

CURRICULUM VITAE
Updated May 2016
Jonathan M. Tobis, M.D.

Articles... page 12-29
Editorials... page 29-31
Books and chapters... page 31-33
Abstracts... page 33-44
National meetings... page 44-59
International meetings... page 59-63
Director of medical conferences.... page 63-64

DATE OF BIRTH:

December 31, 1947 - Brooklyn, New York

UNDERGRADUATE EDUCATION:

Amherst College, Amherst, Massachusetts, 1969, B.A., Cum Laude, Chemistry

MEDICAL EDUCATION:

Albert Einstein College of Medicine, Bronx, New York, 1973, M.D.

POSTGRADUATE EDUCATION:

Intern and First-Year Resident in Medicine, Lincoln Hospital, Bronx, New York, 1973-75

Resident in Medicine, University of California, Irvine/UCI Medical Center, Orange, California, 1975-76

Fellowship in Cardiology, University of California, Irvine/UCI Medical Center, Orange, California, 1976-78

POSITIONS:

Director of Interventional Cardiology Research, UCLA
Clinical Professor of Medicine, Cardiology
University of California, Los Angeles June 1999- Current

Director of Interventional Cardiology Fellowship Program, UCLA 2009 - 2014

Director of Interventional Cardiology, UCLA 2009 – 2014

Proctor for Cardiac Dimensions, Inc. 2014- Teaching physicians in Europe and Australia a new technique for treating functional mitral regurgitation

UCLA Clinical Professor (Comp) VI – July 2008
Visiting Professor of Medicine, University of California, Los Angeles, 1995-1999
Adult Cardiac Catheterization Laboratory

Director of Cardiac Catheterization Laboratories, University of California, Irvine/UCI Medical Center, Orange, California, 1981-1995

Professor of Medicine, University of California, Irvine/UCI Medical Center, Orange, California, 1990-1999

Professor of Radiology, University of California, Irvine/UCI Medical Center, Orange, California, 1991-1999

Attending Consultant Physician, Cardiology, Long Beach Veterans Affairs Medical Center, Long Beach, California, 1978-present

Attending Consultant Physician, Cardiology, Long Beach Memorial Medical Center, Long Beach, California, 1982-1999

Attending Consultant Physician, Cardiology, Green Hospital of Scripps Clinic, La Jolla, California, 1993-1996

Acting Chief, Division of Cardiology, University of California, Irvine/UCI Medical Center, Orange, California, 1989-1992

Associate Professor of Medicine, University of California, Irvine/UCI Medical Center, Orange, California, 1984-1990

Director of Cardiology Fellowship Training Program, University of California, Irvine/UCI Medical Center, Orange, 1981-1988

Assistant Professor of Medicine, University of California, Irvine/UCI Medical Center, Orange, California, 1978-1984

Attending Consultant Physician, Cardiology, Fairview State Hospital, Costa Mesa, California, 1978-1982

Director of Heart Station, University of California, Irvine/UCI Medical Center, Orange, California, 1978-1981

SYNOPSIS OF MY RESEARCH CAREER

Dr. Tobis was a leader in developing digital angiography for use in the cardiac catheterization laboratory. While at UC Irvine, Dr. Tobis performed the first digital left ventricular and coronary angiograms in the world. This work helped transform the cardiac catheterization laboratory from a film based procedure to a completely digital environment.

Dr. Tobis helped to develop one of the first mechanically rotating intravascular ultrasound (IVUS) imaging devices which aids our understanding of coronary

pathophysiology and the mechanism of action of multiple devices used in interventional cardiology.

In collaboration with Antonio Colombo, IVUS technology helped to explain the high incidence of subacute thrombosis during the early experience with intracoronary stents. This led to the use of larger balloons and higher pressures with decreased subacute stent thrombosis and permitted a dramatic increase in the use of coronary stents for angioplasty.

He is the coauthor with Paul Yock of the textbook, "Intravascular Ultrasound Imaging" and with Antonio Colombo for "Techniques in Coronary Artery Stenting". His recent work has been devoted to understanding the role of patent foramen ovale (PFO) in relation to cryptogenic stroke, migraine headache, and orthodeoxia. He is a co-editor of a textbook on Patent Foramen Ovale. He is a consultant for Cardiac Dimensions, a start up company that has developed a percutaneous device for treating mitral regurgitation. He travels to Europe and Australia to proctor physicians how to perform this new procedure. He continues to work at UCLA seeing patients and doing procedures in the cardiac catheterization laboratory.

HONORS

May 2016: Inducted as a Master Fellow of SCAI, the Society of Cardiac Angiography and Interventions. I am one of 35 fellows in this society which recognizes a lifetime achievement in the field of interventional cardiology.

UCLA Clinical Professor (Comp) VI – July 2008

Summary statement from the CAP report:

Overall Dr. Tobis is an internationally recognized interventional cardiologist, who excels in teaching, research, creative and scholarly contributions as well as in service contributions. The committee believes that he is well suited for the proposed merit increase to Clinical Professor (Compensated), Step 6 effective July 1, 2008 and agrees with the Dean that he should be considered for the Clinical X Series.

Listed in the President of the University of California's "A" Report to the UC Regents for achievement in medical and health sciences, July 1989 and July 1990

Citation from Spencer King, MD in JACC 31, 4, 64B-88B in:

The Development of Interventional Cardiology

“Two major developments revolutionized the use of stents. Paul Barragan and others in Marseilles, France began to use antiplatelet therapy consisting of aspirin and ticlopidine exclusively and abandoned the use of warfarin. This practice spread rapidly throughout France and other countries. **Antonio Colombo** of Milan, Italy, who had invited **Jonathan Tobis** from the University of California, Irvine to collaborate on an evaluation of the results of stenting judged by intravascular ultrasound, discovered that many times stents were not fully expanded and were in poor apposition against the vessel wall. These features were not easily discernible by angiography, and this observation led to the use of high pressure post-stent balloon inflations for more complete expansion of the devices.... Because of

dramatically improved clinical results, consisting of decreased subacute thrombosis rates, reduced bleeding complications and substantially shorter hospital stays, the practice of using antiplatelet therapy without continued anticoagulation and the use of high pressure post-stent balloon expansion became standard practice.”

2008

Dear Dr. Tobis,

I congratulate you upon being selected as an Elite Reviewer for the *Journal of the American College of Cardiology* for the year 2008. This designation is based upon the number, timeliness, and quality of the critiques which you have performed for *JACC* in the last year as judged by the editors. It reflects critical thinking and effective participation in the process of peer review. After examining the performance of reviewers, the editors have identified approximately one percent judged to be deserving of this recognition.

We look forward to recognizing you at the upcoming JACC Editorial Board Meeting at the ACC Annual Scientific Sessions in Orlando and we will be sending you a small memento to recognize this achievement. Again, congratulations for being selected an Elite Reviewer for *JACC*, and thank you for your many contributions to the peer review process.

Sincerely,
Anthony N. DeMaria, MD, MACC
Editor-in-Chief, JACC

2009-2015: Selected for Best Doctors in America. The Best Doctors in America database is a valued resource that contains the names and professional profiles of approximately 45,000 of the best doctors in the United States.

July 2013-July 2015: chosen as one of 12 national mentors by the Society of Cardiac Angiography and Interventions as part of the ELM Program (Emerging Leaders and Mentoring). This program brings together established leaders in the field of interventional cardiology to help as role models and mentor younger colleagues who demonstrate potential for academic advancement in the field of interventional cardiology

March 25, 2016: Dear Dr. Tobis:

As you may know, last fall your name was placed into nomination for the 2016 class of SCAI Master Fellows (MSCAI). Many outstanding candidates were nominated and carefully considered by the selection panel through an objective, confidential voting process.

On behalf of the Credentials Committee, we would like to advise you that you have been selected as one of the nine distinguished individuals selected for this year's MSAI class. Congratulations !

As you know, this designation acknowledges outstanding SCAI Fellows recognized by their peers as having demonstrated excellence over their careers, committed to the highest levels of clinical care, innovation, publication and teaching.

Sincerely,

Jeffrey Cavendish, MD, FSCAI
Credentials Committee Chair

SPECIALTY INTERVENTIONAL PROCEDURES:

In addition to the usual angioplasty procedures performed in the Adult Catheterization Laboratory, Dr. Tobis performs the following procedures:

Percutaneous closure of atrial septal defect or ventricular septal defect.

Closure of PFO (patent foramen ovale)

Mitral Valvuloplasty with the Inoue balloon

Coronary Fistula closure with coils or vascular plugs

Alcohol Septal Ablation for Hypertrophic Cardiomyopathy

Aortic Balloon Valvuloplasty

Trans-septal Catheterization

CURRENT RESEARCH PROJECTS:

Co-PI for the PREMIUM Trial: Association of PFO with Migraine Headaches. AGA Medical Amplatzer device

Consultant for RESPECT Trial: Randomized trial of PFO closure vs medical therapy for cryptogenic stroke with PFO

PFO related investigator originated studies:

Association of HRT, stroke and PFO

Frequency of Right to Left Shunt by TCD in patients with:

Dementia

Sleep Apnea

Migraine

Scotoma without headache

Raynaud's phenomena

Control population

A Comparison of TEE and TCD for sensitivity of identifying a PFO.

MEMBERSHIPS:

2007-2010 Elected to the Board of Trustees of SCAI (Society of Cardiac Angiography and Interventions) This organization helps to write the guidelines for interventional cardiology procedures.

Fellow, American College of Cardiology, March 1981

Fellow, Society of Cardiovascular Angiography and Interventions 1985

North American Society for Cardiac Radiology, inducted 1986

American Heart Association
American College of Physicians
Sigma Xi (Chemistry)

CERTIFICATION BOARD:

Diplomat, American Board of Internal Medicine, June 1976
Diplomat, American Board of Cardiology, June 1979
Diplomat, American Board of Interventional Cardiology, June 1998 recertified 2009

LICENSURE:

State of California, June 1976, G029150

SPECIAL TEACHING ASSIGNMENTS:

Coordinator, Mechanisms of Disease-Cardiology Section, University of California, Irvine, 1981-1990

Instructor, Mechanisms of Disease-Cardiology Section, "Coronary Artery Disease," University of California, Irvine, 1981-1999

PRECEPTOR FOR POSTGRADUATE RESEARCH STUDIES:

Warren David Johnston, M.D., University of California, Irvine, 1982

David Sato, M.D., University of California, Irvine, 1986

John Mallery, M.D., University of California, Irvine, 1987

Masahito Moriuchi, M.D., of Nihon University, Tokyo, Japan, 1989-1991

Junko Honye, M.D., of Nihon University, Tokyo, Japan, 1991-1992

Steven Goldberg, M.D., of University of California, Irvine, 1992

Shigeru Nakamura, M.D., of Toho University, Tokyo, Japan, 1992-1993

Dan Gutfinger, Ph.D., of University of California, Irvine, Honors Research Project, Summer 1993

Cyril Leung, M.D., of University of California, Irvine, 1994

Takafumi Hiro, M.D., of Yamaguchi University, Yamaguchi, Japan, 1994-1996

Sarah De Guzman, M.D., of University of California, Irvine, 1994-1996

Shunji Kasaoka, M.D., of Yamaguchi University, Yamaguchi, Japan, 1996-1998

Kali Kathleen Fessenden, Ph.D., of University of California, Los Angeles, 1995-1996

Takehiro Yamashita, M.D., of Hokkaido University, Supporo, Japan, 1998-1999

Yuzuru Takano, M.D., of Kagawa Medical University, Japan, 2000-2002

Hitoshi Anzai, MD post graduate training from Kyoto, Japan. July 2002 –July 2003

Koji Tanaka, MD post graduate research fellow, Osaka, Japan October 2003 – December 2005

Hai Yan Li, MD post graduate research fellow, Beijing, China September 2003 – April 2005

Kook Jin Chun, MD post graduate research fellow, Pusan, Korea August 2006 – July 2008

Mostafa Shalaby, MD post graduate research fellow, Cairo, Egypt, May 2008 – June 2009

Qiang-Sun Zheng, MD post graduate research fellow, Xi An, China October 2008 – September 2009

Nabil Nourredin, MD, post graduate research fellow, Aleppo, Syria July 2013-2016

STUDENT RESEARCH PROCTOR:

Sam Bastani, BS, of Western Medical College, second year medical student summer research project, 2001

Oren Guttman, BS of University of California, Irvine, second year medical student summer research project, 2001

American Heart Association summer student researchers 2002

Pradeep Natarajan

Eric Wei

UCLA Medical School Student Research Proctor 2002

Peter Drocton

Jennie Kim

American Heart Association summer student researchers 2003

Richard Gaster

Vicki Chan

Catherine Dao

American Heart Association summer student researchers 2004

Dominic Lai
Boris Arbit

American Heart Association summer student researchers 2005
Michael Ma
Suzan Khajavi
Boris Arbit
Jeremy Orr

American Heart Association summer student researchers 2006
Aarti Puri
Philip Cheung
Malika Chowdry
Adam Tanious

Neil Vyas, Chief Resident Summer Researcher 2007
Michael Tamkin

Bennett Cua Summer Researcher 2008
Malika Chowdry
Catherine Dao

UNIVERSITY SERVICE:

Chairman, Ad Hoc Committee on Academic Personnel, 1997

Laser Committee, 1990-1995

Pharmacy and Therapeutics Committee, 1982-1988

Dean's Search Committee for Associate Dean of Student and Curricular Affairs,
1984

Academic Promotions Review Committee, 1984-1989

Executive Committee, Member at Large, 1985-1987

Chair, UCI Faculty Practice Building Committee (Ad Hoc Committee Appointed by
Dean Weinstein), 1985-1988

Faculty Practice Advisory Committee, 1987

Resource Allocation Advisory Committee, 1988

Ph.D. Dissertation Committee, 1988
("Three-Dimensional Reconstruction from Digital Angiograms," Student: Kitamura)

Finance Committee, Department of Medicine, 1989-1992

UCI/LBVA Affiliation Committee (Ad Hoc Dean's Committee), 1990

Ph.D. Dissertation Committee, 1993. UC Irvine Department of Radiological Sciences

("Instantaneous Brain Blood Flow Measurements Using First Pass Distribution Analysis and Digital Subtraction Angiography," Student: Atila Ersahin)

Ph.D. Dissertation Committee, 2003: Student: Petr Janecek, UCLA Dept. of Bioengineering; "Instrumentation for Imaging Lesions Labeled with Beta or Conversion Electron Emitters"

Allied Health Professionals Committee, 2006-2007

Director of Interventional Cardiology for UCLA Medical Center: administrative responsibilities consist of a multiple committee meetings and working with the hospital administration to ensure that the laboratories function smoothly.

