demonstration Course in Cardiology: Percutaneous Cardiopulmonary Bypass, Washington, DC, April, 1990.*
12. *IV Live Demonstration Course in Interventional Cardiology: Percutaneous Cardiopulmonary Bypass, Washington, DC, May, 1991.*
13. *V Live Demonstration Course in Interventional Cardiology: Percutaneous Cardiopulmonary Bypass, Washington, DC, September, 1992.*
14. *VI Live Demonstration Course in Interventional Cardiology: Minimally Invasive Angioplasty, Washington, DC, May, 1993.*
15. *VII Live Demonstration Course in Interventional Cardiology: Minimally Traumatic Angioplasty, Washington, DC, April, 1994.*
16. *VIII Live Demonstration Course in Interventional Cardiology: Minimally Traumatic/Invasive Angioplasty Update; Rotational Atherectomy; Procedure Costs; PCPS. Washington, DC, April/May 1995.*
17. *IX Live Demonstration Course in Interventional Cardiology: Minimally Traumatic Angioplasty; Rotational Atherectomy; PCPS; Carotid Stenting and Peripheral Interventions.*
18. *Percutaneous Transluminal Myocardial Revascularization 1997 – 1998*

MAJOR INVITED PRESENTATIONS, GUEST LECTURES, GUEST FACULTY – CME COURSES AND COURSE DIRECTORSHIPS

1987

- ◆ **Live Demonstration Course on Aortic/Mitral Valvuloplasty (Course Director): Washington, D.C.**

1988

- ◆ **Live Demonstration Course on Percutaneous Cardiopulmonary (Bypass) Support (PCPS) in Complex Angioplasty (Course Director): Washington, D.C.**

- ◆ **Grand Rounds: Role of Percutaneous Cardiopulmonary (Bypass) Support (PCPS) in Interventional Cardiology.** Harvard Medical School, Beth Israel Hospital, **Boston, MA**, December 1988.

MAJOR INVITED PRESENTATIONS, GUEST LECTURES, GUEST FACULTY –

CME COURSES AND COURSE DIRECTORSHIPS (Continued)

1989

- ◆ **Interventional Cardiology '89: Techniques of Percutaneous Cardiopulmonary Bypass, Snow Mass, CO,** Feb 27-Mar 3, 1989.
- ◆ **Montgomery General Hospital: Cardiopulmonary Bypass Support, Olney, MD,** March 16, 1989.
- ◆ **American College of Cardiology, 38th Annual Scientific Session: Percutaneous Cardiopulmonary Bypass Support: Technique, Indications & Results, Anaheim, CA,** Mar 19-23, 1989.
- ◆ **Washington Hospital Center: PCPS in High Risk PTCA, Washington, D.C.,** April, 1989.
- ◆ **Walter Reed Army Medical Center: Portable CPS Role in Interventional Cardiology, Washington, D.C.,** April 1, 1989.
- ◆ **II Annual Live Demonstration Course in Interventional Cardiology (Course Director): Cardiopulmonary Bypass and Stent Implantation, Washington, D.C.,** April 1989.
- ◆ **George Washington University Hospital: PCPS in High Risk PTCA, Washington, D.C.** May 7, 1989.
- ◆ **Treatment of High Risk Patient (Role of PCPS), Silver Spring, MD,** June 1, 1989.
- ◆ **Texas Heart Institute Annual Symposium: PCPS in High Risk PTCA, Houston, TX,** June 23-24, 1989.
- ◆ **Angioplasty 1989: PCPS in High Risk PTCA, San Francisco, CA,** August 14-17, 1989.
- ◆ **American College of Cardiology, 3rd International Workshop on Future Directions in Interventional Cardiology: PCPS in High Risk Angioplasty: Technique, Indications and Results Santa Barbara, CA,** Sept 15-17, 1989.
- ◆ **18th Annual Cardiology Symposium: PCPS in High Risk PTCA, Kalamazoo, MI,** Sept. 29, 1989.

- ◆ **Air Force Institute of Pathology: Advances in Cardiology: PCPS in Complex Angioplasty, Washington, D.C., Oct. 4, 1989.**
- ◆ **Texas Heart Institute: 19th Annual Symposium: PCPS in Elective and Emergency PTCA, Houston, TX, Oct. 12-14, 1989.**
- ◆ **Interventional Cardiology '89: Percutaneous Cardiopulmonary Support, Miami, FL, Oct. 23-24, 1989.**
- ◆ **XVI World Congress on Diseases of the Chest & 55th Annual Scientific Session: Percutaneous Cardiopulmonary Support, Boston, MA, Oct. 31, 1989.**
- ◆ **Florida Heart Institute, Interventional Cardiology Symposium: PCPS in Complex PTCA, Orlando, FL, Nov. 5-7, 1989.**
- ◆ **American Heart Association, 62nd Scientific Session: PCPS in High Risk PTCA, New Orleans, LA, Nov. 13-16, 1989.**
- ◆ **Extra-Corporeal Meeting: PCPS in High Risk PTCA, Oakland, CA, Nov. 18, 1989.**

1990

- ◆ **Medical University of South Carolina: Cannulation Techniques for Femoro-Femoral Bypass, Charleston, SC, Jan 6, 1990.**
- ◆ **Roche Pharmaceuticals: How To Approach "High Risk" Coronary Patients, Marco Island, FL, Jan 8, 1990.**
- ◆ **Stormont-Vail Regional Medical Center: PCPS in High Risk Interventions, Topeka, KS, Jan 12, 1990.**
- ◆ **C.R. Bard, Inc.: PCPS in High Risk PTCA, Lake Tahoe, NV, Feb 14, 1990.**
- ◆ **Interventional Cardiology 1990: Percutaneous Cardiopulmonary Support, Snow Mass, CO, Feb 26, 1990.**
- ◆ **10th Annual San Diego Cardiothoracic Surgery Symposium: Techniques of Cardiopulmonary Support, San Diego, CA, Mar 15-18, 1990.**
- ◆ **American College of Cardiology, 39th Annual Scientific Session: Percutaneous Cardiopulmonary Support, New Orleans, LA, Mar 18-22, 1990.**