COMMUNITY SERVICE:

American Heart Association, Orange County Chapter
Research Committee Member, 1980, 1981

American Heart Association, California Affiliate,
Research Review Committee, 1981-1987

American Heart Association, Western States Affiliate,
CA STEMI Task Force, 2007-08

Society of Cardiac Angiography and Interventions (SCAI) Board of Trustees 2007-2010.
SCAI Fall Fellows Course Program Director 2014-2015

JOURNAL MANUSCRIPT REVIEWER:

American Heart Journal
Cardiac Catheterization and Interventions
Circulation
Circulation Interventions
Journal of the American College of Cardiology
JACC Interventions

EDITORIAL BOARD MEMBER:

Cardiac Catheterization and Interventions

GRANT REVIEWER:

National Institutes of Health - Study section of the vulnerable plaque in atherosclerosis 1998

GRANT AWARDS:

1. Iris Cantor-UCLA Women's Health Center –Principal Investigator
“The Prevalence of Patent Foramen Ovale (PFO) in Postmenopausal Women Who Develop an Ischemic Stroke and the Impact of Hormone Replacement Therapy (HRT)”
Total Award: \$30,000 2007-2009
2. National Institutes of Health – Co-Investigator
“Quantification of regional coronary blood flow”
RO1 Total Award: \$866,913 2001-2004
2. National Institutes of Health - Principal Investigator
"Intravascular Ultrasound Imaging of Atherosclerosis"
RO1 Total Award: \$910,614 - 1995-1998
3. National Institutes of Health - Principal Investigator
"Intravascular Ultrasound Imaging of Atherosclerosis"
RO1 Total Award: \$672,238 - 1991-1994
4. National Institutes of Health - Co-Investigator
"Quantitative Coronary Angiography by Dual Energy DSA"
RO1 Total Award: \$345,851 - 1989-1994
5. National Institutes of Health - Principal Investigator
"Evaluation of Coronary Disease by Digital Subtraction Angiography"
RO1 Total Award: \$380,450 - 1987-1990
6. National Institutes of Health - Co-Principal Investigator
"Evaluation of Coronary Disease by Digital Subtraction Angiography"
RO1 Total Award: \$513,051 - 1984-1987
7. American Heart Association - Principal Investigator
"Cardiac Applications of Digital Subtraction Angiography"
Total Award: \$17,682 - 1984
8. American Heart Association - Principal Investigator

"Cardiac Applications of Digital Subtraction Angiography"
Total Award: \$13,500 - 1983

9. American Heart Association - Principal Investigator
"Computer Enhanced Angiography"
Total Award: \$6,000 - 1982

10. SCAI – Program Director
Fellowship in Training
Total Award: \$25,000, 2011-2012

11. Abbott Vascular – Program Director
Cardiovascular Fellowship
Total Award: \$33,868, 2011-2012

12. Abbott Vascular – Program Director
Cardiovascular Fellowship
Total Award: \$34,898, 2012-2013

13. Abbott Vascular – Program Director
Cardiovascular Fellowship
Total Award: \$35,889, 2013-2014

14. Boston Scientific – Program Director
Fellowship Training
Total Award: \$20,000, 2013-2014

15. Edward Lifescience – Program Director
Fellowship Training
Total Awarded: \$25,000; 2013-2014

16. St. Jude Medical – Program Director
Fellowship Training
Total Award: \$35,000, 2013-2014

CURRENT AREAS OF RESEARCH:

1. Intravascular Ultrasound Imaging
2. Percutaneous Transluminal Coronary Angioplasty
3. Patent foramen ovale and migraine headaches
4. Percutaneous treatment of mitral regurgitation

The PREMIUM TRIAL January 2006 -2014

I am currently the cardiology co-principal investigator for a national multi-center randomized trial comparing PFO closure with the Amplatzer device versus medical therapy for reduction of migraine headaches. I wrote the initial proposal and helped

develop the protocol for this clinical trial, and I will be the principal author of this paper.

PUBLICATIONS:

ARTICLES

1. Tobis JM, Das B: Cardiac complications of amitriptyline poisoning. *JAMA* 1976;235:1474-1476.
2. Aronow WS, Tobis JM, Hughes D, Easthope J, Siegel J: Comparison of trimazosin and methyldopa in hypertension. *Clinical Pharmacology and Therapeutics* 1977;22:425-429.
3. Aronow WS, Oberman A, Pool P, Schnaper H, Seagrean S, Tobis JM, Hughes D, Siegel J, Easthope J: Effect of trimazosin methyldopa and placebo on hypertension. *Current Therapeutic Research* 1978;23:448-454.
4. Danahy D, Tobis JM, Aronow WS, Glauser F, Chetty K: Hemodynamic effect of isosorbide dinitrate in pulmonary hypertension. *Clinical Pharmacology and Therapeutics* 1979;25:541-548.
5. Tobis JM, Danahy D, Aronow WS, Chetty K, Glauser F: Comparison of hemodynamic and noninvasive data in patients with pulmonary hypertension secondary to chronic obstructive pulmonary disease. *Am J Med Sci* 1979;278:19-26.
6. Ferlinz J, Easthope J, Hughes D, Siegel J, Tobis JM, Aronow WS: Antihypertensive and hemodynamic effects of oxprenolol versus propranolol. *Clinical Pharmacology and Therapeutics* 1980;27:602-606.
7. Tobis JM, Aronow WS: Effect of amitriptyline antidotes on repetitive extrasystolic threshold. *Clinical Pharmacology and Therapeutics* 1980;27:602-606.
8. Ferlinz J, Hughes D, Easthope J, Siegel J, Tobis JM, Aronow WS: Right performance after beta blockage. *Br Heart J* 1981;46:23-29.
9. Tobis JM, Aronow WS: Tricyclic antidepressant poisoning. *ER Reports* 1980;1:17-20.
10. Tobis JM, Aronow WS: Cardiotoxicity of amitriptyline and doxepin. *Clinical Pharmacology and Therapeutics* 1981;29:359-364.
11. Mumford M, Tobis JM: A case of Munchausen's syndrome masquerading as unstable angina. *J Natl Med Assoc* 1981;73:661-664.

12. Nalcioglu O, Seibert JA, Roeck WW, Henry WL, Tobis JM, Johnston D: Comparison of digital subtraction video densitometry and area-length method in the determination of left ventricular ejection fraction. *SPIE* 1981;314:294-298.
13. Tobis JM, Nalcioglu O, Johnston WD, Seibert A, Iseri LT, Roeck W, Elkayam U, HenryWL: Left ventricular imaging with digital angiography using intravenous injection and fluoroscopic exposure levels. *Am Heart J* 1982;104:20-27.
14. Tobis JM, Nalcioglu O, Johnston WD, Seibert JA, Roeck WW, Iseri LT, Elkayam U, HenryWL: Correlation of 10ml digital subtraction angiography compared with standard cine angiograms. *Am Heart J* 1983;105:946-952.
15. Tobis JM, Nalcioglu O, Johnston WD, Seibert JA, Iseri LT, Roeck WW, Henry WL: Digital angiography in assessment of ventricular function and wall motion during pacing in patients with coronary artery disease. *Am J Cardiol* 1983;51:668-675.
16. Gardin JM, Iseri LT, Elkayam U, Tobis J, Childs W, Burn CS, Henry WL: Evaluation of dilated cardiomyopathy by pulsed Doppler echocardiography. *Am Heart J* 1983;106:1057-1065.
17. Tobis JM, Henry WL, Nalcioglu O: Cardiac applications of digital subtraction angiography. *Applied Radiol* 1983;Mar/Apr:61-67.
18. Tobis JM, Nalcioglu O, Henry WL: Digital subtraction angiography. *Chest* 1983;84:68-75.
19. Tobis JM, Nalcioglu O, Seibert A, Johnston WD, Henry WL: Measurement of left ventricular ejection fraction by videodensitometric analysis of digital subtraction angiograms. *Am J Cardiol* 1983;52:871-875.
20. Iseri LT, Tobis JM, Chung P: Magnesium therapy for intractable ventricular tachyarrhythmias in normomagnesemic patients. *Western J Med* 1983;1381:823-828.
21. Tobis JM, Henry WL: Cardiac applications of digital subtraction angiography. *CardiacImpulse* 1983;4:1-8.
22. Tobis JM, Nalcioglu O, Henry WL: Cardiovascular applications of digital subtraction angiography. *Modern Concepts of Cardiovascular Disease* 1984;53:31-36.
23. Tobis JM, Nalcioglu O, Iseri L, Johnston WD, Roeck W, Castleman E, Bauer B, Montelli S, Henry WL: Detection and quantitation of coronary artery stenoses from digital subtraction angiograms compared with 35mm film cine angiograms. *Am J Cardiol* 1984;54:489-496.
24. Tobis JM, Nalcioglu O, Henry WL: Angiographie numerique par soustraction. *International de Medecine* 1985;10:36-45.

25. Tobis JM, Allen B, Nalcioglu O, Henry WL: Imaging the ventricles by digital subtraction. *Cardio* 1985;February:24-29.
26. Tobis JM, Roeck W, Johnston WD, Bauer B, Montelli S, Nalcioglu O, Henry W: Digital angiographic coronary roadmapping as an aid for assisting coronary angioplasty. *AmJCardiol* 1985;56:237-241.
27. Tobis JM, Nalcioglu O, Henry W: Digital Angiography: The implementation of computer technology for cardiovascular imaging. *Progress in Cardiovascular Diseases* 1985;18:195-212.
28. Gardin JM, Tobis JM, Dabestani A, Smith C, Elkayam U, Castleman E, White D, Allfie A, Henry WL: Superiority of two-dimensional measurement of aortic vessel diameter in Doppler echocardiographic estimates of left ventricular stroke volume. *J Am Coll Cardiol* 1985;6:66-74.
29. Tobis JM, Iseri L, Johnston WD, Nalcioglu O, DeBoer C, Shah A, Paynter J, Henry WL: Determination of the optimal timing for performing digital ventriculography during atrial pacing stress tests in coronary heart disease. *Am J Cardiol* 1985;56:426-433.
30. Elias AN, Iyer K, Pandian MR, Weathersbee P, Stone S, Tobis JM: Beta-endorphin/ Beta-lipotropin release and gonadotropin secretion after acute exercise in normal males. *Journal of applied physiology* 1986;0161-7567/86:2045-2049.
31. Sato DA, Tobis JM, Nalcioglu O, Johnston WD, Henry WL: Applications of digital angiography: Percutaneous transluminal coronary angioplasty. *Am J Cardiac Imaging* 1987;1:51-57.
32. Tobis JM, Nalcioglu O, Johnston WD, Qu L, Reese T, Sato D, Roeck W, Montelli S, HenryWL: Videodensitometric determination of minimum coronary artery luminal diameter before and after angioplasty. *Am J Cardiol* 1987;59:38-44.
33. Tobis JM, Sato D, Nalcioglu O, Johnston W, Mallery J, See J, Qu L, Reese T, Paynter J, Montelli S, and Henry WL: Correlation of minimum coronary lumen diameter with left ventricular functional impairment induced by atrial pacing. *Am J Cardiol* 1988;61:697-703.
34. Nalcioglu O, Roeck WW, Reese T, Qu LZ, Tobis JM, Henry WL: Interpolated background subtraction method for coronary stenosis quantification. *SPIE* 1988;914:690-698.
35. Kitamura K, Tobis JM, Sklansky J: Estimating the 3-D skeletons and transverse areas of coronary arteries from biplane angiograms. *IEEE Transactions on Medical Imaging* 1988;7:173-186.
36. Nalcioglu O, Roeck WW, Reese T, Qu LZ, Tobis JM, Henry: Background subtraction algorithms for videodensitometric quantification of coronary stenosis. *Machine Vision and Applications* 1988;1:155-162.

37. Tobis JM, Smolin M, Mallery J, Macleay L, Johnston WD, Connolly JE, Lewis G, Zuch B, Henry W, Berns M: Laser-assisted thermal angioplasty in human peripheral artery occlusions: Mechanism of recanalization. *J Am Coll Cardiol* 1989;13:1547-1554.
38. Tobis JM, Oakes D, Sato D, Nalcioğlu O, Johnston W, Mallery J, See J, Qu L, Reese T, Paynter J, Montelli S, and Henry WL: Minimal luminal diameter versus percent diameter narrowing for assessing coronary artery disease. *Cardiol Board Rev* 1989;6:96-106.
39. Tobis JM, Miranda C, Mallery J, Macleay L, Johnston WD, Connolly JE, Lewis G, Zuch B, Henry W, Berns M: Laser-assisted thermal angioplasty in human peripheral artery occlusions: Mechanism of recanalization. *Cardiovascular Reviews and Reports* 1989.
40. Tobis JM, Mallery JA, Gessert J, Griffith J, Mahon D, Bessen M, McLeay L, Moriuchi M, McRae M, Henry WL: Intravascular ultrasound cross-sectional arterial imaging before and after balloon angioplasty in vitro. *Circulation* 1989;80:873-882.
41. Tobis JM, Mallery JA, Mahon D, Griffith J, Gessert J, Lehmann K, Henry WL: Intravascular ultrasound imaging: A new method for guiding interventional vascular procedures. *Echocardiography* 1990;7:415-424.
42. Tobis JM, Mahon D, Moriuchi M, Mallery JA, Lehmann K, Griffith J, Gessert J, Zalesky P, McRae M, Dwyer M-L, Henry WL: Intravascular ultrasonic imaging. *Texas Heart Institute Journal* 1990;17:181-189.
43. Mallery JA, Tobis JM, Griffith J, Gessert J, McRae M, Moussabeck O, Bessen M, Moriuchi M, Henry WL: Assessment of normal and atherosclerotic arterial wall thickness with an intravascular ultrasound imaging catheter. *Am Heart J* 1990;119:1392-1400.
44. Ott RA, Mills TC, Tobis JM, Allen BJ, Dwyer ML: ECMO assisted angioplasty for cardiomyopathy patients with unstable angina. *ASAIO Transactions* 1990;36:M483-485.
45. Moriuchi M, Tobis JM, Mahon D, Gessert J, Griffith J, McRae M, Moussabeck O, Henry WL: The reproducibility of intravascular ultrasound imaging in vitro. *J of Am Soc Echocardiography* 1990;3:444-450.
46. Tobis JM, Miranda CP, Deutsch L-S, Griffith J, Gessert J, Bergman A, Berns M, Henry WL: The mechanism of peripheral recanalization by laser-assisted thermal angioplasty: Confirmation by intravascular sonography. *Am J Roentgenology* 1990;155:1100-1102.
47. Tobis JM, Mahon DJ, Mallery JA, Lehmann K, Griffith J, Gessert J, Zalesky P, McRae M, Huwe S, Paynter J, Henry WL: Intravascular ultrasound imaging during balloon angioplasty. *Am J Cardiac Imaging* 1991;5:78-86.

48. Ehrlich S, Honye J, Mahon D, Bernstein R, Tobis JM: Unrecognized stenosis by angiography documented by intravascular ultrasound imaging. *Cathet Cardiovasc Diagn* 1991;23:198-201.
49. Tobis JM, Mahon DJ, Moriuchi M, Honye J, McRae M: Intravascular ultrasound imaging following balloon angioplasty. *Int J Cardiac Imaging* 1991;6:191-205.
50. Tobis JM, Mallery JA, Mahon D, Lehmann K, Zalesky P, Griffith J, Gessert J, Moriuchi M, McRae M, Bessen M, Dwyer M-L, Greep N, Henry WL: Intravascular ultrasound imaging of human coronary arteries in vivo: Analysis of tissue characterizations with comparison to in vitro histological specimens. *Circulation* 1991;83:913-926.
51. Moriuchi M, Tobis JM, McRae M, Mallery JA, Macleay L, Moussabeck O, Berns M, Henry WL: A comparison of excimer laser, thermal probe, and mechanical devices for recanalizing occluded human arteries. *Japanese Circulation Journal* 1991;55(6):591-600.
52. Tobis JM, Conroy R, Deutsch LS, Gordon I, Honye J, Andrews J, Profeta G, Chatzkels, Berns M: Laser-assisted versus mechanical recanalization of femoral arterial occlusions. *Am J Cardiol* 1991;68:1079-1086.
53. Honye J, Mahon DJ, Jain A, White CJ, Ramee SR, Wallis JB, Al-Zarka A, Tobis JM: Morphological effects of coronary balloon angioplasty in vivo assessed by intravascular ultrasound imaging. *Circulation* 1992;85:1012-1025.
54. Dietz WA, Tobis JM, Isner JM: Failure of angiography to accurately depict the extent of coronary artery narrowing in three fatal cases of percutaneous transluminal coronary angioplasty. *J Am Coll Cardiol* 1992;19:1261-1270.
55. Goel M, Wong ND, Eisenberg H, Hagar J, Kelly K, Tobis JM: Risk factor correlates of coronary calcium as evaluated by ultrafast computed tomography. *Am J Cardiol* 1992;70:977-980.
56. Myler RK, Tobis JM, Cumberland DC, Hidalgo B: A new flexible and deflectable tip guidewire for coronary angioplasty and other invasive and interventional procedures. *J Invas Cardiol* 1992;4:393-397.
57. Hermann HC, Ramaswamy K, Isner JM, Feldman TE, Carroll JD, Pichard AD, Bashore TM, Dorros G, Massumi GA, Sundram P, Tobis JM, Feldman RC, Ramee S: Factors influencing immediate results, complications and short term follow-up status after Inoue balloon mitral valvotomy: a North American multicenter study. *Am Heart J* 1992;124:160-66
58. Moriuchi M, Gordon IL, Bergman A, Griffith J, Tobis JM: Anatomic and functional assessment of stenosis severity with intravascular ultrasound imaging in vitro. *Am J Card Imaging* 1992;6:109-116

59. Feldman T, Carroll JD, Herrmann HC, Holmes DR, Bashore TM, Isner JM, Dorros G, Tobis JM: Effect of balloon size and stepwise inflation technique on the acute results of Inoue mitral commissurotomy. *Cathet Cardiovasc Diagn* 1993;28:199-205.
60. Tobis JM, Mahon DJ, Goldberg SL, Nakamura S, Colombo A: Lessons from intravascular ultrasonography: Observations during interventional angioplasty procedures. *J Clin Ultrasound* 1993;21:589-607.
61. Mahon DJ, Padilla LD, Abrahamson D, Gutfinger DE, Dwyer ML, Tobis JM: Coronary angioplasty supported by extracorporeal membrane oxygenation. *Cardiac Surgery: State of the Art Reviews* 1993;7-2.
62. Wong ND, Vo A, Abrahamson D, Tobis JM, Eisenberg H, Detrano RC: Detection of coronary artery calcium by ultrafast computed tomography and its relation to clinical evidence of coronary artery disease. *Am J Cardiol* 1994;73:223-227.
63. Honye J, Mahon DJ, Nakamura S, Wallis J, Al-Zarka A, Saito S, Berns M, Tobis JM: Intravascular ultrasound imaging after excimer laser angioplasty. *Cathet Cardiovasc Diagn* July 1994;32:213-222.
64. Goldberg SL, Colombo A, Nakamura S, Almagor Y, Maiello L, Tobis JM: The benefit of intracoronary ultrasound in the deployment of Palmaz-Schatz stents. *J Am Coll Cardiol* 1994;24:996-1003.
65. Nakamura S, Colombo A, Gaglione A, Almagor Y, Goldberg SL, Maiello L, Finci L, Tobis JM: Intracoronary ultrasound observations during stent implantation. *Circulation* 1994;89:2026-2034.
66. Gordon IL, Conroy RM, Tobis JM, Kohl C, Wilson SE: Determinants of Patency After Percutaneous Angioplasty and Atherectomy of Occluded Superficial Femoral Arteries. *Am J Surg* 1994;168:115-119.
67. Wong ND, Kouwabunpat D, Vo AN, Detrano RC, Eisenberg H, Goel M, Tobis JM: Coronary calcium and atherosclerosis by ultrafast computed tomography in asymptomatic men and women: relation to age and risk factors. *Am Heart J* 1994;127:422-430.
68. Hall P, Colombo A, Almagor Y, Maiello L, Nakamura S, Martini G, Tobis JM: Preliminary experience with intravascular ultrasound guided Palmaz-Schatz coronary stenting: The acute and short-term results on a consecutive series of patients. *J Interven Cardiol* 1994;7:141-159.
69. Colombo A, Nakamura S, Hall P, Maiello L, Martini G, Tobis J: Does intravascular ultrasound permit better results during PTCA? *Cardiologia* 1994:218-233.
70. Colombo A, Hall P, Nakamura S, Almagor Y, Maiello L, Martini G, Gaglione A, Goldberg S, Tobis JM: Intracoronary stenting without anticoagulation

accomplished with intravascular ultrasound guidance. *Circulation* 1995;91(6):1676-1688.

71. Hall P, Nakamura S, Maiello L, Almagor Y, Gaglione A, Goldberg SL, Tobis JM, Martini G, Tucci G, Di Maggio M: Clinical and angiographic outcome after Palmaz-Schatz stent implantation guided by intravascular ultrasound. *J Invasive Cardiol* 1995;7 Suppl A:12A-22A.
72. Nakamura S, Mahon DJ, Maheswaran B, Gutfinger DE, Yang J, Zelman R, Tobis JM: Intracoronary ultrasound imaging before and after directional atherectomy: Clinical and in vitro observations. *Am Heart J* 1995;129(5):841-851.
73. Wong ND, Detrano RC, Abrahamson DA, Tobis JM, Gardin J: Coronary artery screening by electron beam computed tomography. *Circulation* 1995;92:632-636.
74. Maheswaran B, Leung CY, Gutfinger DE, Nakamura S, Russo RJ, Hiro T, Tobis JM: Intravascular ultrasound appearance of normal and mildly diseased coronary arteries: correlation with histologic specimens. *Am Heart J* 1995;130:976-986.
75. Nakamura S, Conroy RM, Gordon IL, Deutsch LS, Maheswaran B, Antone CS, Tobis JM: A randomized trial of transcatheter extraction atherectomy in femoral arteries: intravascular ultrasound observations. *J Clin Ultrasound* 1995;23:461-471.
76. Nakamura S, Mahon DJ, Maheswaran B, Gutfinger DE, Colombo A, Tobis JM: An explanation for discrepancy between angiographic and intravascular ultrasound measurements after percutaneous transluminal coronary angioplasty. *J Am Coll Cardiol* 1995;25:633-639.
77. Alibelli-Chemarin MJ, Puel J, Elbaz M, Escourrou S, Assoun B, Galinier M, Carrié D, Tobis JM: Identification of coronary thrombus after myocardial infarction by intracoronary ultrasound compared with histology of tissues sampled by atherectomy. *Am J Cardio* 1996; 77(5): 344-349.
78. Gutfinger DE, Leung CY, Hiro T, Maheswaran B, Nakamura S, Detrano R, Kang X, Tang W, Tobis JM: In vitro atherosclerotic plaque and calcium quantitation by intravascular ultrasound and electron-beam computed tomography. *Am Heart J* 1996;131:899-906.
79. Hiro T, Leung CY, de Guzman S, Caiozzo VJ, Farvid A, Karimi H, Helfant R, Tobis JM: Are soft echoes really soft? Intravascular ultrasound assessment of mechanical properties in human atherosclerotic tissue. *Am Heart J* 1997;133-1:1-7.
80. Hiro T, Leung CY, Russo RJ, Moussa I, Karimi H, Farvid A, Tobis JM: Variability in tissue characterization of atherosclerotic plaque by intravascular ultrasound: A comparison of four intravascular ultrasound systems. *Am J Cardiac Imaging* 1996;10-4:209-218.
81. Hiro T, Leung CY, Russo RJ, Karimi H, Farvid A, Tobis JM: Variability of a three-layered appearance in intravascular ultrasound coronary images: A comparison of

- morphometric measurements with four intravascular ultrasound systems. *Am J Cardiac Imaging* 1996;10-4:219-227.
82. Hiro T, Leung CY, Russo RJ, Teirstein P, Yeatman L, Tobis JM: Intravascular ultrasound identification of stent entrapment in vivo with in vitro confirmation. *Cath & Cardiovasc Diag* 1996;40-1:40-45.
 83. Park JB, Tobis JM: Spontaneous plaque rupture and thrombus formation in the left main coronary artery documented by intravascular ultrasound. *Cath & Cardiovasc Diag* 1996;40-4:358-360.
 84. Moriuchi M, Saito S, Honye J, Takaiwa Y, Horiuchi K, Takayama T, Yajima J, Shimizu T, Kanmatsuse K, Tobis JM: Plaque rupture as a cause of apparent coronary aneurysm formation following directional coronary atherectomy. *Cath & Cardiovasc Diag* 1997;41-1:48-50.
 85. Di Mario C, Akiyama T, Moussa I, Reimers B, Jang YT, Tobis J, Colombo A: First experience with imaging core wires. *Semin Intervent Cardiol* 1997; 2:69-73.
 86. Albiero R, Rau T, Schluter M, Di Mario C, Reimers B, Mathey D, Tobis J, Schofer J, Colombo A: Comparison of immediate and intermediate-term results of intravascular ultrasound versus angiography-guided Palmaz-Schatz implantation in matched lesions. *Circulation* 1997, 96(9):2997-3005.
 87. Tobis JM, Aharonian V, Mansukhani P, Kasaoka S, Jhandyala R, Son R, Browning R, Youngblood L, Thompson M: Video Networking of Cardiac Catheterization Laboratories. *J Digital Imaging*, Aug 1997, 10(3 suppl 1):113-115.
 88. Moussa I, Di Mario C, Reimers B, Akiyama T, Tobis J, Colombo A: Subacute stent thrombosis in the era of intravascular ultrasound-guided coronary stenting without anticoagulation: frequency, predictors and clinical outcome. *J Am Coll Cardiol* 1997;29-1:6-12.
 89. Moussa I, Di Mario C, Moses J, Reimers B, Di Francesco L, Martini G, Tobis J, Colombo A: Coronary stenting after rotational atherectomy in calcified and complex lesions. Angiographic and clinical follow-up results. *Circ* 1997; 96:128-136.
 90. Kasaoka S, Son R, Eslami M, Pierman C, Currier J, Yeatman L, Tobis J: Comparison of the Sheath Delivery System Versus Bare Stenting for Coronary Stent Implantation. *Cathet & Cardiovasc Diag* April 1998;43-4:386-394.
 91. Hiro T, Hall P, Maiello L, Itoh A, Colombo A, Jang Y, Salmon S, Tobis JM: Clinical feasibility of an 0.018 inch intravascular ultrasound imaging device. *Am Heart J* 1998;136:1017-1020.
 92. Kasaoka S, Tobis JM, Akiyama T, Reimers B, Di Mario C, Wong N, Colombo A: Angiographic and Intravascular Ultrasound Predictors of In-Stent Restenosis. *J Amer Coll Cardio* 1998;32-6:1630-1635.

93. Kostamaa H, Donovan J, Kasaoka S, Tobis JM, Fitzpatrick L: Calcified Plaque Cross Sectional Area in Human Arteries: Correlation Between Intravascular Ultrasound and Un-Decalcified Histology. *Amer Heart J* 1999;137:482-488.
94. Son R, Tobis J, Yeatman L, Johnson J, Wener L, Kobashigawa J: Does Use of Intravascular Ultrasound Accelerate Arteriopathy in Cardiac Transplant Recipients? *Amer Heart J* 1999; 138: 358-63.
95. Hiro T, Leung C, Karimi H, Farvid A, Tobis JM: Angle dependence of intravascular ultrasound imaging and its feasibility in tissue characterization of human atherosclerotic tissue. *Am Heart J* 1999; 137, 476-481.
96. Yamashita T, Colombo A, Tobis JM: Limitations of Coronary Angiography Compared with Intravascular Ultrasound: Implications for Coronary Interventions. *Progress in Cardiovascular Diseases* Volume 42, No. 2, 1999: 91-138.
97. Tobis, J; Aharonian, V; Mansukhani, P; Kasaoka, S; Jhandyala, R; Son, R; Browning, R; Youngblood, L; Thompson, M. Video networking of cardiac catheterization laboratories [see comments] *American Heart Journal*, 1999 Feb, 137(2):241-9.
98. Honye, J; Saito, S; Takayama, T; Yajima, J; Shimizu, T; Chiku, M; Mizumura, T; Takaiwa, Y; Horiuchi, K; Moriuchi, M; Komaki, K; Ozawa, Y; Kanmatsuse, K; Tobis, JM. Clinical utility of negative contrast intravascular ultrasound to evaluate plaque morphology before and after coronary interventions. *American Journal of Cardiology*, 1999 Mar 1, 83(5):687-90.
99. Yamashita, T; Nishida, T; Adamian, MG; Briguori, C; Vaghetti, M; Corvaja, N; Albiero, R; Finci, L; Di Mario, C; Tobis, JM; Colombo, A. Bifurcation lesions: two stents versus one stent--immediate and follow-up results. *Journal of the American College of Cardiology*, 2000 Apr, 35(5):1145-51.
100. Tobis JM: The Future of Intravascular ultrasound imaging. *Cardiology International* 2000,1, 22-28.
101. Conroy RM, Gordon IL, Tobis JM, Hiro T, Kasaoka S, Stemmer EA, Wilson SE: Angioplasty and Stent Placement in Chronic Occlusion of the Superficial Femoral Artery: Technique and Results. *JVIR* 2000; 11: 1009-1020.
102. Kobashigawa, J; Wener, L; Johnson, J; Currier, JW; Yeatman, L; Cassem, J; Tobis, J. Longitudinal study of vascular remodeling in coronary arteries after heart transplantation. *Journal of Heart and Lung Transplantation*, 2000 Jun, 19(6):546-50.
103. Gordon, IL; Conroy, RM; Arefi, M; Tobis, JM; Stemmer, EA; Wilson, SE. Three-year outcome of endovascular treatment of superficial femoral artery occlusion. *Archives of Surgery* 2001 Feb, 136(2):221-8.