- ◆ **III Annual Live Demonstration Course in Interventional Cardiology** (Course Director): *Percutaneous Cardiopulmonary Support*, Washington, D.C., Apr 20, 1990.
- ◆ **USCI/Bard Meeting:** *Percutaneous Cardiopulmonary Support*, Harrisburg, PA, Apr 26, 1990.
- ◆ **Genentech, Inc.:** *Issues in Reperfusion for the '90's*, Naples, FL, Apr 29, 1990.
- ◆ **Society for Cardiac Angiography and Interventions, Thirteenth Annual Meeting:** *Percutaneous Cardiopulmonary Support*, Colorado Springs, CO, May 18, 1990.
- ◆ **Maryland Academy of Family Physicians:** *Interventional Cardiology 1990*, Ocean City, MD, May 19, 1990.
- ◆ **Rhode Island Hospital:** *Percutaneous Cardiopulmonary Support*, Providence, RI, June 12, 1990.
- ◆ **Killingbeck Cardiovascular II Course:** *PCPS and Stents (Live Demonstrations of CPS and Other Interventional Techniques)*, Leeds, England, July 11-13, 1990.
- ◆ **Beth Israel Hospital:** *Percutaneous Cardiopulmonary Support*, NY, Aug 22, 1990.
- ◆ **American College of Cardiology--Future Directions in Interventional Cardiology:** *Advances in CPS*, Santa Barbara, CA, Sept 7-9, 1990.
- ◆ **Advanced Demonstrations in Percutaneous Transluminal Angioplasty XXIV:** *Use of Extracorporeal Support in Acute Cath Lab Complications, Cardiogenic Shock, and High Risk PTCA*, Andreas Gruentzig Interventional Institute, Atlanta, GA, Sept 23-26, 1990.
- ◆ **American Heart Association, 63rd Scientific Session:** *Percutaneous cardiopulmonary bypass support in the catheterization laboratory: Technique and complications*, Dallas, TX, Nov 11-15, 1990.
- ◆ **Frontiers in Cardiovascular Medicine:** *Cardiopulmonary Bypass Supported Angioplasty*, Dallas, TX, Nov 15, 1990.
- ◆ **PTCA and Valvuloplasty--a Live Demonstration Course:** *(Live Demonstrations of CPS and Other Interventional Techniques)*, Singapore, Dec 12-14, 1990.
- ◆ **Newer Techniques in Coronary Angioplasty:** *PTCA in High Risk Patients*, New Delhi, India, Dec 17-18, 1990.
- ◆ **Advanced Coronary Interventions Course:** *Live Demonstrations of CPS, Stenting and Atherectomy*, New Delhi, India, December 1990.

1991

- ◆ **Guthrie Clinic: CPS-Supported High Risk Angioplasty, Sayre, PA, Jan 8, 1991. SciMed Medical Advisory Board: Interventional Cardiology, Scottsdale, AZ, Mar 14-17, 1991.**
- ◆ **National Hemodynamic Meeting, Live Demonstration of CPS Technique: CPS in High Risk Angioplasty, Sao Paulo, Brazil, Apr 12-15, 1991.**
- ◆ **International Symposium on Advances in Cardiology and Cardiac Surgery: PTCA in the Patient without Surgical Changes and Mechanical Supports to Systematic Circulation, Il Ciocco, Italy, May 2-5, 1991.**
- ◆ **IV Annual Live Demonstration Course in Interventional Cardiology (Course Director): Percutaneous Cardiopulmonary (Bypass) Support (PCPS), Washington, D.C., May 18-20, 1991.**
- ◆ **PTCA 8th Course: PCPS in High Risk PTCA, Geneva, Switzerland, June 24-26, 1991.**
- ◆ **Cardiovascular Interventions--Technology at the Summit. Live Demonstration of CPS Technique, Atherectomy and Groin Comparison Technique: The CPS Experience, Keystone, CO, July 28-31, 1991.**
- ◆ **Angioplasty 1991: Live Demonstration Course: PCPS Supported Interventions and Directional Atherectomy: Techniques and Indications, San Francisco, CA, Sept 20-22, 1991.**
- ◆ **Future Directions in Interventional Cardiology: Advances in CPS--A Three-Year Experience, Santa Barbara, CA, Sept 20-22, 1991.**
- ◆ **Interventional Cardiology Course: Long Term Experience with PCPS and PCPS for Cardiogenic Shock and/or Cardiac Arrest, Doral Resort, FL, Oct 6-11, 1991.**
- ◆ **International Symposium on Complex PTCA: PCPS, Live Demonstration: CPS Stenting, Atherectomy Complex PTCA and Groin Compression Techniques, Bombay, India, Oct 14-16, 1991.**
- ◆ **Society of Extracorporeal Technology: Current Status of PCPS, Trumbull, CT, Oct 19, 1991.**
- ◆ **American Heart Association, 64th Scientific Session: Percutaneous Cardiopulmonary Bypass in Cardiac Arrest, and Cardiopulmonary Bypass Supported PTCA: Long Term Follow-up in High Risk Patients, Anaheim, CA, Nov 11-14, 1991.**

1992

- ◆ **Cedars-Sinai Medical Center: Excimer Laser Coronary Angioplasty & Intravascular Stent Implantation, Marina Del Rey, CA, Mar 18-24, 1992.**
- ◆ **Cardiovascular Interventions--Technology on the Horizon: Eastern U.S. CPB Experience, Lubbock, TX, Apr 10-11, 1992.**
- ◆ **American College of Cardiology, 41st Scientific Session: Emergent Percutaneous Bypass Support Following Cardiac Arrest, Dallas, TX, Apr 12-16, 1992.**
- ◆ **Cardiovascular Interventions--Technology at the Summit: Supported Angioplasty: Current Status and Recommendations, Keystone, CO, July 30-Aug 1, 1992.**
- ◆ **VI Annual Live Demonstration Course in Interventional Cardiology (Course Director):**
 - *PCPS, Current Indications*
 - *Current Status of ELCA and DCA Technique*
 - *Management of Groin Complications. Washington, D.C., Sept 27-29, 1992.*
 -
- ◆ **Cardiological Society of India, 44th Annual Conference**
 - *New Approaches in the Management of Cardiogenic Shock: Role of Assist Devices*
 - *Live Demonstration Technique - Stents, Atherectomy, CPS, and Groin Compression***New Delhi, India, Nov 2-5, 1992.**
- ◆ **Talk on Excimer Laser Angioplasty at a meeting held concurrently with the American Heart Association, 65th Scientific Session: New Orleans, LA, Nov. 1992.**

1993

- ◆ **Cardiovascular Interventions: Technology on the Horizon. Evolving Experience with CPS and Directional Coronary Atherectomy, Improved Techniques for Avoiding Groin Complications, Lubbock, TX, Apr 2-4, 1993.**
- ◆ **VI Annual Live Demonstration Course in Interventional Cardiology (Course Director): Minimally Invasive Angioplasty, Washington, D.C., May 8-11, 1993.**
- ◆ **Cardiovascular Interventions: Technology at the Summit, III. High-risk Angioplasty: Prophylactic and Emergent Support and Complex Angioplasty: New Techniques. Aspen CO, Jul 29-Aug 1, 1993.**

- ◆ **Union Memorial Hospital.** *Minimally Invasive Angioplasty.* **Baltimore, MD**, Oct. 20, 1993.
- ◆ **Point/Counterpoint in Interventional Cardiology: Debating Advanced Modalities.** *Percutaneous Cardiopulmonary Bypass Support.* **New York, NY**, December 11, 1993.
- ◆ **Live Demonstration Techniques** (CPS, Complex PTCA, Rotational Atherectomy, Peripheral Vascular Interactions and Groin Hemostasis), **Rawalpindi, Pakistan**, December 14, 1993.

1994

- ◆ **VII Annual Live Demonstration Course in Interventional Cardiology** (Course Director): *Minimally Traumatic Angioplasty.* **Washington, D.C.**, April 17-19, 1994.
- ◆ **Providence Heart Center Cardiovascular Conference: Interventional Cardiology Today.** *High-risk Angioplasty.* **Anchorage, Alaska**, Apr 30, 1994.
- ◆ **Technology at the Summit, IV.** *High-Risk Angioplasty: Prophylactic and Emergent Support.* **Aspen CO**, July 31, Aug 3, 1994.
- ◆ **46th Annual Conference of Cardiological Society of India.**
 - *Cardiac Interventions, Past, Present & Future*
 - *Complex PTCA - Supported PTCA*
 - *Percutaneous Rotational Atherectomy in Complex Coronary Stenoses Unfavorable to Balloon Angioplasty***Bombay & Jaipur, India**, November 30 - December 2, 1994.
- ◆ **Live Demonstration.** *Complex PTCA, Atherectomy, CPS, Stenting, and Mechanical Groin Compression,* **Bombay, India**, December 3-4, 1994.