104. Takehiro Yamashita, MD, PhD; Shunji Kasaoka, MD, PhD; Rirei Son, MD; Ian L Gordon, MD; Rahil Khan, MD; John Neet; Allan D Hedrick; Jonathan M Tobis, MD, Optical Coherent Reflectometry (OCR): A New Technique to Guide Invasive Procedures. *Catheterization and Cardiovascular Interventions, Cathet & Cardiovasc Diag* Oct 2001.
105. Takano Y, Yeatman LA, Higgins JR, Currier JW, Ascencio E, Kopelson KA, Tobis JM. Optimizing stent expansion with new stent delivery systems. *J Am Coll Cardiol*. 2001 Nov 15;38(6):1622-7.
106. Takano Y, Tobis JM, Currier JW, Yeatman LA, Kuntz RE, Lansky AJ, Stone GW. The X-SIZER: a new thrombectomy device. *Cardiology International* 2001;2(4):153-7.
107. Briguori, C; Tobis, J; Nishida, T; Vaghetti, M; Albiero, R; Di Mario, C; Colombo, A; Discrepancy between angiography and intravascular ultrasound when analyzing small coronary arteries. *European Heart Journal* 23, 247-254, 2002.
108. Takano Y, Currier JW, Yeatman LA, Kobashigawa JA, Rogers AD, Cianfichi LJ, Fishbein MC, Tobis JM. Cutting balloon angioplasty for cardiac transplant vasculopathy. *J Heart Lung Transplant* 2002;21:910-913.
109. Nishida T, Colombo A, Briguori C, Stankovic G, Albiero R, Corvaja N, Finci L, Di Mario C, Tobis JM. Outcome of nonobstructive residual dissections detected by intravascular ultrasound following percutaneous coronary intervention. *Am J Cardiology*. 2002 Jun 1, 89 (11): 1257-62.
110. Spanos V, Stankovic G, Colombo A, Tobis J. The Challenge of In-stent restenosis: insights from intravascular ultrasound. *European Heart Journal* 2003, 24: 138-150.
111. Grise M, Reilly J, Tobis J, Takano Y, Currier J, Kobashigawa J, Weisz G, Moses J, Yeung A, Teirstein P. Intracoronary Radiation to Treat In-stent Restenosis in Six Cardiac Transplant Patients. *Catheterization and Cardiovascular Interventions* 2003; 60 (1): 41-44.
112. Daniel Cruz M.D., Ph.D., Ronald Karlsberg, M.D., Yuzuru Takano, M.D., Michael Rosove, M.D. Devandra Vora, M.D., Ph.D. Jonathan Tobis, M.D. Subacute Stent Thrombosis Associated with a Heparin-coated Stent and Heparin-induced Thrombocytopenia. *Catheterization and Cardiovascular Interventions* 2004.
113. Peter J. Curran, M.D., Jessie Currier, M.D., Jonathan Tobis, M.D., Percutaneous Snare Retrieval of a Partially Deployed Wallstent in a Saphenous Vein Graft. *Catheterization and Cardiovascular Interventions* 2004, 61:400-402.
114. Hitoshi Anzai, MD, John Child, MD, Barbara Natterson, MD, Janine Krivokapich, MD, Michael C. Fishbein, MD, Vicki K. Chan, BS, Jonathan M. Tobis, MD. Incidence of Thrombus Formation on the CardioSEAL and the Amplatzer Interatrial Closure Devices. *American J of Cardiology*: February 2004, 15;93(4): 426-31.

115. Kao J, Tobis J, McClelland RL, Heaton MR, Davis BR, Holmes DR Jr, and Currier JW for the Investigators in the Prevention of Restenosis With Tranilast and Its Outcomes Trial. Relation of Metformin Treatment to Clinical Events in Diabetic Patients Undergoing Percutaneous Intervention. *Am J Cardiol* 2004;93:1347-1350.
116. Babak Azarbal, M.D., Jonathan Tobis, M.D., William Suh, M.D., Vicki Chan, B.A. Catherine Dao, B.A., Richard Gaster. Association of Inter-Atrial Shunts and Migraine Headaches: Impact of Transcatheter Closure. *J Am Coll Cardiol* 2005;45:489-92.
117. Jon A Kobashigawa, MD, Jonathan M Tobis, MD, Robert M Mentzer, MD, Hannah A Valentine, MD, Robert C Bourge, MD, Mandeep R Mehra, MD, Frank W Smart, MD, Leslie W Miller, MD, Koji Tanaka, MD, Haiyan Li, MD, David W Gjertson, PhD, and Robert D Gordon, MD; Mycophenolate Mofetil Reduces Intimal Thickness by Intravascular Ultrasound After Heart Transplant: Reanalysis of the Multicenter Trial. *JACC* May 2005 volume 45, number 9.
118. Coronary Steal Syndrome with coil embolization of a large LIMA side branch. Radionuclide evidence for reversible ischemia. Nasser Abdo, M.D., Peter J. Curran, M.D., Vinod Kumar, M.D., Jonathan M. Tobis, M.D. *CCI* 66: 360-363, 2005.
119. Pericarditis Associated with Nickel Hypersensitivity to the Amplatzer Occluder Device: A Case Report. Dominic W. Lai, BA, Jeffrey L. Saver, MD, Jesus A. Araujo, MD, Marc Riedl, MD, and Jonathan Tobis, MD *CCI* 66: 424-426 November 2005. 66(3):424-6. PMID: 16208708
120. Brett Wertman, M.D., Babak Azarbal, M.D., Marc Riedl, M.D., and Jonathan Tobis, M.D. Adverse Events Associated with Nickel Allergy in Patients Undergoing Percutaneous ASD or PFO Closure. *J Am Coll Cardiol*. 2006 Mar 21;47(6):1226-27. Epub 2006 Feb 28.
121. Poommipanit PB, Lensky M, Tobis J. [Eosinophilic arteritis with coronary aneurysms and stenoses](#). *J Invasive Cardiol*. 2005 May;17(5):266-9.
122. Babak Azarbal, M.D., Jonathan Tobis, M.D. Interatrial Communications, Stroke, and Migraine Headache. *Applied Neurology* 1 (10) 2005
123. Jonathan Tobis, M.D., Babak Azarbal, M.D. Does Patent Foramen Ovale Promote Cryptogenic Stroke and Migraine Headache? *Texas Heart Journal, Current Issues in Cardiology*, volume 32 number 3, 2005 page 362-365. Review. PMID: 16392219
124. Jonathan Tobis, Jeremy Orr. Patent foramen ovale closure to treat migraine: should it be considered as a treatment option? *Nature Clinical Practice Cardiovascular Medicine* 3, 174-175, 2006 Apr;3(4):174-5. Review. PMID: 16568111

125. Tanaka K, Li H, Curran PJ, Takano Y, Arbit B, Currier JW, Yeatman LA, Kobashigawa JA, Tobis JM. Usefulness and safety of percutaneous coronary interventions for cardiac transplant vasculopathy. *Am J Cardiol.* 2006 Apr 15;97(8):1192-7. Epub 2006 Mar 9. PMID: 16616025
126. Li H, Tanaka K, Anzai H, Oeser B, Lai D, Kobashigawa JA, Tobis JM. Influence of pre-existing donor atherosclerosis on the development of cardiac allograft vasculopathy and outcomes in heart transplant recipients. *J Am Coll Cardiol.* 2006 Jun 20;47(12):2470-6. Epub 2006 May 26. PMID: 16781375
127. Kobashigawa JA, Tobis JM, Mentzer RM, Valantine HA, Bourge RC, Mehra MR, Smart FW, Miller LW, Tanaka K, Li H, Gjertson DW, Gordon RD. Mycophenolate mofetil reduces intimal thickness by intravascular ultrasound after heart transplant: reanalysis of the multicenter trial. *Am J Transplant.* 2006 May;6(5 Pt 1):993-7. PMID: 16611335
128. Slavin L, Chhabra A, Tobis JM. Drug-Eluting Stents: Preventing Restenosis. *Cardiology in Review* 2007 Jan-Feb;15(1):1-12. Review. PMID: 17172878
129. LI Hai-yan, Koji Tanaka, Brandy Oeser, Brett Wertman, Jon A. Kobashigawa and Jonathan M. Tobis Compensatory enlargement in transplant coronary artery disease: an intravascular ultrasound study. *Chin Med J* 2006 Apr 5;119(7):564-9. PMID: 16620697
130. Haiyan Li, Koji Tanaka, Brandy Oeser, Jon A. Kobashigawa, Jonathan M. Tobis. Vascular remodeling after cardiac transplantation: a 3-year serial intravascular ultrasound study. *European Heart Journal Advance Access published* 2006 Jul;27(14):1671-7. Epub 2006 Jun 21. PMID: 16790471
<http://eurheartj.oxfordjournals.org/cgi/rapidpdf/ehl097?ijkey=aSznXKKrhoSV7d6&keytype=ref>
131. Haiyan Li, Koji Tanaka, Ankush Chhabra, Brandy Oeser, Jon A. Kobashigawa, Jonathan M. Tobis, Vascular remodeling 1 year after cardiac transplantation. *J Heart Lung Transplant.* 2007 Jan;26(1):56-62. PMID: 17234518
132. Tobis JM, Azarbal B, Slavin L. State-Of-The-Art Review: Assessment of Intermediate Severity Coronary Lesions in Catheterization Laboratory. *Journal of American College of Cardiology* 2007 Feb 27;49(8):839-48. Epub 2007 Feb 9. Review. PMID: 17320741
133. Koji Tanaka, Krishnan Rangarajan, Babak Azarbal, Jonathan Tobis, Percutaneous Ventricular Assist during Aortic Valvuloplasty: potential application to the development of aortic stent-valves. *Texas Heart Journal, Current Issues in Cardiology*, volume 34 number 1, 2007 page 36-40.
134. Slavin L, Tobis JM, Rangarajan K, Dao C, Krivokapich J, Liebeskind DS. Five-year experience with percutaneous closure of patent foramen ovale. *Am J Cardiol.* 2007 May 1;99(9):1316-20. Epub 2007 Mar 20. PMID: 17478165

135. Michael S. Lee,* MD, Raymond Zimmer, MD, Antonio Pessequeiro, MD. , Daniel Jurewitz, MD, and Jonathan Tobis, MD. Outcomes of Nonagenarians Who Undergo Percutaneous Coronary Intervention With Drug-Eluting Stents. *Catheterization and Cardiovascular Interventions* 71:526–530 (2008)
136. Lee MS, Sillano D, Latib A, Chieffo A, Biondi Zoccai G, Bhatia R, Sheiban I, Colombo A, Tobis J. Multicenter International Registry of Unprotected Left Main Coronary Artery Percutaneous Coronary Intervention with Drug-eluting Stents in Patients With Myocardial Infarction. *Catheterization and Cardiovascular Interventions* 71:526-530 (2008).
137. Lee MS, Zimmer R, Pessequeiro A, Jurewitz D, Currier J, Yeatman L, Tobis JM. Impact of diabetes and acute coronary syndrome on survival in patients treated with drug-eluting stents. *Cathet Cardiovasc Interv* 2008.
- 138 Lee MS, Kobashigawa J, Tobis JM. Comparison of percutaneous coronary intervention with bare metal stents with drug-eluting stents for cardiac allograft vasculopathy. *J Am Coll Cardiol Interv* 2008-:1710-715.
<http://interventions.onlinejacc.org/cgi/content/abstract/1/6/710>
139. Lee MS, Chun KJ, Tobis JM. Drug-eluting stenting of unprotected left main coronary artery stenosis in patients with orthotopic heart transplantation: Initial clinical experience. *Catheter Cardiovasc Interv* 2008;71:306-11.
140. Lee MS, Zimmer R, Pessequeiro A, Jurewitz D, Tobis J. Outcomes of Nonagenarians who Undergo Percutaneous Coronary Intervention With Drug-Eluting Stents. *Catheter Cardiovasc Interv* 2008;71:526-30.
141. Case Study: Closure of Patent Foramen Ovale in a Patient with Decompression Illness – Alice A. Perlowski, Jonathan M. Tobis, *Congenital Cardiology Today* Volume 6, Issue 11 November 2008
142. Mechanical stress analysis of a rigid inclusion in distensible material: a model of atherosclerotic calcification and plaque vulnerability.
Hoshino T, Chow LA, Hsu JJ, Perlowski AA, Abedin M, Tobis J, Tintut Y, Mal AK, Klug WS, Demer LL.
Am J Physiol Heart Circ Physiol. 2009 Aug;297(2):H802-10. Epub 2009 Jun 19.
143. Sheiban I, Sillano D, Biondi-Zoccai G, Chieffo A, Colombo A, Vecchio S, Margheri M, Gunn JP, Raina T, Liistro F, Bolognese L, Lee MS, Tobis J, Moretti C. Incidence and management of restenosis after treatment of unprotected left main disease with drug-eluting stents 70 restenotic cases from a cohort of 718 patients. FAILS (Failure in Left Main Study).
- 144 Atheroma volume by intravascular ultrasound as a surrogate for clinical end points. Tobis JM, Perlowski A. *J Am Coll Cardiol*. 2009 Mar 31;53(13):1116-8.

145. Mehta Rupal, Mehta Rashi, Solis OE, Jahan R, Salamon N, Tobis JM, Yong WH, Vinters HV, and Fishbein MC. Hydrophilic polymer emboli an under-recognized iatrogenic cause of ischemia and infarct. *Modern Pathology* 2010; 23, 921-930.
146. HoHai Van, MD, Paul Poommipanit, MD, Mostafa Shalaby, MD, Rubine Gevorgyan, MD, Chi-Hong Tseng, PhD, Jonathan Tobis, MD. Sensitivity of Transcranial Doppler Versus Intracardiac Echocardiography in the Detection of Right-to-Left Shunt. *J Am Coll Cardiol Img*, 2010; 3:343-348
147. Lee, MS and Tobis, JM. Comparison of Bivalirudin versus Heparin Plus Glycoprotein IIb/IIIa Inhibitors in Patients Undergoing An Invasive Strategy: A Meta-Analysis of Randomized Clinical Trials. *International J. of Cardiology* 2010.
148. Lee MS, Tarantini G, Xhaxho J, Yang T, Ehdaie A, Bhatia R, Favaretto E, Tobis J. Sirolimus- Versus Paclitaxel-Eluting Stents for the Treatment of Cardiac Allograft Vasculopathy. *J Am Coll Cardiol Interv* 2010;3:378-82.
149. Tobis, JM. Impact of 24 hour in-hospital interventional cardiology team on timeliness of reperfusion for STEMI: The challenge of "24-7 on-call" for treatment of STEMI. *Catheterization and Cardiovascular Interventions*. Vol 75(7); 1024-1025: June 2010.
150. Andre Akhondi, Rubine Gevorgyan, Chi-Hong Tseng, Leo Slavin, Catherine Dao, David S. Liebeskind, and Jonathan M. Tobis. The Association of Patent Foramen Ovale Morphology and Stroke Size in Patients with Paradoxical Embolism. *Circ Cardiovasc Interv*, Sep 2010.
151. Tobis, JM. Angiography for ESRD transplant evaluation: "nuclear" or "unclear" imaging versus angiography. *Catheterization and Cardiovascular Interventions*.

Volume 76, Issue 6, pages 802–803, 15 November 2010
- 152.. Poommipanit P, Levi D, Shenoda M, Tobis JM. Percutaneous Retrieval of the Locked Helex Septal Occluder. *Catheterization and Cardiovascular Interventions* May 2011; Vol 77(6); 892-900.
153. Lee MS, Bokhoor P, Park SJ, Kim YH, Stone GW, Sheiban I, Bionid-zoccai G, Sillano D, Tobis J, Kandzari DE. Unprotected Left Main Coronary Disease and ST-Segment Elevation Myocardial Infarction: A Contemporary review and Argument for Percutaneous Coronary Intervention. *JACC: Cardiovascular Interventions* 2010.
154. Poommipanit P, Tobis JM. Intra-Cardiac Echocardiogram (ICE) Guided Biopsy of a Atrial Mass. *Journal of Invasive Cardiology*. 2011 May; Vol 23(5); E99-101.
155. Poommipanit P, Tobis JM. Atrial septal defect and patent foramen ovale closure: A brief review. *Cardiology International* Spring 2009;10(1):10-14

156. Catherine N. Dao, M.D., Rubine Gevorgyan, M.D., Bennett Cua, M.S., Alice Perlowski, M.D., and Jonathan M. Tobis, M.D. PFO and Paradoxical Embolism Producing Events Other Than Stroke. *Catheter Cardiovasc Interv.* 2011 May 1;77(6):903-9
157. Swarnendra K. Verma, MD and Jonathan M. Tobis, MD, EXPLANTATION OF PFO CLOSURE DEVICES: A Multicenter Survey *JACC Cardiovasc Interv.* 2011 May;4(5):579-85.
158. Tobis, JM. Patent foramen ovale and migraine headaches: The saga continues. *Catheterization and Cardiovascular Interventions.* [Volume 77, Issue 4](#), pages 575–576, 1 March 2011
159. Volman, M, Mojadidi, MK, Gevorgyan, R, Kaing A, Agrawal, H, and Tobis, J. Incidence of patent foramen ovale and migraine headache in adults with congenital heart disease with no known cardiac shunts. *Catheterization Cardiovascular Intervention.* Vol. , Issue , pages , 25 Aug 2012.
160. Mojadidi MK, MD, Khessali H, Gevorgyan R, Levinson R, Tobis J. Visual Migraine Aura with or without Headache: Association with Right to Left shunt and Assessment Following Transcatheter Closure. *Journal of Clinical Ophthalmology.* 2012 Jul;6:1099-105.
161. Khessali H, Mojadidi MK, Gevorgyan R, Levinson R, Tobis J. The effect of patent foramen ovale closure on visual aura without headache or typical aura with migraine headache. *JACC Cardiovasc Interv.* 2012 Jun, vol 5(6):682-7.
162. [Tobis J](#), [Shenoda M](#). Percutaneous treatment of patent foramen ovale and atrial septal defects. [J Am Coll Cardiol.](#) 2012 Oct 30;60(18):1722-32.
163. [Wray C](#), [Scovotti JC](#), [Tobis J](#), [Niemann CU](#), [Planinsic R](#), [Walia A](#), [Findlay J](#), [Wagener G](#), [Cywinski JB](#), [Markovic D](#), [Hughes C](#), [Humar A](#), [Olmos A](#), [Sierra R](#), [Busuttil R](#), [Steadman RH](#). Liver transplantation outcome in patients with angiographically proven coronary artery disease: a multi-institutional study. [Am J Transplant.](#) 2013 Jan;13(1):184-91.
164. Eric H. Yang M.D.; Murray H. Kwon M.D.; Aman Mahajan M.D., Ph.D.; John S. Child M.D.; Jonathan M. Tobis M.D.; Gopi Manthripragada M.D.; Cheri A. Silverstein M.D.; Kamran Shamsa, M.D. "Circumferential Type A Aortic Dissection and Intimal Intussusception of the Aorta Causing Severe Aortic Regurgitation and Obstruction of the Left Main Coronary Artery." *Echocardiography.* 2013 March, [Volume 30, Issue 3](#), pages E81–E84.
165. [Bhutani S](#), [Tobis J](#), [Gevorgyan R](#), [Sinha A](#), [Suh W](#), [Honda HM](#), [Vorobiof G](#), [Packard RR](#), [Steadman R](#), [Wray C](#), [Busuttil R](#), [Tseng CH](#). Accuracy of stress myocardial perfusion imaging to diagnose coronary artery disease in end stage liver disease patients. [Am J Cardiol.](#) 2013 Apr 1;111(7):1057-61.

166. [William M. Suh](#) MD; [Gabriel Vorobiof](#), MD; [Richard J. Shemin](#), MD; [Murray H. Kwon](#), MD; [Melissa Fusari](#), MD; [Jonathan M. Tobis](#), MD. Treating Aortic Stenosis and Mitral Regurgitation With 1 Transcatheter Heart Valve : 2 Birds With 1 Stone. *JACC*, 2013, June 12, Vol 61, Issue 24 page e349.
167. [Sensitivity of Brachial Versus Femoral Vein Injection of Agitated Saline to Detect Right-To-Left Shunts with Transcranial Doppler.](#)
Gevorgyan R, Perlowski A, Shenoda M, Mojadidi MK, Agrawal H, Tobis JM. *Catheter Cardiovasc Interv.* 2014 Jan 9. doi: 10.1002/ccd.25391. [Epub ahead of print]PMID:24403023
168. M. Khalid Mojadidi, MD; Scott C. Roberts, BS; Jared S. Winoker, BS; Jorge Romero, MD; David Goodman-Meza, MD; Rubine Gevorgyan, MD; Jonathan M. Tobis, MD. [Accuracy of Transcranial Doppler for the Diagnosis of Intracardiac Right-to-Left Shunt](#): A Bivariate Meta-Analysis of Prospective Studies. *J Am Coll Cardiol Img.* Published online February 19, 2014. doi:10.1016/j.jcmg.2013.12.011
169. [Comparison of residual shunt rates in five devices used to treat patent foramen ovale.](#) Matsumura K, **Gevorgyan R**, Mangels D, Masoomi R, Mojadidi MK, Tobis J. *Catheter Cardiovasc Interv.* 2014 Sept 01, Vol 84, Issue 3; pages 455-463.
170. Association of Ischemic Stroke, Hormone therapy, and Right to Left Shunt in Postmenopausal Women. Greep NC, Liebeskind DS, Gevorgyan R, Truong T, Cua B, Tseng CH, Dodick DW, Demaerschalk BM, Thaler DE, Tobis JM. *Catheter Cardiovasc Interv.* 2014 Sept-01. Vol 84, Issue 3; pages 479-485.
171. Comparison of residual shunt rates in five devices used to treat patent foramen ovale. Matsumura K, Gevorgyan R, Mangels D, Masoomi R, Mojadidid MK, Tobis J. *Catheter Cardiovasc Interv.* 2014 Feb 19. PMID24550064.
172. Accuracy of Transcranial Doppler for the Diagnosis of Intracardiac Right-to-Left Shunt: A Bivariate Meta-Analysis of Prospective Studies. Mojadidi MK, Roberts SC, Winoker JS, Romer J, Goodman-Meza D, Gevorygan R, Tobis JM. *JACC Cardiovasc Imaging.* 2014 Mar; 7(3):236-50.
173. Accuracy of Conventional transthoracic Echocardiography for the Diagnosis of Intracardiac Right-to-Left Shunt: A Meta-Analysis of Prospective Studies. Mojadidi MK, Winoker JS, Roberts SC, Msaouel P, Zaman MO, Gevorgyan R, Tobis JM. *Echocardiography.* 2014 Apr 2.

174. Mojadidi MK, Bokhoor PI, Gevorgyan R, Nouredin N, Maclellan WC, Wen E, Aysol R, Tobis JM. Sleep Apnea in Patients with and without a Right-to-Left Shunt. *J. Clin Sleep Medicine*, 2015, Jun 11. PMID 26094924.
175. Mojadidi MK, Gevorgyan R, Nouredin N, Tobis JM. The effect of patent foramen ovale closure in patients with platypnea-orthodeoxia syndrome. *Catheter Cardiovascular Intervention*, 2015 Jun 9. PMID 26063336.
176. Tobis JM and Abudayyeh, I. Percutaneous Mitral Valve Repair Devices Beyond MitraClip: A review of devices in development for the percutaneous treatment of mitral regurgitation. *Cardiac Interventional*, May/June 2015; page 28-32.
177. Angelini P, Uribe C, Monge J, Tobis JM, Elayda MA, Willerson JT. Origin of the right coronary artery from the opposite sinus of Valsalva in adults: Characterization by intravascular ultrasonography at baseline and after stent angioplasty. *Catheter Cardiovascular Interventions*. 2015 Aug; 86(2): 199-208. PMID: 26178792
178. Mojadidi MK and Tobis JM. Patent Foramen Ovale and Atrial Septal Defect: Utility of Alternative Imaging Modalities for the Diagnosis of Patent Foramen Ovale and Atrial Septal Defect. *Echocardiography*. 2015 Sept; 32(9):1451-2. PMID 26332696
179. Mohammad Khalid Mojadidi, Rubine Gevorgyan, Nabil Nouredin and Jonathan M. Tobis. The effect of patent foramen ovale closure in patients with platypnea-orthodeoxia syndrome. *Catheterization and Cardiovascular Interventions*. October 2015: Vol 86, Issue 4, pages 701-707.
180. Elgendy IY, Tobis JM, and Faillace R. Patent Foramen Ovale: Unanswered Questions. *European Journal of Intern Med*. 2015 Dec; 26(10): 743-51. PMID 26489724
181. Kijima Y, Bokhoor P, and Tobis JM. Patent foramen ovale with right atrial septal pouch. *Catheter Cardiovasc Interv*. 2015 Dec. PMID 26711371
182. Tobis JM. Putting cryptogenic stroke into perspective. *Catheter Cardiovasc Inter*. 2016 Feb 15; 87(3): 515. PMID 26919345
183. Hovnanians N, Mojadidi MK, Brandt JC, Eshtehardi P, and Tobis JM. Platypnea-Orthodeoxia Syndrome: From Gastroesophageal Reflux to Hypoxemia. *Am J Med*. 2016 Apr; 129(4):e15-6. PMID 26773976

184. Kijima Y, Gevorgyan R, McWilliams JP, Miller N, Nouredin N, and Tobis JM. Usefulness of Transcranial Doppler for Detecting Pulmonary Arteriovenous Malformations in Hereditary Hemorrhagic Telangiectasia. *Am J Cardiology*. 2016 Apr 1; 117(7):1180-4. PMID 26873746
185. Mojadidi MK, Zhang L, Chugh Y, Eshtehardi P, Hovnanians N, Gevorgyan R, Mojaddedi S, Nezami N, Zaman MO, Rafique A, Villablanca PA and Tobis JM. Transcranial Doppler: Does Addition of Blood to Agitate Saline Affect Sensitivity for Detecting Cardiac Right-to-left Shunt? *Echocardiography*. 2016 Aug; 33(8): 1219-27. PMID 27095475
186. Tobis JM and Abudayyeh I. Platypnea-Orthodeoxia Syndrome: An Overlooked of Hypoxemia. *JACC Cardiovasc Interv*. 2016 Sept 26; 9(18): 1939-40. PMID 27659571
187. Kijima Y, Rafique AM, and Tobis JM. Patent Foramen Ovale Combined with Pulmonary Arteriovenous Malformation. *JACC Cardiovasc Interv*. 2016 Oct 24; 9(20): 2169-2171. PMID 27765314

EDITORIALS

1. Henry WL, Tobis JM: The future of computerized cardiac angiography. *Am J Cardiol* 1984;53:1722-1723.
2. Tobis JM, Henry WL: Digital angiography: The physician's love affair with the computer. *Chest* 1985;87:560-561.
3. Tobis, JM: Evolution of intravascular ultrasound imaging. *Am J Cardiac Imaging* 1991;5:51-53.
4. Tobis, JM: Intravascular ultrasound, a fantastic voyage. *Circulation* 1991;84:2190-2192.
5. Tobis, JM: The future of digital angiography. *Cathet Cardiovasc Diagn* 1992;27:14-15.
6. Tobis, JM: Clinical Utility of intravascular ultrasound imaging. *Cathet Cardiovasc Diagn* 1994;33:221-223.
7. Tobis JM: Clinical significance of an abnormal coronary flow reserve. *Cathet Cardiovasc Diagn* 1995;36:281-282
8. Tobis JM, Colombo A: "Do you need IVUS guidance for coronary stent deployment?", *Cathet Cardiovasc Diagn* 1996;37:360-361.

9. Tobis JM, Colombo A: "IVUS and Coronary stenting", *Cathet Cardiovasc Diag* 1996; 39-4:346.
10. Tobis, JM: "Not All Stents are Created Equal", *Cathet Cardiovasc Diag* 1997; 40-3:271.
11. Tobis, JM: "QCA and the Emperor's New Clothes", *Cathet Cardiovasc Diag*, 1997; 42(2):120.
12. Tobis, JM: "What's New With IVUS?", *Cathet Cardiovasc Diag* 1998; 43(3):261.
13. Tobis JM, Moussa I: Debulking Plaque Before Stenting: A Resurgence of Directional Atherectomy?, *Cathet Cardiovasc Diag* 1998; 45:113-114.
14. Tobis JM: Distinguishing Physiology from Anatomy: a comparison of fractional flow reserve and intravascular ultrasound imaging, *Cathet Cardiovasc Diag*, 2001
15. Tobis, JM: The Use Of 3-D Echocardiography During Interventional Procedures. *Cathet Cardiovasc Diag*, 2005
16. Jonathan M. Tobis, M.D., Jeremy E. Orr, B.S. Bypass versus Angioplasty – A misleading comparison. *Cardiology International* 2005
17. Jonathan M. Tobis, M.D, Jeremy E. Orr, B.S. Patent foramen ovale closure to treat migraines: A viable option? *Nature Clinical Practice*
18. Tobis JM, Fonarow GC. Optimal Blood Pressure Levels in Patients with Coronary Artery Disease. *J Am Coll Cardiol*. 2006 Aug 15;48(4):839-40.
19. Tobis JM., A non-biased assessment of the usefulness of computed tomographic angiography. *Am J Cardiol*. 2007 Apr 15;99(8):1165. Epub 2007 Mar 5. No abstract available. PMID: 17437749
20. Tobis JM, Heterogeneity of Atherosclerotic Plaque Characteristics in Human Coronary Artery Disease: A Three-Dimensional Intravascular Ultrasound Study. *CCI* 2007 : 70 ; 357-358.
21. "Stenting LAD Myocardial Bridges: Is the Glass Half Empty or...." *Catheterization and Cardiovascular Interventions*. 2008: 71:197
22. "Management of Patients with Refractory Migraine and PFO: Is MIST Relevant?" *Catheterization and Cardiovascular Interventions* March 2008
23. "The Practicality of Optical Coherent Tomography for Coronary Imaging"; *CCI* 2009
24. "Long Term" Follow-up, or "So Long", to Cardioseal and Starflex? *CCI* 2009.
25. "What Is The Best Way To Close a PFO?" *CCI* January 23, 2009.