1995

- ◆ **VIII Annual Live Demonstration Course in Interventional Cardiology** (Course Director)
 - *Minimally Traumatic/Invasive Angioplasty Update*
 - *Rotational Atherectomy*
 - *Procedure Costs*
 - *PCPS***Washington D.C.**, April 29 - May 2, 1995.
- ◆ **SCIMED Medical Advisory Board.** **Scottsdale, Arizona.** May 18-21, 1995.

- ◆ **Cardiovascular Interventions Technology at the Summit, V.** *High Risk Angioplasty: Effects of Minimally Invasive Intervention.* Aspen, Colorado. August 3-6, 1995.
- ◆ **Johnson & Johnson Palmaz-Stent Forum.**
 - *How to Implant a Coronary Stent Using Minimally Traumatic Approach*
 - *How to Handle Groin Access Complication Following Coronary Interventions*Dallas, Texas, October 11-13, 1995.
- ◆ **Point Counterpoint in Interventional Cardiology.** *Supported Percutaneous Transluminal Coronary Angioplasty (PTCA).* New York, December 7-8, 1995.

1996

- ◆ **International Andreas Grüentzig Society.** *High Risk Coronary Intervention with Poor LV Function.* Aruba, February 4-8, 1996.
- ◆ **Transcatheter Cardiovascular Therapeutics (TCT) - VIII.**
 - *Acute Hemodynamic Support during High-Risk Transcatheter Coronary Interventions*
 - *The Management of Carotid & Coronary Disease: The Interventional Cardiologist's Domain?*Washington Convention Center, Washington D.C., February 28 - March 3, 1996.
- ◆ **American College of Cardiology 45th Annual Scientific Session.** *Emergency Coronary Bypass or Angioplasty in Patients with Electromechanical Dissociation or Refractory Ventricular Fibrillation: Enhanced Survival with Left Ventricular Venting.* Orlando, Florida, March 24-27, 1996.
- ◆ **IX Annual Live Demonstration Course in Interventional Cardiology (Course Director):** *Supra Aortic Interventions/Advanced Stent Techniques.* Washington, D.C., April 28 - 30, 1996.
- ◆ **The Society for Cardiac Angiography and Interventions.** *Safety and Efficacy of Rotational Atherectomy in the Treatment of Coronary Stent Restenosis.* Colorado Springs, Colorado, May 14 - 18, 1996.
- ◆ **Cardiovascular Interventions Technology at the Summit VI.**
 - *High Risk PTCA: Effects of Minimally Invasive Intervention*
 - *Carotid Stenting in the High Risk Patient*Aspen, Colorado, July 31 - August 3, 1996.
- ◆ **Interventional Cardiology: Toward the Third Millennium - Carotid Stenting: Minimally Invasive Approach for Carotid Artery Disease.** Bethesda, MD, September 13, 1996.
- ◆ **New Techniques and Concepts in Cardiology - American College of Cardiology.**
 - *What is the role of carotid stenting in carotid insufficiency?*
 - *HIGH RISK PTCA: The Value of Cardiopulmonary Support*

Washington, D.C., October 24-26, 1996

- ◆ **Asian Pacific Society of Interventional Cardiology.** *Interventional Cardiology, Where do we stand in 1996? High Risk Intervention - How far can we go?; Live Cases Demonstrations:: Carotid Stenting, Complex PTCA, Madras, India, and December 7-8, 1996.*

1997

- ◆ **American College of Cardiology 46th Annual Scientific Session.** *Percutaneous Carotid Intervention in Patients with Symptomatic Coronary Artery Disease. Anaheim, CA. March 15 - 19, 1997.*
 - ◆ **Lecture [Grand Rounds].** *Interventional Cardiology - Update. Nassau Medical Center, New York, March 27, 1997.*
 - ◆ **Satellite Symposium.** *Live Demonstration in Coronary Intervention [Rotational Atherectomy & Stents], Ruby Hall, Pune, India, March 29 - 30, 1997.*
 - ◆ **Cardiac and Newer Interventions: Where Do We Stand in 1997?** *Batra Hospital, New Delhi, India, April 1, 1997.*
 - ◆ **Satellite Symposium. Live Demonstration: Coronary Intervention; Carotid Stenting and Management of Groin Complications.** *Punjab Institute of Cardiology, Lahore, Pakistan, April 2, 1997.*
 - ◆ **Asian Pacific Interventional Cardiology Satellite Symposium:**
 - *Role of Interventional Cardiology in Patients with No Options*
 - *Percutaneous Carotid Intervention in Patients with Symptomatic Carotid Artery Disease*
 - *How to manage patients with Acute Myocardial Infarction*
 - *How to prevent complication During PCI?*
 - **Live Demonstrations, CPS in High Risk/Inoperable Patients, and Carotid Stenting**
- Rawalpindi, Pakistan, April 3 - 5, 1997.**
- ◆ **New Horizons in Cardiovascular Intervention, Advances in Cardiovascular Stenting, 20th Anniversary of Coronary Angioplasty.** *High Risk Interventions, How Far Can We Go? Live Demonstrations of CPS, Rotational Atherectomy and Complex PTCA, San Francisco, California, May 4 - 7, 1997.*
 - ◆ **Lecture. The Society of Cardiac Angiography and Interventions.** *Role of Standby Cardiopulmonary Bypass Support (CPS) For Elective Percutaneous Coronary Interventions. Scottsdale, Arizona, May 15 - 18, 1997.*

- ◆ **Advanced Coronary & Peripheral Intervention Symposium.**
 - *Current Status of Interventional Cardiology - 1997.*
 - *Carotid Stenting - Current Role and Future Directions*
 - *Management of Groin Complication*
 - *Live Demonstrations: Percutaneous Transluminal Myocardial Revascularization Technique: 1st Human Demonstration*Batra Hospital, **New Delhi, India**, June 28 - July 1, 1997.

- ◆ **The Sixth Annual New Devices Seminar for the Cardiac and Peripheral Vascular Laboratories.** *High Risk Intervention Including Left Main: Where Do We Stand?* Disney Yacht and Beach Club Resort, **Orlando, FL**, July 2 - 5, 1997.

- ◆ **Cardiovascular Interventions Technology At The Summit, VII.**
 - *High Risk PTCA*
 - *Carotid Stenting during High Risk Syndromes*Ritz Carlton, **Aspen, Colorado**, July 26, 1997.

- ◆ **XIXth Congress Of The European Society Of Cardiology.** *Elective Stent Supported Carotid Angioplasty (SSCA) In Patients With Symptomatic Coronary Artery Disease.* Grand Hotel, **Stockholm, Sweden**, August 25, 1997.

- ◆ **20 Years of PTCA - Back To The Cradle, Andreas Gruentzig Anniversary.** *Percutaneous Cardiopulmonary Support; History Current Role, Future Developments.* Kongresshaus, **Zurich, Switzerland**, September 17, 1997.