26. Tobis J. Which do you prefer, OCT or IVUS? Catheter Cardiovascular Interventions. 2015 Aug; Vol 86(2); page 236.

BOOKS

1. Tobis JM, and Yock P: Intravascular Ultrasound Imaging; New York, Churchill Livingstone, 1992.
2. Tobis JM, and Colombo A: Techniques in Coronary Artery Stenting; London, England, Martin Dunitz, 2000. May 2000
3. Amin, Z, Tobis, JM, Carroll, J, Seivert, H: Patent Foramen Ovale; Springer-Verlag, London, 2015.

VIDEOS

Fitzgerald P, Hodgson J, Mintz G, Nissen S, Tobis J, Yock P: The IVUS Video Workshop: Volume I - Coronary Stenting with Ultrasound Guidance; January 1996.
Volume II - IVUS Image Interpretation and Measurements; May 1996.
Volume III - Multi-Device Applications of IVUS; May 1996.

BOOK CHAPTERS

1. Tobis JM: Dissecting aneurysm during pregnancy. In Cardiac Problems in Pregnancy: Diagnosis and Management of Maternal and Fetal Disease, Elkayam U and Gleicher N (eds), New York, Alan R. Liss, 1982.
2. Tobis JM, Nalcioglu O, Henry WL: Digital subtraction angiography. In Cardiovascular Medicine, Vogel JHK (ed), New York, Raven Press, 1982.
3. Tobis JM, Nalcioglu O, Henry WL: Review of digital subtraction angiography. In UCI Family Medicine Yearbook, 1982.
4. Nalcioglu O, Seibert JA, Boone JM, Wang Y, Roock W, Henry WL, Tobis JM, Johnston WD: The effect of physical problems on the determination of ventricular ejection fraction by video densitometry in digital imaging. In Cardiovascular Radiology (International Symposium Kiel, April 1982), Heintzen PH and Brennecke R (eds), New York, Georg Thieme Verlag, 1983.
5. Tobis JM, Nalcioglu O, Henry WL: Functional assessment of coronary stenoses using digital subtraction angiography in digital imaging. In Cardiovascular Radiology (International Symposium Kiel, April 1982), Heintzen PH and Brennecke R (eds), New York, Georg Thieme Verlag, 1983.

6. Tobis JM, Nalcioglu O, Henry WL, Castleman E: Digital subtraction angiography. In Cardiology Update, Rapaport E (ed), New York, Elsevier, 1984.
7. Nalcioglu O, Roeck W, Seibert J, Lando A, Tobis JM, Henry WL: Quantitative aspects of image intensified-television-based digital x-ray imaging. In Digital Radiography, Kereiakes JG, Thomas SR, and Orton CG (eds), Plenum Press, New York, 1986.
8. Sato D, Tobis JM, Nalcioglu O, Henry WL: Reevaluation of the role of digital angiography in cardiac diagnosis. In New Concepts in Cardiac Imaging, Pohost GM, Higgins CB, Morganroth J, Ritchie JL, and Schelbert HR (eds), Chicago, Year BookMedical Publishers, Inc., 1987.
9. Tobis JM, Mallery JA, Nalcioglu O, Henry WL: Applications of digital angiography in the evaluation of coronary artery disease: Implications for angioplasty. In Cardiac-Application of Digital Angiography, Wasserman AG and Ross AM (eds), New York, FuturaPublishing Company, 1989.
10. Tobis JM, Henry W, Nalcioglu O: Cardiac digital angiography. In Comparative Cardiac Imaging--Function, Flow, Anatomy, Quantification, Brundage (ed), Rockville, Aspen Publishers, Inc.
11. Tobis JM, Nalcioglu O, Henry WL: Ventricular function assessed with digital subtraction angiography. In Cardiac Imaging--Principles and Practice, Marcus ML (ed), Philadelphia, WBSaunders, 1990.
12. Mallery JA, Tobis JM, Gessert JM, Griffith JM, Henry WL: Intravascular ultrasound imaging. In Lasers in Cardiology, Abela GM (ed), Boston, Kluwer Academic Publishers.
13. Tobis JM, Miranda CP, Moriuchi M, McRae M, Deutsch L-S, Berns M, Henry WL: Mechanism of laser recanalization. In Percutaneous Revascularization Techniques, Casteneda-Zuniga RW (ed), New York, Theime Medical Publishers, 1992.
14. Mahon DJ, Padilla LD, Abrahamson D, Gutfinger DE, Dwyer ML, Tobis JM: Coronary angioplasty supported by extracorporeal membrane oxygenation. In Cardiac Surgery-- Mechanical Cardiac Assist, Ott RA, Gutfinger DE, and Gazzaniga AB (eds), Philadelphia, Hanley & Belfus, 1993.
15. Al-Zarka A, Tobis J, Wallis J: Transluminal Cardiac Ultrasound Diagnosis- Intravascular Ultrasound. In Ultrasound in Cardiology, Schmailzl K, Ormerod O (eds), Berlin, Germany, Blackwell Science, 1994.
16. Colombo A, Nakamura S, Hall P, Almagor Y, Maiello L, Gaglione A, Finci L, Tobis JM. Milan update: intravascular ultrasound-guided coronary stent deployment without subsequent anticoagulation. In Stent Forum, 1994, Vol. 9, pp. 1-2

17. Slavin L, Tobis JM, Chapter 12: In-stent Restenosis. SCAI Board Review Book, 2006.
18. Tobis JM, Provias T. Chapter on Closure of Patent Foramen Ovale with the Amplatzer Device, in *Complications in Percutaneous Interventions For Congenital & Structural Heart Disease*. Hijazi, Sievert, and Feldman, 2008
19. Tobis JM and Verma S. Chapter 6: *PFO Closure and Migraines*. Transcatheter Closure of ASDs and PFOs: A Comprehensive Assessment. Ziyad HM, Feldman T, Abdullah M, and Sievert H, 2010

ABSTRACTS

1. Danahy D, Tobis JM, Chetty K, Aronow WS: Hemodynamic effects of oral isosorbide dinitrate in pulmonary hypertension. *Circulation* 1978;56.
2. Tobis JM, Danahy D, Aronow W, Chetty K, Glauser F: Comparison of noninvasive with hemodynamic data in patients with pulmonary hypertension due to chronic and obstructive pulmonary disease. *Chest* 1978;74:352.
3. Ferlinz J, Easthope J, Hughes D, Siegel J, Tobis JM, Aronow W: Comparison of antihypertensive and hemodynamic effect of oxprenolol and propranolol in man. *Clinical Pharmacology and Therapeutics* 1979;25:224.
4. Gardin JM, Iseri LT, Elkayam U, Tobis JM, Childs W, Burn C, Henry W: Use of Doppler echocardiography in the noninvasive assessment of left ventricular dysfunction in patients with dilated cardiomyopathy. *Circulation* 1980;62:III-200.
5. Elkayam U, Mumford M, Tobis JM, Henry W: Thermodilution cardiac output determination: The effect of injectates volume and temperature on accuracy and reproducibility. *Clinical Research* 1981;29:188A.
6. Tobis JM, Iseri L, Elkayam U, Udall J, Gardin J, Henry W: Angulated coronary angiograms in the long axis view. *Clinical Research* 1981;29:246A.
7. Tobis JM, Nalcioglu O, Seibert JA, Roeck WW, Iseri LT, Elkayam U, Johnston WD, Henry WL: Use of digital angiography in assessment of ventricular ejection fraction and pacing induced wall motion abnormalities. *Circulation* 1981;Oct:250A.
8. Nalcioglu O, Seibert JA, Roeck WW, Henry WL, Tobis JM, Johnston D: Comparison of digital subtraction video densitometry and area-length method in the determination of left ventricular ejection fraction. *SPIE* 1981;314:294.
9. Tobis JM, Nalcioglu O, Seibert JA, Roeck WW, Johnston WD, Henry WL: Comparison of videodensitometry and area-length methods for computing left ventricular ejection fraction from digital intravenous ventriculograms. *Am J Cardiol* 1982;49:964.

10. Tobis JM, Nalcioglu O, Seibert JA, Roeck WW, Iseri L, Elkayam U, Johnston WD, HenryWL: Digital intravenous angiography: A new technique for obtaining ventriculograms following intravenous injection of iodinated contrast material. *AmJ-Cardiol* 1982;49:985.
11. Johnston WD, Tobis JM, Nalcioglu O, Seibert JA, Roeck WW, Iseri LT, Elkayam U, HenryWL: End-diastolic mask subtraction: An improved method for displaying wall motion abnormalities using a digital angiography computer system. *Am J Cardiol* 1982;49:935.
12. Tobis JM, Nalcioglu O, Boone J, Roeck WW, Henry WL: Videodensitometric assessment of myocardial perfusion using digital subtraction angiography (DSA). *Circulation* 1982;66:II-230.
13. Tobis JM, Nalcioglu O, Johnston WD, Seibert JA, Henry WL: Exercise digital subtraction angiograms in patients with coronary artery disease. *Circulation* 1982;:II-229.
14. Tobis JM, Nalcioglu O, Seibert A, Bauer B, Iseri L, Benvenuti D, Henry W: Coronary angiography performed with real time digital subtraction. *Circulation* 1982;66:II-60.
15. Johnston WD, Tobis JM, Seibert JA, Nalcioglu O, Roeck WW, Henry WL: A videodensitometric method for computing right ventricular ejection fraction from intravenous digital subtraction angiograms. *Circulation* 1982;66:II-61.
16. Tobis JM, Castleman E, Nalcioglu O, Roeck W, Henry W: Portable intravenous digital angiography for bedside assessment of left ventricular function. *J Am Coll Cardiol* 1983;2:617.
17. Tobis JM, Wang Y, Nalcioglu O, Henry W: Absolute left ventricular volume obtained with videodensitometry and digital subtraction angiography. *J Am Coll Cardiol* 1983;2:616.
18. Tobis JM, Nalcioglu O, Johnston WD, Iseri L, Henry WD: Comparison of ejection fraction changes during and after atrial pacing in coronary artery disease. *J Am Coll Cardiol* 1983;2:672.
19. Tobis JM, Iseri L, Nalcioglu O, Johnston W, Henry W, Castleman E: Comparison of digital and cineangiography for quantitation of coronary stenoses. *Circulation* 1983;68:III-91.
20. Nalcioglu O, Lando A, Boone J, Roeck W, Tobis JM, Henry W: Quantification of coronary stenoses from digital images. *Circulation* 1983;68:III-346.
21. Nalcioglu O, Lando A, Boone J, Roeck W, Tobis JM, Henry W: A comparison of methods for determining percent stenosis from digital angiograms. *Circulation* 1983;68:III-209.

22. Gardin JM, Tobis JM, Dabestani A, Smith C, Elkayam U, Castelman E, Allfie A, HenryWL: Superiority of two-dimensional measurement of aortic vessel diameter in Doppler echocardiographic estimates of left ventricular stroke volume. *Clinical-Research* 1983;31:8A.
23. Gardin JM, Tobis JM, Dabestani A, Smith C, Elkayam U, Castleman E, Allfie A, HenryWL: Quantitation of left ventricular stroke volume utilizing Doppler echocardiography: The importance of properly measuring aortic vessel diameter. Erasmus University, Rotterdam, *Proceedings of 5th Symposium on Echocardiography*, p. 96, 1983.
24. Tobis JM, Iseri L, Johnston W, Nalcioglu O, Castleman E, Henry W: Comparison of digital and cineangiography for diagnosis of coronary stenoses. *J Am Coll Cardiol* 1984;3:491.
25. Dabestani A, Johnston W, Tobis JM, Gardin JM, Allfie A, Burn C, Henry WL: Relation between Doppler transmitral diastolic flow and left ventricular filling. *J Am Coll Cardiol* 1984;3:612.
26. Tobis JM, Nalcioglu O, Johnston WD, Henry W: Videodensitometric analysis of coronary stenoses following angioplasty. *Circulation* 1984;70:II-37.
27. Tobis JM, Nalcioglu O, Roeck W, Johnston WD, Henry W: Digital angiographic roadmapping: A new aid for assisting coronary angioplasty. *Circulation* 1984;70:II-294.
28. Johnston WD, Tobis JM, Nalcioglu O, Roeck W, Henry W: Computer quantitation of coronary stenoses with digital angiography. *Circulation* 1984;70:II-31.
29. Johnston WD, Tobis JM, Gardin JM, Allfie A, Burn C, Henry WL: Relation between Doppler transmitral diastolic flow and left ventricular filling. *J Am Coll Cardiol* 1984;3:612.
30. Gardin JM, Tobis JM, Dabestani A, Smith C, Elkayam U, Castleman E, White D, Allfie A, Henry WL: Superiority of two-dimensional measurement of aortic vessel diameter in Doppler echocardiographic estimates of left ventricular stroke volume. *J Am Coll Cardiol* 1985;6:66-74.
31. Tobis JM, Sato D, Johnston WD, Reese T, Nalcioglu O, Henry WL: Correlation of minimum lumen diameter with left ventricular functional impairment during atrial pacing. *J Am Coll Cardiol* 1986;5:216A.
32. Mallery J, Griffith J, Gessert J, Morcos NC, Tobis JM, Henry WL: Intravascular ultrasound imaging catheter assessment of normal and atherosclerotic arterial wall thickness. *J Am Coll Cardiol* 1988;11:22A.
33. Mallery J, Tobis JM, Griffith J, Bessen M, Morcos NC, Henry WL: Evaluation of ultrasound imaging device in porcine peripheral and coronary arteries in vivo. *Circulation* 1988;78:II-21.