- ◆ **Transcatheter Cardiovascular Therapeutics, (TCT IX)**
 - *The Role of Carotid Stent Supported Angioplasty in High Risk Patients*
 - *Carotid Stenting Technique and Case Selection Issues:*
 - *Clinical Experiences in Carotid Stenting: Results from Washington Adventist Hospital.*Washington Convention Center, **Washington, D.C.**, September 28, 1997.

- ◆ **1997 Update in Cardiology**
 - *Interventional Cardiology-How Far Can We Go?*
 - *Catheter-Based Interventions: Current Status and Future Directions, Including TMR*Northampton Country Club, **Allentown, PA**, October 4, 1997.

- ◆ **American Heart Association 70th Scientific Sessions. Moderated Poster Presentation.** *Stent Supported Carotid Angioplasty (SSCA) in Patients with Symptomatic Coronary Artery Disease.* **Orlando, FL**, November 10, 1997.

1998

- ◆ **5th Biennial International Gruentzig Society**
 - *Combined Carotid and Coronary Intervention - A Preferred Approach*
 - *Transmyocardial Revascularization – What is the Current Status Using the Percutaneous Approach?* Conrad Resort and Casino, **Punte Del Este, Uruguay**, January 21, 1998.

- ◆ **Non-Surgical Revascularization Techniques at the Turn of the Century**
 - *PTMR Technical Developments and Initial Experience*
 - *Future of Interventional Cardiology*Batra Hospital and Medical Research Centre, **New Delhi, India**, March 2, 1998.

- ◆ **Goa Medical College Staff Society Meeting**
 - *What Is New in the Prevention of Heart Attack and Stroke?*
 - *New Trends in Interventional Cardiology*
 - *Percutaneous Transluminal Myocardial Revascularization*Oberoi Hotel, **Goa, India**, March 4 - 5, 1998.

- ◆ **Live Demonstration. Complex Case in PTMR. Bombay, India**, March 6, 1998.

- ◆ **American College of Cardiology 47th Annual Scientific Sessions. Percutaneous Transluminal Myocardial Revascularization (PTMR): Procedural Results and Early Clinical Outcome. Atlanta, GA**, March 31 – April 1, 1998.

- ◆ **European Vascular Course. Percutaneous Angioplasty for Atherosclerotic Stenosis of the Internal Carotids. Marseille, France**, April 3, 1998.

- ◆ **Fourth Annual Challenges in Cardiovascular Case Management Conference. Transmyocardial Revascularization - Long Term Results. Las Croabas, Puerto Rico**, April 16 - April 19, 1998.

- ◆ **Tenth Annual Live Demonstration Course in Interventional Cardiology (Course Director): Supra Aortic Interventions and Other Aortic Interventions/Advanced Stent Techniques. Washington, D.C.**, May 1 - 4, 1998.

- ◆ **The Society for Cardiac Angiography and Interventions 21st Annual Meeting.**
 - *Percutaneous Transluminal Myocardial Revascularization (PTMR): Procedural Results and Early Clinical Outcome*
 - *Minimally Invasive Coronary Bypass (MIDCAB) and Percutaneous Coronary Intervention: A Hybrid Approach for High Risk Patients with Multivessel Disease*
 - *Stent Supported Carotid Angioplasty (SSCA) in Patients with Symptomatic Coronary Artery Disease: Acute and Long Term Results***Montreal, Quebec, Canada**, May 13 – 16, 1998.

- ◆ **Live Demonstration. Angiogenesis and Direct Myocardial Revascularization.** *Endocardial - (Catheter-Based) DMR - Eclipse Surgical Technologies.* **Washington Adventist Hospital, Takoma Park, MD,** June 5 - June 6, 1998.

- ◆ **Cardiovascular Interventions: Technology at the Summit VIII.**
 - *Early Results of Eclipse Laser Percutaneous Myocardial Transluminal Revascularization*
 - *Carotid Stenting During High Risk Syndromes*
 - *Interventional Cardiology - Pushing the Envelope***Aspen, CO,** July 25, 1998.

- ◆ **Transcatheter Cardiovascular Therapeutics (TCT) - X**
 - *The Future of Carotid Intervention -- ubiquitous therapy or niche role?*
 - *Peripheral (extra-cardiac) Angioplasty*
 - *Neurovascular Intervention & Carotid Stent Therapy*
 - *Hot Stent Topics: Roundtable Crossfire***Washington, D.C.,** October 9 - October 11, 1998.

- ◆ **American Heart Association 71st Scientific Sessions**
 - *Stent Supported Carotid Angioplasty (SSCA) Has More Favorable Outcome in Octogenarians (Oct) Compared To Non-Octogenarians (Non-Oct)*
 - *Carotid Stenting in High Risk Patients with Symptomatic CAD: Acute and Long Term Results***Dallas, TX,** November 8 - November 11, 1998.

1999

- ◆ **American College of Cardiology 48th Annual Scientific Sessions**
 - *Complications of Coronary Intervention: Prevention, Recognition and Management*
 - *Cath Lab Catastrophes: When Death is Imminent***New Orleans, LA,** March 6 - March 9, 1999.

- ◆ **Cardiovascular Training and Education Center (CTEC).** *Advanced Stenting Tips and Tricks - Guide Wires, Guide Catheters, Access Site Considerations, Hemodynamic Support and More.* **Washington, D.C.,** April 26, 1999.

- ◆ **Angiogenesis & DMR – Direct Myocardial Revascularization.** *Catheter Based DRM – A Revolutionary Therapeutic Advance or an Exaggerated Placebo?* **Washington, D.C.,** April 26, 1999.

- ◆ **Cardiovascular Interventions, Technology at the Summit IX.** *Carotid Stenting in High Risk Symptomatic Coronary Artery Disease.* Aspen, CO., July 29 - Aug. 1, 1999.

- ◆ **Seventh New Devices Seminar for the Cardiac and Peripheral Vascular Laboratories.** *Tips and Tricks to Avoid Complications during Carotid Stenting.* Orlando, FL., July 2-5, 1999.

- ◆ **Cardiovascular Training and Education Center (CTEC).** *Advanced Stenting Tips and Tricks - Guide Wires, Guide Catheters, Access Site Considerations, Hemodynamic Support, and More.* Washington, D.C., August 2, 1999.

- ◆ **Live Demonstration Cases. Batra Hospital & Medical Research Centre.** *Percutaneous Myocardial Channeling.* New Delhi, India, August 24 - August 31, 1999.

- ◆ **Transcatheter Cardiovascular Therapeutics (TCT) – Eleventh Annual Symposium.**
 - Percutaneous Intervention I: Interventions and Techniques – *Percutaneous Intervention Techniques*
 - Controversies in Extra cardiac Intervention – Distal Protection Devices will Become Standard in the Interventional Treatment of Carotid, Renal, and Peripheral Disease – *Counterpoint: Keep it Simple: Complications are Already Infrequent with Proper Technique!*
 - Novel Approaches to “Mechanical Angiogenesis” – *The AngioTrax™ Myectomy System: First Human Experience*
 - Laser Myocardial Revascularization Techniques: Similarities and Differences – *Eclipse Percutaneous Transmyocardial Revascularization (PTMR): Device Description and User’s Guide*
 - Carotid Stenting: The Basics – *Avoiding Complications During Carotid Stenting: Tips, Tricks and Interventional Pear*
 - Carotid Stenting: Clinical Results – *Interventional Strategies in Patients with Concomitant Coronary and Carotid Disease*
 - Carotid Stenting: The Future – *Carotid Stenting: Discussion and Case Reviews*

Live Case Demonstrations from Washington Adventist Hospital,
ISCAT (International Society for Carotid Artery Therapy) Scientific and Clinical Sessions at TCT -
Complex Lesion and Patient Subsets – *Combined Coronary and Carotid Disease*
Washington, D.C., September 22 – 25, 1999.

2000

- ◆ **American College of Cardiology 49th Annual Scientific Session - ACCIS 2000**
 - Complications: Prevention, Recognition, and Management – *Cath Lab Catastrophes: When Death is Imminent*
 - *Percutaneous Myocardial Revascularization Using a Myocardial Channeling Device: First Human Experience Using the AngioTrax™ System*
 - *Outcome of Carotid Stenting in Symptomatic Octogenarians and Non-Octogenarians*
 - *Extent of Late Angiographic Luminal Loss Following Carotid Artery Stenting*
 - *Long-Term Outcome Following Carotid Artery Stenting***Anaheim, CA, March 12 – 15, 2000.**

- ◆ **Sixth Annual Interventional Fellows Course.** Live Case and; Lecturer - *When Death is Imminent: Management of the High Risk Patient and Cath Lab Catastrophes.* **San Jose, CA, March 29 - April 1, 2000.**

- ◆ **Sixth Biennial International Andreas Gruentzig Society (IAGS) Meeting - Diffuse Coronary Artery Disease; and - Non Cardiac Revascularization.** **Elounda, Crete, May 28 – June 1, 2000.**

- ◆ **Cardiovascular Interventions: Technology at the Summit X.** *Cath Lab Catastrophes: When Death is Imminent.* **Aspen, CO, June 29 - July 1, 2000.**

- ◆ **The Eighth New Devices Seminar for the Cardiac and Peripheral Vascular Laboratories**
 - Lecture: *Percutaneous (non-laser) Myocardial Revascularization - Initial Human Experience*
 - Workshop: *Techniques and Equipment for Percutaneous Coronary Bypass, Venous Arterialization, Myocardial Revascularization***Orlando, FL, July 1-3, 2000.**

- ◆ **Interventional Cardiology: 2000 and Beyond (Second Annual Mayo Interventional meeting)**
Lecture (live remote teleconference) - *Cath Lab Crashes and How to Deal with Them: 2000 and Beyond.* **Minneapolis, MN, October 2, 2000.**

- ◆ **TCT 2000 - Transcatheter Cardiovascular Therapeutics – Twelfth Annual Symposium.**
Case Moderator--Live Cases:
 - *Coronary State-of-the-Art*
 - *AngioTrax™ PMC*
 - *The High-Risk Patient and the High-Risk Lesion*
 - *Tips, Tricks and Technical Pearls (Fundamentals of Carotid Stenting)*

- ◆ **TCT 2000 - Twelfth Annual Symposium (Contd.)**
Lecturer:
 - *Advanced Carotid Stenting: High Risk Anatomy and Patient Subsets*

- *Managing the Carotid Patient with Acute Coronary Ischemia*
- *The AngioTrax™ Mechanical DMR System - Device Design, Technique, and Preliminary Clinical Experiences*
- *New DMR Systems in Clinical Trials II: The AngioTrax Mechanical Coring System*
Washington, D.C., October 17 - 22, 2000.

- ◆ **George Washington University Hospital, Division of Cardiology, Grand Rounds.** *Percutaneous Transluminal Septal Myocardial Ablation in Hypertrophic Obstructive Cardiomyopathy.* **Washington, DC**, November 29, 2000.
- ◆ **Endovascular Therapy Symposium 2000 - Argentina Society of Cardiology Annual Meeting.** Remote Live Case Demonstration (with James A. Smith, D.O.) - *Carotid stenting.* **Rosario, Argentina**, November 30, 2000.

2001

- ◆ **Sixth Interventional Cardiology Workshop - Pakistan Society of Interventional Cardiology.** Opening Session Lecture - *Interventional Cardiology in the New Millennium and beyond*; Live case operator; panel discussant. **Rawalpindi, Pakistan**, February 15 - 17, 2001.
- ◆ **American College of Cardiology 50th Annual Scientific Session**
 - *Percutaneous Myocardial Revascularization Using a Myocardial Channeling Device: Procedural Results and 12-Month Outcome*
 - Symposium Lecture - ACCIS 2001:**
 - *Intervention in Challenging Patient Subsets - Severe Left Ventricular Systolic Dysfunction*
 - *Outcome of Carotid Stenting in Octogenarians Compared to Non-Octogenarians: Acute and Long Term Outcome*
 - *Does Standby Cardiopulmonary Bypass Support Improve Survival in Patients Who Sustain a Cardiac Arrest During Elective Percutaneous Coronary Interventions?***Orlando, FL**, March 18-21, 2001.
- ◆ **Seventh Annual Interventional Cardiology Fellows Course - When Death is Imminent: Management of the High Risk Patient and Cath Lab Catastrophes.** **San Jose, CA**, April 4-7, 2001.
- ◆ **24th Annual Scientific Session - The Society for Cardiac Angiography & Interventions.** Panelist: *Moderated Recorded Cases; Workshop, Carotid Stenting.* **Houston, TX**, May 16-18, 2001.
- ◆ **Medical College of Virginia Campus of Virginia Commonwealth University - Division of Cardiology Catheterization Conference.** Lecture - *Carotid Artery Stenting.* **Richmond, VA**, June 7, 2001.

- ◆ **The Ninth New Devices Seminar for the Cardiac and Peripheral Vascular Laboratories**
 - Lecture - *Percutaneous Bypass: Hype or Reality*
 - Workshop - *Chronic Coronary Occlusions***Orlando, FL, June 30 - July 3, 2001.**
- ◆ **2nd International Congress on Heart Disease - *The Role of Carotid Artery Stenting in Patients with Symptomatic Coronary Artery Disease*; Session Chair - *Interventional Cardiology II*. **Washington, D. C., July 21-24, 2001.****
- ◆ **George Washington University Hospital Department of Cardiology Grand Rounds - *Carotid and Abdominal Aortic Interventions*. **Washington, D. C., August 8, 2001.****
- ◆ **TCT 2001 - Transcatheter Cardiovascular Therapeutics – Thirteenth Annual Symposium. Self-Assessment Course Lecture - *Carotid Artery Stenting, - Percutaneous Cardiopulmonary Bypass Support in Iatrogenic Cardiogenic Shock, Restenosis after Carotid Artery Stenting*. **Washington, D.C., September 11-16, 2001.****
- ◆ **Washington Adventist Hospital Department of Medicine - Grand Rounds - *Management of Carotid Disease with Non-Surgical Technique*. **Takoma Park, MD, November 2, 2001.****

2002

- ◆ **Seventh Biennial International Andreas Gruentzig Society (IAGS) Meeting - *The Intractable Angina Patient*, Panel Member - *Supporting Patients in Shock*. **St. Lucia, West Indies, February 17-21, 2002.****
- ◆ **Cardiovascular Administrators' Management Conference - Keynote Speaker - *Interventional Cardiology in the New Millennium*. **Atlanta, GA, March 15, 2002.****
- ◆ **American College of Cardiology 51st Annual Scientific Session - Co-Chairman - Meet the Experts Session - *Carotid Stenting: Techniques*. **Atlanta, GA, March 18, 2002.****
- ◆ **George Washington University, Department of Neurology - Grand Rounds - *Carotid and Abdominal Aortic Interventions*. **Washington, DC, March 27, 2002.****
- ◆ **International Academy of Cardiology, 8th World Congress on Heart Failure - Mechanisms and Management. *Role of Coronary Intervention in Patients with Severe Left Ventricular Dysfunction*. **Washington, DC, July 15, 2002.****

◆ Vascular Interventions - 2002

- *Current Status of Carotid Stenting*
- *Interventional Cardiology in the 21st Century*
- *Cost/Benefit of Drug Eluting Stent*
- *Peripherals (Carotids)*
- *Use of Non-Balloon Devices in Interventions*
- *Prevention of Distal Embolism & SVG Interventions*
- *Complications and Nightmares-I*
- *Complications and Nightmares-II*

Mauritius, August 10 - 15, 2002.