34. Tobis JM, Mallery JA, Gessert J, Griffith J, Bessen M, Macleay L, Morcos NC, Henry WL: Intravascular ultrasound visualization before and after balloon angioplasty. *Circulation* 1988;78:II-84.
35. Mallery JA, Tobis JM, Gessert J, Griffith J, Bessen M, Macleay L, Henry WL: Identification of tissue components in human atheroma by an intravascular ultrasound imaging catheter. *Circulation* 1988;78:II-22.
36. Tobis JM, Mallery J, Macleay L, Georgeson S, Shipman R: The mechanism of laserprobe recanalization: Thermal ablation vs. mechanical dissection. *Circulation* 1988;78:II-417.
37. Heldman D, Mallery J, Gessert J, Griffith J, Tobis JM, Henry WL: Intravascular ultrasound imaging catheter accurately measures valve area in aortic stenosis in vitro. *J Am Coll Cardiol* 1989;13:49A.
38. Tobis JM, Mallery JA, Macleay L, McRae M, Berns M, Henry WL: An in vitro comparison of an excimer laser and an argon laser heated probe. *J Am Coll Cardiol* 1989;13:53A.
39. Tobis JM, Mallery JA, Mahon D, Griffith J, Gessert J, Bessen M, Henry WL: Intravascular ultrasound visualization of atheroma plaque removal by atherectomy. *J Am Coll Cardiol* 1989;13:222A.
40. Moriuchi M, Tobis JM, Gordon I, Bergman A, Griffith J, Henry WL: Functional significance of arterial stenoses predicted by angiography and intravascular ultrasound imaging catheter. *J Am Coll Cardiol* 1990;15:106A.
41. Tobis JM, Mahon D, Lehmann K, Moriuchi M, Honye J, Henry WL: Intracoronary ultrasound imaging after balloon angioplasty. *Circulation* 1990;82:III-676.
42. Tobis JM, Mahon D, Lehmann K, McRae M, Henry WL: The sensitivity of ultrasound imaging compared with angiography for diagnosing coronary atherosclerosis. *Circulation* 1990;82:III-439.
43. Tobis JM, Conroy R, Deutsch L-S, Gordon I, Honye J, Berns M: Laser-assisted versus mechanical recanalization of peripheral occlusions: A randomized trial. *Circulation* 1990;82:III-221.
44. Bittl JA, Sanborn TA, Hershman RA, Siegel RM, Kramer BL, Ginsburg R, Watson LE, Tobis J: Coronary excimer laser angioplasty: Results in 223 patients from a multicenter registry. *Circulation* 1990;82(4):III-670.
45. Tobis JM, Mahon D, Honye J, Gessert J, Dwyer M-L, Griffith J, Henry WL: Cross sectional morphology of balloon dilation in vivo by intravascular ultrasound. *J Am Coll Cardiol* 1991;17:157A.

46. Honye J, Mahon DJ, Tobis JM: Plaque distensibility of human coronary arteries documented by intravascular ultrasound imaging. *Circulation* 1991;84:II-437.
47. Honye J, Jain A, Mahon DJ, Tobis JM: Atherosclerotic plaque eccentricity: A comparison of angiography and intravascular ultrasound imaging. *Circulation* 1991;84:II-700.
48. Honye J, Mahon DJ, Jain A, Wong N, Tobis JM: Intravascular ultrasound imaging predicts restenosis following PTCA. *J Am Coll Cardiol* 1992;19:169A.
49. Feldman T, Carroll JD, Isner J, Chisholm R, Herrmann HC, Pichard A, Bashore TM, Holmes D, Dorros G, Massumi A, Stertz S, Ramee S, Rothbaum DA, Feldman RC, Tobis J, Inoue K: Six month follow-up after Inoue balloon mitral valvotomy. *J Am Coll Cardiol* 1992;19:364A.
50. Honye J, Mahon DJ, Nakamura S, Martinez T, Tobis JM: A comparison of angiography and intravascular ultrasound to predict the result of PTCA. *J Am Coll Cardiol* 1993;21:485A.
51. Honye J, Mahon DJ, Nakamura S, Barnett K, Tobis JM: Enhanced diagnostic ability of intravascular ultrasound imaging compared with angiography. *Circulation* 1992;86:I-324.
52. Nakamura S, Honye J, Conroy R, Gordon I, Martinez T, Antone C, Tobis JM: Intravascular ultrasound documentation of plaque removal during peripheral extraction atherectomy. *Circulation* 1992;86:I-365.
53. Goel M, Honye J, Nakamura S, Hagar J, Burn C, Huwe S, Eisenberg H, Tobis J: Significance of coronary calcification by ultrafast computed tomography: Comparison with intravascular ultrasound. *Circulation* 1992;86:I-476.
54. Wong ND, Vo A, Abrahamson D, Eisenberg H, Tobis JM: Prediction of coronary events from noninvasive calcium screening by ultrafast CT. *Circulation* 1993;88:I-15.
55. Nakamura S, Honye J, Conroy R, Gordon I, Antone C, Tobis JM: A randomized trial of transcatheter extraction catheter (TEC) atherectomy versus balloon dilatation in superficial femoral artery occlusions. *Circulation* 1993;88:I-198.
56. Nakamura S, Mahon DJ, Yang J, Zelman R, Moore D, Tobis JM: Intravascular ultrasound imaging before and after directional coronary atherectomy (DCA). *Circulation* 1993;88:I-502.
57. Goldberg SL, Colombo A, Almagor Y, Maiello L, Gaglione A, Nakamura S, Tobis JM: Can intravascular ultrasound improve coronary stent deployment? *Circulation* 1993;88:I-597.

58. Nakamura S, Colombo A, Gaglione A, Almagor Y, Goldberg SL, Maiello L, Finci L, Rizzon P, Tobis JM: Coronary stenting guided by intravascular ultrasound. *Circulation* 1993;88:1-597.
59. Nakamura S, Colombo A, Gaglione A, Goldberg SL, Almagor Y, Maiello L, Barrione M, Finci L, Tobis JM: Intravascular ultrasound criteria for successful stent deployment. *Circulation* 1993;88:1-598.
60. Tobis JM, Colombo A, Gaglione A, Almagor Y, Goldberg SL, Nakamura S, de Cesare NB, Barrione M, Rizzon P, Guazzi M, Wong N: Intravascular ultrasound guidance of interventional procedures: A randomized trial. *Circulation* 1993;88:1-660.
61. Nakamura S, Hall P, Almagor Y, Maiello L, Tobis JM, Colombo A: Ultrasound-assisted stent placement and directional atherectomy. *J Interventional Cardiol* 1994;7:99-100.
62. Hall P, Colombo A, Almagor Y, Maiello L, Gaglione A, Nakamura S, Finci L, Goldberg SL, Tobis J: Intravascular ultrasound guided coronary stenting of angiographic small vessels (<3.0 mm). *J Am Coll Cardiol* February 1994:136A.
63. Gutfinger DE, Maheswaran B, Nakamura S, Detrano R, Kang X, Tang W, Tobis JM: Calcium estimation by intravascular ultrasound and ultrafast computed tomography. *J Am Coll Cardiol* February 1994:180A.
64. Nakamura S, Mahon DJ, Maheswaran B, Gutfinger DE, Tobis JM: Extent of plaque fracture explains discrepancy between angiographic and intravascular ultrasound measurements after PTCA. *J Am Coll Cardiol* February 1994:271A.
65. Goldberg SL, Hall P, Almagor Y, Maiello L, Finci L, Tobis J, Colombo A: Intravascular ultrasound guided rotational atherectomy of fibro-calcific plaque prior to intracoronary deployment of Palmaz-Schatz stents. *J Am Coll Cardiol* February 1994:290A.
66. Feldman T, Herrmann HC, Carroll JD, Bashore TM, Dorros G, Whitlow PL, Tobis JM, Kiesz SR, Pavlides GS and the North American Inoue Investigators: Early and late valve replacement after Inoue balloon mitral valvotomy. *J Am Coll Cardiol* February 1994:292A.
67. Colombo A, Hall P, Almagor Y, Maiello L, Gaglione A, Nakamura S, Borriene M, Goldberg SL, Finci L, Tobis J: Results of intravascular ultrasound guided coronary stenting without subsequent anticoagulation. *J Am Coll Cardiol* February 1994:335A.
68. Hiro T, Leung CY, Russo RJ, Gutfinger DE, Farvid AR, Karimi H, Tobis JM: A comparison of four intravascular ultrasound imaging systems. *Circulation* November 1994:1- 551.
69. Maheswaran B, Gutfinger DE, Nakamura S, Russo RJ, Tobis JM: An explanation

- for the variability in intravascular ultrasound images. *Circulation* November 1994; 1-551.
70. Goldberg SL, Colombo A, Almagor Y, Hall P, Maiello L, Nakamura S, Tobis J: Has the Introduction of Intravascular Ultrasound Guidance Led to Different Clinical Results in the Deployment of Intracoronary Stents? *Circulation* November 1994;1-612.
 71. Russo RJ, Schatz RA, Sklar MA, Johnson AD, Tobis JM, Teirstein PS: Ultrasound Guided Coronary Stent Placement without Prolonged Systematic Anticoagulation. *J Am Coll Cardiol* February 1995;902-7:50A.
 72. Feldman T, Hermann HC, Carroll JD, Ramaswamy K, Tobis JM, Harrison JK, Pichard AD, Holmes DR, Rothbaum DA, Dorros G, Bailey SR, Feldman R, Margolis JR, Ramee SR, N. American Inoue Investigation: Balloon Valvotomy for Non-Ideal Commissurotomy Candidates. *J Am Coll Cardiol* February 1995;717-4:90A.
 73. Leung CY, Hiro T, de Guzman S, Farvid AR, Karimi H, Sylora J, Tobis JM: Correlation of Intravascular Ultrasound imaging with Histology of Normal and Diseased Pulmonary Arteries. *J Am Coll Cardiol* February 1995;1004-54:353A.
 74. Hiro T, Leung CY, de Guzman S, Gordon I, Conroy R, Tobis JM: A Comparison of Balloon Angioplasty and Self-Expandable Stent Treatment of Occluded Superficial Femoral Arteries. *Circulation* October 1995;92-8:1-56.
 75. Tobis JM, Colombo A, Almagor Y, Nakamura S, Goldberg S, DeCesare N, Guazzi M, Maello L, Gaglioli A: Intravascular Ultrasound Guidance of Multiple Interventions does not Reduce Restenosis. *Circulation* October 1995;92-8:1-148.
 76. Hall P, Maiello L, Colombo A, Itoh A, Jang YT, Salmon S, Tobis JM: In Vivo Evidence that Palmaz-Schatz Stents do not Recoil Immediately Following Deployment. *Circulation* October 1995;92-8:1-327.
 77. Tobis JM, Hall P, Maiello L, Itoh A, Jang YT, Salmon S, Colombo A: Clinical Feasibility of an 0.018" Intravascular Ultrasound Imaging Device. *Circulation* October 1995;92-8:1-400.
 78. Hiro T, Leung CY, de Guzman S, Caiozzo V, Farvid A, Karimi H, Tobis JM: Are "Soft Echoes" Really Soft?: Ultrasound Assessment of Mechanical Properties in Human Atherosclerotic Tissue. *Circulation* October 1995;92-8:1-649.
 79. Gordon IL, Conroy RM, Tobis JM, Nimon ML: Stenting of occluded superficial femoral arteries. *J Endovasc Surg* 1996;3:247-248.
 80. Moussa I, Di Mario C, Moses J, Di Francesco L, Reimers B, Tobis J, Colombo A: The impact of preintervention plaque area determined by intravascular ultrasound on luminal renarrowing following coronary stenting. *Circulation* October 1996;94-8:1-261.

81. Moussa I, Di Mario C, Tobis J, Di Francesco L, Reimers B, Blengino S, Colombo A: The differential predictive value of various intravascular ultrasound criteria for subacute stent thrombosis. *Circulation* October 1996;94-8:1-262.
82. Moussa I, Moses J, Di Francesco L, Reimers B, Blengino S, Tobis J, Colombo A: The impact of lesion length on Doppler coronary flow reserve in patients with ischemic heart disease. *Circulation* October 1996;94-8:1-562.
83. Moussa I, Di Mario C, Di Francesco L, Reimers B, Tobis J, Colombo A: Doppler coronary flow reserve is inversely related to lesion length. *Eur Heart J* 1996; 17: 512.
84. Moussa I, Di Mario C, Di Francesco L, Reimers B, Blengino S, Martini G, Tobis J, Colombo A: Coronary stenting of chronic total occlusions without anticoagulation: immediate and long-term outcome. *Eur Heart J* 1996; 17: 2451.
85. Moussa I, Di Mario C, Blengino S, Ferraro M, Di Francesco L, Martini G, Tobis J, Colombo A: Coronary stenting after rotational atherectomy in calcified and complex lesions: angiographic and clinical follow-up results. *Eur Heart J* 1996; 17: 2456.
86. Goldberg S, Hall P, Nakamura S, Maiello L, Almagor Y, Tobis J, Colombo A: Is there a benefit from intravascular ultrasound when high-pressure stent expansion is routinely performed prior to ultrasound imaging? *J Am Coll Cardiol* 1996;27: 792-4 306A.
87. Moussa I, Di Mario C, Moses J, Di Francesco L, Reimers B, Tobis J, Colombo A: The impact of preintervention plaque area determined by intravascular ultrasound on luminal renarrowing following coronary stenting. *Circulation* 1996; 94: 1528 1261.
88. Moussa I, Di Mario C, Tobis J, Di Francesco L, Reimers B, Blengino S, Colombo A: The differential predictive value of various intravascular ultrasound criteria for subacute stent thrombosis. *Circulation* 1996; 94: 1533 1262.
89. Moussa I, Moses J, Di Francesco L, Reimers B, Blengino B, Tobis J, Colombo A: The impact of lesion length on doppler coronary flow reserve in patients with ischemic heart disease. *Circulation* 1996; 94: 3285 1562.
90. Tobis J, Aharonian V, Mansukhani P, Hiro T, Kasaoka S, Thompson M, Johnson E: On-line video telecommunication between cardiac catheterization laboratories: A new technology to facilitate clinical trials. *J Am Coll Cardio* February 1997;29-2A:7A.
91. Feldman T, Hermann H, Rothbaum D, Bashore T, Ramee S, Carroll J, Dorros G, Pichard A, Isner J, Feldman R, Bailey S, Holmes D, O'Neill W, Massumi A, Tobis J, Kawanishi D: Late outcome after percutaneous mitral commissurotomy: Six year results of the N. American Inoue Balloon Registry. *J Am Coll Cardio* February 1997;29-2A:226A.