◆ TCT 2002 - Transcatheter Cardiovascular Therapeutics – Fourteenth Annual Symposium

Plenary Sessions Live Case Discussant: Case Presenter

- *High-Risk Intervention: Shock Only Remaining Vessel, etc*
- *Neurovascular Intervention - Carotid, Vertebral and Intracerebral PCI*

Washington, D.C., September 24 - 28, 2002.

2003**◆ National Conference of Indian College of Interventional Cardiology**

- *Carotid Interventions: Current Status and Future Direction*
- *Interventional Cardiology - Now & Beyond 2003*
- Live Case Demonstrations

Mumbai, February 8 - 10, 2003.

◆ Vascular Interventions - 2003

- *Management of Thrombus Containing Stenosis*
- *How to Approach Real Life Dilemmas in the Catheterization Laboratory*
- *Carotid Artery Stenting: Tips & Tricks to Prevent a Neurovascular Catastrophe*
- *Management and Prevention of Complications: Case Presentations*

Malaysia, August 16 - 20, 2003.

◆ Interventional Cardiology Seminar/Synapse Programme - Interventional Cardiology: Current Status & Future Advancements, United Arab Emirates, August 20, 2003.**◆ TCT 2003 - Transcatheter Cardiovascular Therapeutics – Fifteenth Annual Symposium**

“High-risk Intervention: Shock, Only Remaining Vessel, Etc.

- *Restenosis after Carotid Stenting: Presentation, Frequency, Detection, and Management*

Washington, D.C., September 15 - 19, 2003.

2004

- ◆ **Saudi Heart Association - 15th Scientific Session: Jeddah, Saudi Arabia, January 6 - 8, 2004.**
Lecture:
 - *Interventional Cardiology: Current status and future directions*
 - *High risk, in-operable coronary patient: Current management and future innovation*
- ◆ **Eighth Biennial International Andreas Gruentzig Society (IAGS) Meeting - Stroke Prevention and Therapies. Lanai, Hawaii, January 24 - 28, 2004.**
- ◆ **Cardiology Summit 2004**
Lecture:
 - *Peripheral, Renal and Carotid Angioplasty: Tips & Tricks*
 - *Management of Left Main, Saphenous Vein Graft Disease, and Arterial Graft Stenosis***Mumbai, India, February 13 - 14, 2004.**
- ◆ **Special Invitation Lecture - Current Challenges in Cardiovascular Disease: Prevention & Knifeless Surgery.** Clube Harmonia - **Margo, India, February 15, 2004.**
- ◆ **Live Case Demonstrations - Apollo Victor Hospital - Margo, India, February 16, 2004.**
- ◆ **Special Invitation Lecture - Current Challenges in Cardiovascular Disease: Prevention & Knifeless Surgery.** Hotel Mandovi - **Panaji, India, February 16, 2004.**
- ◆ **Special Invitation Lecture/Interaction with Physicians - Interventional Cardiology - Current Status and Future Direction.** Hotel Marriott - **Panaji, India, February 16, 2004.**
- ◆ **13th Annual Peripheral Angioplasty and all that JAZZ. DEBATE: Con: Embolic protection should be required for carotid stent placement.** **New Orleans, LA, April 13-16, 2004.**
- ◆ **CRT 2004. Do we need Protection Devices for Carotid Intervention?** **Washington, DC, May 5-7, 2004.**
- ◆ **Cardiac and Vascular Symposium: Innovations 2004.** Lecture/Live Case Demonstration – **Carotid Artery Stenting: Current Status - Adelphi, MD, May 21, 2004.**

- ◆ **Grand Rounds – King Faisal Cardiovascular and Research Center.** *Carotid Artery Stenting: Current Status.* Jeddah, Saudi Arabia, June 14, 2004.
- ◆ **Special Invitation Lecture – Carotid Intervention: Current Status & Future Directions – Bethesda, MD,** September 15, 2004
- ◆ **TCT 2004 - Transcatheter Cardiovascular Therapeutics – Sixteenth Annual Symposium**
 - Case Reviews with the Experts:
 - *High-risk Intervention: Shock, Only Remaining Vessel, Etc*
 - *Case Reviews in Carotid and Neurovascular Intervention***Washington, D.C.,** September 27 – October 1, 2004.
- ◆ **Conference for Cardiovascular Invasive Professionals: The Nurse and Technologist Symposium at TCT 2004.** Presentation of the “Worst Nightmare” Case Award – **Washington, DC,** September 30, 2004
- ◆ **Vascular Interventions 2004**
 - Lecture - *Cath Lab Catastrophes: Prevention & Management***Cairo, Egypt,** October 30 – November 3, 2004.

2005

- ◆ **International Summit on Coronary Artery Disease and Cardiovascular Interventions.** Live case transmission from Washington Adventist Hospital – *Endovascular Repair of AAA using the Medtronic AneuRx™ System* – **Mumbai, India,** February 18–20, 2005.
- ◆ **2nd World Congress of Interventional Cardiology**
 - Guest Lecture – *Percutaneous Coronary Intervention: Lesion Specific Approach*
 - Guest Lecture – *Left Main Interventions*
 - Live case presentations**Mumbai, India,** February 24 – 27, 2005.
- ◆ **Vascular Interventions 2005.** Special Invitation Lecture – *Vascular Interventions: Current Status & Future Directions.* **Zuleka Hospital, Dubai, UAE,** February 28, 2005.
- ◆ **Cardiac and Vascular Symposium: Innovations 2005.** Lecture/Live Case Demonstration – *Carotid Artery Stenting: Current Status.* **Adelphi, MD,** April 13, 2005.
- ◆ **TCT 2005 - Transcatheter Cardiovascular Therapeutics – Seventeenth Annual Symposium**
 - Case Review with the Experts – *My Worst Complications: Coronary Intervention I*
 - Case Review with the Experts – *Complex Carotid and Brachicephalic Interventions II*

- Lecture – Peripheral and Neurovascular Intervention – Carotid and Cerebrovascular Intervention: *Challenging Carotid Stent Cases; Access nightmares*
Washington, DC, October 16-21, 2005.

- ◆ **Cutting Edge Cardiology – First Annual Symposium.** *Carotid Interventions: Present & Future Directions* - Easton, PA, Nov. 5, 2005.
- ◆ **4th Annual International Cardiovascular Conference 2005**
 - Lecture – *Left Main PCI – Are We There?*
 - Lecture – *Drug Eluting Stents in LAD – IS LIMA IS DEAD!*
Jeddah, Saudi Arabia, November 21 – 24, 2005.
- ◆ **Capital Cardiovascular Conference**
 - Live Case Session: *Carotid Interventions I*
 - - Live Case Session: *Carotid Interventions II*
 - Live Case Session: *Complex Coronary Interventions I*
 - Live Case Session: *Complex Coronary Interventions II*
 - Live Case Session: *Critical Limb Ischemia featuring New Radiation Protection Table Technology*
Harrisburg, PA, December 2 – 3, 2005.

2006

- ◆ **Ninth Biennial International Andreas Gruentzig Society (IAGS) Meeting.** *The last frontiers of intervention – total occlusions, unprotected left main stenoses, vein graft and bifurcation lesions – Canouan, The Grenadines, January 29 – February 2, 2006.*
- ◆ **5th Conference of Interventional Cardiology of the Indian College of Interventional Cardiology**
 Lecture:
 - *DES in LAD: Are We Ready to Replace LIMA?*
 - *Future of Interventional Cardiology*
 - *Carotid Artery Stenting*
On Luxury Cruise Liner “Super Star Virgo”, Singapore, February 26 – March 1, 2006.
- ◆ **Cardiac and Vascular Symposium – Innovations 2006**
 - Live Case Operator – *Complex Coronary Intervention*
 - Live Case Moderator – *Complex Peripheral Vascular Intervention*
Adelphi, MD, April 26, 2006.
- ◆ **Carotid Angio Club for Experts (ACE) Dinner Meeting.** Moderator/Facilitator/Lecturer: Carotid Artery Stenting – **McLean, VA, May 30, 2006.**

- ◆ **MEET 2006 – Multidisciplinary European Endovascular Therapy**
 - Lecture Chairman – *Techniques for carotid stenting*
 - Lecture – Proponent in Crossfire Controversy: *All carotid stents are equivalent*
 - Lecture/Case Presentation - Teaching & Training Session: “How to start a carotid stenting program”
*Avoiding complications:
The role of patient & technique selection***Cannes, French Riviera, June 15 – 18, 2006.**

- ◆ **SYNAPSE – CME program at Heart Care @ Zulekha Hospital**
 - Lecture – *“Interventional Cardiology – Present Status and Future Directions”***Hotel Le Meridien Dubai - Dubai, UAE, September 11, 2006.**

- ◆ **2nd International Conference on Newer Frontiers in Cardiology**
 - Live Case Presentation – *Complex Coronary Intervention*
 - Lecture – *Last Frontiers of Coronary Intervention: Left Main Bifurcation & vein graft disease***Mumbai, INDIA, September 28 - 30, 2006.**

- ◆ **AICT 2006 – Asian Interventional Cardiovascular Therapeutics**
 - Lecture– *Cardiogenic Shock*
 - Lecture – Learn with the Experts: *Coronary Perforation***New Delhi, INDIA, October 1– 4, 2006.**

- ◆ **TCT 2006- Transcatheter Cardiovascular Therapeutics – Eighteenth Annual Symposium**
 - Panel Discussant - *Peripheral Vascular Disease A to Z: Clinical Syndromes, Diagnostic Testing, and Management Strategies (Carotid Artery Stenting)*
 - Case Review with the Experts – *High-Risk Intervention: Shock, Only Remaining Vessel, Etc.*
 - Case Review with the Experts – *Complex Carotid and Brachiocephalic Interventions II*
 - Lecture –Interactive Operator Tutorial – Carotid and Peripheral Vascular Intervention: Management of Carotid and Peripheral Vascular Complications – - Lecture –Interactive Operator Tutorial – Coronary Intervention II: Cause and Management of Coronary Complications– A Case-Based Review – *Shock in the Cath Lab***Washington, DC, October 22-27, 2006.**

- ◆ **SYNAPSE – CME program of Zulekha Hospital**
 - Lecture – *“Cardiovascular Diseases: Early Detection, Prevention and Interventional Strategies”***Hôtel Renaissance - Dubai, UAE, November 20, 2006.**

- ◆ **Vascular Interventions 2006**
 - Guest Lecture– *Interventional Cardiology – Now and Beyond*
 - Lecture –*Cerebral Embolism: Prevention and Management*
 - Session Co-Chair/Lecture – Symposium on DES - *LaST in DES***Istanbul, Turkey, November 22-25, 2006.**

- ◆ **C³ – Capital Cardiovascular Conference**
 - Live Case Session III Panelist - Structural Heart Disease & Complex Coronary Intervention
 - Live Case Session IV Panelist – via DVD Percutaneous Aortic Valve Replacement
 - Live Case Session VI Operator – Complex Coronary Intervention (Harrisburg Hospital)
 - Live Case Session VIII Panelist – Peripheral Interventions II
 - Live Case Session IX Panelist – Peripheral Interventions III
 - Live Case Session X Panelist – Peripheral Interventions IV**Harrisburg, PA, November 30 – December 2, 2006.**

2007

- ◆ **CIT 2007 – China Interventional Therapeutics (in conjunction with TCT at CIT & EuroPCR at CIT)**
 - Lecture/Case Presentation – *Avoiding complication during Carotid Stenting: Tricks and Tips*
 - Lecture/Case Presentation – *Cardiogenic Shock: Management Strategies*
 - Live Case Moderator – Live Case Transmission from Ruijin Hospital, Shanghai**Beijing, China, March 29 – April 1, 2007.**
- ◆ **SYNAPSE – CME program of Zulekha Hospital**
 - Lecture – *“Interventional Cardiology: From Prevention to Intervention”***Dubai, UAE, April, 2, 2007.**
- ◆ **Cardiac and Vascular Symposium – Innovations 2007**
 - Live Case Moderator – *Complex Peripheral Vascular Intervention***Adelphi, MD, April 13, 2007.**
- ◆ **National Interventional Council Meet - 2007 – Cardiological Society of India**
 - Live Case Transmission from Washington Adventist Hospital**Ahmadabad, India, April 20, 2007.**
- ◆ **Division of Cardiology Catheterization Conference – Medical College of Virginia/Virginia Commonwealth University**
 - Invited Lecture – *“New Frontiers: Left Main, Bifurcations and AVR”***Richmond, VA, May 17, 2007.**
- ◆ **The First Live Demonstration Course in Basic and Advanced Interventional Cardiology**
 - **Course Director**
 - Lecture – *“Interventional Cardiology: An Expanded Vision”*
 - Live Case Operator from Zulekha Hospital, Dubai

Session Moderator – “*From Complex Endovascular Procedures to Cath Lab Catastrophes/Nightmares*”

Grand Hyatt Hotel, Dubai - **Dubai, UAE**, June 9 - 10, 2007.

◆ **13th World Congress on Heart Disease**

- Lecture – “*Left Main Stenting: Are We There Yet?*” (New Directions in Coronary Interventional Therapy Session)

Vancouver, British Columbia, Canada, July 27 - 29, 2007.

◆ **C³ – Capital Cardiovascular Conference**

- Live Case Sessions – Carotid and Cervicocerebral Interventions III

- Live Case Sessions – Complex Coronary Intervention I

Harrisburg, PA, September 9 - 12, 2007.

◆ **30-Year Anniversary Meeting of Coronary Angioplasty - The International Andreas Gruentzig Society (IAGS).**

- Lecture – “*Percutaneous Interventions for Heart Failure*”

- Roundtable Discussant – “*What is next in Interventional Cardiology?*”

Zurich, Switzerland, September 15 - 16, 2007.

◆ **TCT 2007- Transcatheter Cardiovascular Therapeutics – Nineteenth Annual Symposium**

- Lecture – The Carotid Workshop: Exploring the Controversies from Diagnosis to Intervention – “*When Complications Occur Anyway: Managing CAS Catastrophes*”

- Case Presenter – High-Risk Intervention: Shock, Only Remaining Vessel, Etc.

- Discussant – Best of Endovascular Interventional Abstracts (Carotid Intervention)

- Discussant – TCT Closing Session: Case Reviews, Complications and Brain Teasers, Featuring “*Interventional Jeopardy*”

Washington, DC, October 20 – 25, 2007.

2008

◆ **SKIMS – Sher-i-Kashmir Institute of Medical Sciences**

- Lecture– “*Cardiovascular Challenges in Kashmir: From Prevention to Intervention*”

- Lecture – “*Cath Lab Complications & Management*”

- Lecture- “*Management of Acute Myocardial Infarction*”

- Lecture – “*Case managements*”

- *LIVE CASES (Principal Operator)*

Srinagar, Kashmir, February 18 - 20, 2008.

- ◆ **ARAB HEALTH 2008 – Interventional Cardiology Conference**
 - Invited Lecture – “*Cath Lab Catastrophes*”**Dubai, UAE, January 28, 2008.**

- ◆ **Department of Cardiology Grand Rounds – Cedars-Sinai Medical Center**
 - Invited Lecture – “*Last Frontiers in Interventional Cardiology: From Left Main PCI to Percutaneous Aortic Valve Replacement*”**Los Angeles, CA, March 4, 2008.**

- ◆ **CIT 2008 - China Interventional Therapeutics (in conjunction with TCT at CIT & EuroPCR at CIT)**
 - Lecture – “*Cath Lab Catastrophes: Management and Prevention*”
 - Live Case Moderator – Live Case from Xijing Hospital, Xi’an, China
 - Session Moderator – Featured Lectures & “Hot Topics”**Beijing, CHINA, March 19 - 23, 2008.**

- ◆ **The Second Live Demonstration Course in Basic and Advanced Interventional Cardiology – Course Director**
 - Lecture – “*Interventional Cardiovascular Medicine: Present Status & Future Directions*”
 - Lecture – “*History of Angioplasty*”
 - Lecture – “*Cath Lab Catastrophes: When Death is Eminent*”
 - Lecture – “*Percutaneous Treatment of Heart Failure*”
 - Lecture – “*Carotid Stent Technique: How to Avoid Neurologic Catastrophes*”
 - Live Case Presentations from Zulekha Hospital, Dubai
 - Live Case Moderator – Live Case from USA, Germany, Italy**Grand Hyatt Hotel, Dubai - Dubai, UAE, March 25 – 26, 2008.**

- ◆ **Cardiac and Vascular Symposium – Innovations 2008**
 - Live Case Demonstration – *Complex Peripheral Vascular Intervention***Adelphi, MD, April 9, 2008.**

- ◆ **SKIMS – Sher-i-Kashmir Institute of Medical Sciences**
 - Lecture– “*Interventional Cardiology: “What is New?”*”
 - Lecture – “*Case managements*”
 - *LIVE CASES (Principal Operator)*
 - *Free OPD clinic***Srinagar, Kashmir, India May 30 -31st, 2008**

- ◆ **WEILL Medical College of Cornell University**
 - Lecture– *Guides, Wires Selection during complex PCI*
 - *Live Cases (Moderator)***New York, September 12th. 2008**

- ◆ **TCT 2008- Transcatheter Cardiovascular Therapeutics –Annual Symposium**
 - Lecture / Panel: *Managing CAS Catastrophes*, *Cardiogenic Shock*
 - Discussant – Best of Endovascular Interventional Abstracts (Carotid Intervention)
 - Panelist: Live Cases**Washington, DC, October 12th-17th, 2008.**

2009

- ◆ **30-Year Anniversary Meeting of Coronary Angioplasty - The International Andreas Gruentzig Society (IAGS).**
 - Lecture – *“Complex & High Risk Interventions”*
 - Roundtable Discussant – *“What is Next in Interventional Cardiology?”*
*“Acute Myocardial Infarction: Management Strategies***Johannesburg, South Africa. January 28th – 30th, 2009**
- ◆ **7th Conference of Interventional Cardiology of the Indian College of Interventional Cardiology**
Lectures:
 - Last Frontiers of Intervention
 - Are We Ready to Say Good to CABG
 - Moderator: *Case Review Section*
 - *Carotid Artery Stenting- Present technique***Zurich, Switzerland, April 10- 13th. 2009**
- ◆ **Cardiac and Vascular Symposium – Innovations 2009**
Co-Director
 - Live Case Demonstration – *Complex Coronary Intervention*
*Live Case Demonstration – Impeller LVAD during High Risk PCI***Bethesda, Maryland, April 30th – May 1, 2009.**
- ◆ **C³ – Capital Cardiovascular Conference- 2009**
Moderator:
 - Live Case Sessions – Carotid and Cervicocerebral Interventions III
 - Live Case Sessions – Complex Coronary Intervention**Baltimore, Maryland. June 14th- 17th, 2009**
- ◆ **TCT 2009- Transcatheter Cardiovascular Therapeutics –Annual Symposium**
 - Panelist: Live Cases / Management Stent Thrombosis.
 - Discussant – Best of Interventional Abstracts**Sanfrancisco, California, September 20th – 23rd, 2009.**

- ◆ **ICCER_2009**
 - **Course CO- Director**
 - Lecture – “*Interventional Cardiovascular Medicine: 2009 and Beyond?*”
 - Lecture – “*Neurological Catastrophes*” after CAS. Prevention & management
 - Lecture – “*Cath Lab Complications after PCI*”: Preventive and Management strategies
 - Moderator** : Live Cases and Cinefilm review sessions.
 - Paris, France, November 3rd – 5th, 2009**

- ◆ **Third Live Demonstration Course in Basic and Advanced Interventional Cardiology**
 - **Course Director**
 - Lecture – “*Interventional Cardiovascular Medicine: Present Status*”
 - Lecture – “*DES & Pharmacological Stratégies during Primary PCI*”
 - Lecture – “*Cath Lab Catastrophes: When Death is Eminent*”
 - Moderator “Cinefilm presentations
 - Live Case Demonstrations from Zulekha Hospital, Dubai
 - Live Case Moderator – Live Case from USA
 - Grand Hyatt Hotel, Dubai - Dubai, UAE, December 5th, 2009**

2010

- ◆ **TTT 2010. Taiwan Transcatheter Therapeutics –Annual Symposium**
 - Lecture: Neurological Complications after Carotid Stenting: “*Management and Preventive strategies*”.
 - Lecture: Complications after PCI: Prevention and management Strategies “
 - Moderator: Live cases
 - Taipei, Taiwan, January 15th – 17th, 2010**