92. Yamashita T, Kasaoka S, Son R, Neet J, Hedricks A, Tobis J: Optical Coherent Reflectometry (OCR): A new technique to guide invasive procedures. (*Accepted for presentation at American Heart Association, November 1998*)
93. Takano Y, Higgins JR, Tobis JM, Ascencio E, Yeatman LA, Kopelson KA, Currier JW. New Stent Delivery Systems Do Not Provide Optimal Stent Expansion. *J Am Coll Cardiol* 2001;37:78A
94. Takano Y, Bastani S, Guttman OT, Currier JW, Yeatman LA, McCloy K, Davis A, Devendra K, Vora DK, Tobis JM. Intravascular Ultrasound Guidance Optimizes Cutting Balloon Angioplasty. *J Am Coll Cardiol* 2002;39:55A
95. Takano Y, Guttman OT, Currier JW, Yeatman LA, Kobashigawa JA, Marelli D, Grise M, MD, Higgins JR, MD, Tobis JM. Percutaneous Catheter Interventions for Cardiac Transplant Patients. *J Am Coll Cardiol* 2002;39:188A
96. Takano Y, Currier JW, Yeatman LA, Jose M, Burt KE, Tobis JM. Intravascular ultrasound facilitates the thrombectomy with the X-SIZER. *Catheter Cardiovasc Interv* 2002;56:128
97. John Kao, Scripps Clinic, La Jolla, CA; Jonathan Tobis, David Geffen School of Medicine at UCLA, Los Angeles, CA; Robyn L McClellan, Melissa R Heaton, Mayo Clinic, Rochester, MN; Barry R Davis, University of Texas School of Public Health, Houston, TX; David R Holmes, Jr, Mayo Clinic, Rochester, MN; Jesse W Currier; David Geffen School of Medicine at UCLA, Los Angeles, CA; Metformin Treatment is Associated with Decreased Clinical Events in Diabetic Patients Undergoing Percutaneous Intervention: A Presto Substudy
98. Hitoshi Anzai, MD, John Child, MD, Barbara Natterson, MD, Janine Krivokapich, MD, Michael C. Fishbein, MD, Vicki K. Chan, BS, Jonathan M. Tobis, MD. Incidence of Thrombus Formation on the CardioSEAL and the Amplatzer Interatrial Closure Devices. *American J of Cardiology*: 92 (supplement 6A), September 2003 of 164L.
99. John Kao, Jonathan Tobis, Robyn L McClellan, Melissa R Heaton, Barry R Davis, David R Holmes, Jr, Jesse W Currier; METFORMIN TREATMENT IS ASSOCIATED WITH DECREASED CLINICAL EVENTS IN DIABETIC PATIENTS UNDERGOING PERCUTANEOUS INTERVENTION: A PRESTO SUBSTUDY . *Circulation*:
100. Ankush Chhabra, Babak Azerbal, Hitoshi Anzai, Michael Fishbein, Catherine Dao, Vicki Chan, Richard Gaster, John Moore, Jonathan Tobis. Stability of the Amplatzer Septal Occluder Device: Importance of the Atrial Tissue Rim. *JACC* 2004, 43 (5), 376.
101. Hitoshi Anzai, Vicki Chan, Jonathan Tobis, Barbara Natterson, Janine Krivokapich, Michael Fishbein, John Child. Relative Incidence of Thrombus Formation on the CardioSeal and Amplatzer Interatrial Closure Devices. *JACC* 2004, 43 (5), 382.

102. Norio Uchimura, Ganesha Perera, Roy Fujitani, Jonathan Tobis, Shin Ishimaru, Samuel Wilson, Ian Gordon. Dose-dependent inhibition of Myointimal hyperplasia by orally administered rapamycin. *Annals of vascular Surgery*, 2004.
103. FURTHER ANALYSIS OF THE INTRAVASCULAR ULTRASOUND DATA FROM THE RANDOMIZED MYCOPHENOLATE MOFETIL (MMF) TRIAL IN HEART TRANSPLANT RECIPIENTS. J A Kobashigawa¹, J Tobis¹, R M Mentzer², H A Valentine³, R C Bourge⁴, F W Smart⁵, L W Miller⁶ and R D Gordon⁷. ¹ University of California at Los Angeles, Los Angeles, CA; ² University of Kentucky, Lexington, KY; ³ Stanford University, Stanford, CA; ⁴ University of Alabama at Birmingham, Birmingham, AL; ⁵ Texas Heart Institute, Houston, TX; ⁶ University of Minnesota, Minneapolis, MN and ⁷ Roche Pharmaceuticals, Basel, Switzerland. *International Society of Heart and Lung Transplantation Scientific Sessions April 2004*.
104. MULTI-CENTER INTRAVASCULAR ULTRASOUND VALIDATION STUDY AMONG HEART TRANSPLANT RECIPIENTS: OUTCOMES AFTER 5 YEARS. J A Kobashigawa^{1*}, J M Tobis¹, R C Starling², M Tuzcu², M R Mehra³, A Yeung⁴, H Valentine⁴, A Smith⁵, H Anzai¹, B T Oesser¹, K Abeywickrama⁶, J Murphy⁶ and N Cretin⁶. ¹ University of California at Los Angeles, Los Angeles, CA; ² Cleveland Clinic, Cleveland, OH; ³ Oschner Clinic, New Orleans, LA; ⁴ Stanford University, Stanford, CA; ⁵ Emory University, Atlanta, GA and ⁶ Novartis Pharma, Basel, Switzerland. *International Society of Heart and Lung Transplantation Scientific Sessions April 2004*.
105. A CASE OF MIDVENTRICULAR OBSTRUCTION AND APICAL ANEURYSM Howard Dinh, MD, Sumanta Pal, MD, Henry Honda, MD, John Child, MD, Jonathan Tobis, MD Abstract S2005-161. *American Federation for Medical Research, Southern Regional Meeting, New Orleans, LA, 2005*.
106. Drug-Eluting Stents in Heart Transplant Recipients with Transplant Coronary Artery Disease. Peter J. Curran, Koji Tanaka, Jesse Currier, Lawrence Yeatman, Ankush Chhabra, Jon Kobashigawa, Jonathan Tobis. *Circulation supplement 3, v.110,p.380*.
107. Vascular Remodeling Patterns One Year after Cardiac Transplantation. Haiyan Li, Koji Tanaka, Ankush Chhabra, David Vadnais, Jon Kobashigawa, Jonathan Tobis. *JACC v 45, No. 3, 2005 p 150A*.
108. Influence of Donor Transmitted Atherosclerosis on the Development of Cardiac Allograft Vasculopathy. Haiyan Li, Koji Tanaka, Hitoshi Anzai, Brandy Oesser, Jon Kobashigawa, Jonathan Tobis. *JACC v 45, No. 3, 2005 p 155A*.
109. Risk Factors for the Development of Coronary Artery Disease after Cardiac Transplantation. Koji Tanaka, Haiyan Li, Krishnan Rangarajan, Jesse W. Currier, Lawrence A. Yeatman, Jon A. Kobashigawa, Jonathan Tobis. *JACC 2006*

110. Slavin L, Haines JM, Rangarajan K, Dao C, Liebeskind DS, Tobis JM. PFO Size as a Predictor of Stroke Size in Patients with Paradoxical Embolization. *Stroke: A Journal of the American Heart Association*. International Stroke Conference, San Francisco, 2007 (Abstract).
111. Slavin L, Rangarajan K, Dao C, Tobis JM. Structural Differences in PFO Between Patients with TIA versus Stroke. *American Journal of Cardiology* 2006; 98(8) S1:226. Transcatheter Cardiovascular Therapeutics, Washington D.C., 2006 (Abstract).
112. Dao C, Rangarajan K, Slavin L, Tobis JM. PFO Parameters in Patients with Oxygen Desaturation. *American Journal of Cardiology* 2006; 98(8) S1:226-227. Transcatheter Cardiovascular Therapeutics, Washington D.C., 2006 (Abstract).
113. Michael S. Lee, Antonio Pessequeiro, Raymond Zimmer, Dan Jurewitz, Kook-Jin Chun, Jonathan Tobis. Clinical Presentation of Patients with In-Stent Restenosis in the Drug-Eluting Stent Era. TCT
114. Lee MS, Sheiban I, Biondi Zoccai G, Sillano D, Tobis J. Multicenter International Experience of Unprotected Left Main Coronary Artery Percutaneous Coronary Intervention with Drug-eluting Stents in Patients With Myocardial Infarction. SCAI/ACCi2 2008.
115. Lee MS, Pessequeiro A, Zimmer R, Jurewitz D, Jeon Jeon KJ, Tobis J. Clinical Presentation of patients with in-stent restenosis in the drug-eluting stent era. TCT 2007.
116. Chieffo A, Kim YH, Meliga E, Sheiban I, Lee MS, Park SJ, Valgimigli M, Moretti C, Park SW, Silano D, Montorfano M, Magni V, Latib A, Park DW, Zoccai GB, Tobis J, Serruys P, Colombo A. Late and Very Late Stent Thrombosis Following Drug-Eluting Stent Implantation in Unprotected Left Main Coronary Artery: A Multicenter Registry. SCAI/ACCi2 2008.
117. Gerber, R.T., Latib, A., Ielasi, A., Cosgrave, J., Qasim, A., Airolidi, F., Chieffo, A., Montorfano, M., Carlino, M., Michev, I., Tobis, J., Colombo, A. Defining a new standard for IVUS optimized drug eluting stent implantation: The PRAVIO Study. CCI 2009; v.74(2) pp348-356.
118. Verma SK, Tobis JM. Explantation of Patent Foramen Ovale (PFO) Closure Devices: A Retrospective Review. *Catheterization & Cardiovascular Interventions (CCI)*. 2010;75(6):S65-S66.

NATIONAL CONFERENCE PRESENTATIONS

1. "Digital Subtraction Angiography," Symposium on the Cardiac Applications of Digital Subtraction Angiography, Dallas, Texas, November 1982.
2. "Digital Angiography: Results of Clinical Studies. What is Its Future Role in Clinical Cardiology?", American College of Cardiology-Ninth Annual Symposium on Clinical Echocardiography, Snowbird, Utah, January 1982.
3. "Evaluation of Left Ventricular Function by Digital Subtraction Angiography," Computers in Cardiology, Seattle, Washington, October 1982.
4. "Digital Subtraction Angiography," Hoag Hospital Symposium, Newport Beach, California, October 1982.
5. "Ventricular Function Assessment with Digital Imaging Techniques" and "Direct Intracoronary Artery Digital Imaging Studies," Digital Radiography 1983 at University of South Florida, Hollywood, Florida, February 1983.
6. "Cardiac Applications of Digital Angiography," DSA Symposium, Washington, D.C., April 1983.
7. "Digital Evaluation of the Coronary Arteries," North American Society for Cardiac Radiology Symposium, Scottsdale, Arizona, May 1983.
8. "Digital Subtraction Angiography of the Heart," Medicine Grand Rounds at William-Beaumont Hospital, Royal Oak, Michigan, August 1983.
9. "Digital Subtraction Angiography," Medicine Grand Rounds at Los Angeles County-University of Southern California Medical Center, Los Angeles, California, September 1983.
10. "Digital Subtraction Angiography: Cardiac Applications," Ninth Annual Vari-X Symposium on Cardiac Imaging, Las Vegas, Nevada, October 1983.
11. "Digital Subtraction Angiography," DSA Symposium, New York, New York, October 1983.
12. "Analysis of Left Ventricular Function with Digital Subtraction Angiography," "Coronary Angiography with Digital Subtraction Imaging," and "Videodensitometry," Digital Radiography 1984 at University of South Florida, Hollywood, Florida, February 1984.
13. "Comparison of Digital and Cineangiography for Diagnosis of Coronary Stenoses," "Digital Angiography: Techniques and Clinical Evaluations," and "Selection of

- Noninvasive Testing in Chronic Coronary Disease," American College of Cardiology, Dallas, Texas, March 1984.
14. "Digital Subtraction Angiography: Cardiac Applications, Left Ventricular Function, Coronary Artery Disease, Peripheral Vascular Applications," Martial A. Demany Lecturer-Preceptor in Cardiology for the Consultant, Rancho Santa Fe, California, April 1984.
 15. "Technical Aspects of Invasive Cardiac Imaging," First Annual Southwest Regional Invasive Cardiology Seminar, San Diego, California, April 1984.
 16. "Cardiac Applications of Digital Subtraction Angiography," Physicians and General Practitioners Radio Network, April 1984.
 17. "Cardiac Applications of Digital Angiography," Medicine Grand Rounds at University of California Irvine-UCI Medical Center, Orange, California, April 1984.
 18. "Surgery for Sleep Apnea and Snoring," (Course Participant), Irvine, California, May 1984.
 19. "New Developments in the Evaluation and Treatment of Coronary Artery Disease," University of California Irvine Medicine Staff Research Conference, Orange, California, May 1984.
 20. "Digital Angiography," Medicine Grand Rounds at Hoag Hospital, Newport Beach, California, May 1984.
 21. "Coronary Angiography Without Film," Medicine Grand Rounds at St. Joseph Hospital, Orange, California, June 1984.
 22. "Videodensitometric Analysis of Coronary Stenoses Following Angioplasty," American Heart Association, Miami Beach, Florida, November 1984.
 23. "Current Treatment of Coronary Artery Disease: PTCA, Thrombolysis, Drugs, and Prevention," Medicine Subspecialty Conference at University of California Irvine-UCI Medical Center, Orange, California, February 1985.
 24. "Emerging Imaging Technology," American College of Cardiology, Anaheim, California, March 1985.
 25. "The Current Status of Digital Angiography" and "Digital Road Mapping with PTCA," New Techniques and Concepts in Coronary Artery Disease Conference, Las Vegas, Nevada, October 1985.
 26. "Assessing the Functional Significance of Coronary Stenoses Using Atrial Pacing Wall Motion Analysis," Symposium on Digital Cardiac Imaging, Washington, D.C., November 1985.

27. "Digital Subtraction Angiography and Coronary Artery Disease," Cardiology '86: Accomplishments and Expectations Conference, San Diego, California, January 1986.
28. "Digital Angiography," Medicine Grand Rounds at Los Angeles County-University of Southern California Medical Center, Los Angeles, California, March 1986.
29. "Digital Roadmapping," Advanced Coronary Angioplasty: Special Emphasis on the Brachial Approach Course at Daniel Freeman Memorial Hospital, Inglewood, California, April 1986.
30. "Applications of Digital Angiography to Angioplasty," St. John's Hospital, Santa Monica, California, September 1986.
31. "Valvular Heart Disease: Diagnosis and Therapy," Medicine Subspecialty Lecture at University of California Irvine-UCI Medical Center, Orange, California, September 1986.
32. "PTCA: Complications and What We Can Learn From Them," (Panel Discussion at) American Heart Association, Los Angeles, California, September 1986.
33. "Laser Angioplasty," Medical Staff Luncheon at Mission Community Hospital, Mission Viejo, California, March 1987.
34. "Digital Roadmapping" and "PTCA: A Southern California Experience," Clinical Aspects of PTCA for Technical Personnel Course at Daniel Freeman Memorial Hospital, Inglewood, California, April 1987.
35. "Mechanism of Thermal and Mechanical Recanalization," International Symposium on Laser Applications in Vascular Surgery, Scottsdale, Arizona, February 1988.
36. "The Future of Laser Angioplasty: Some Insights Based on the Mechanism of Recanalization," (Keynote Speaker at) Frontiers in Cardiovascular Medicine, Washington, D.C., November 1988.
37. "Intravascular Ultrasound Visualization Before And After Balloon Angioplasty" and "The Mechanism of Laserprobe Recanalization: Thermal Ablation vs. Mechanical Dissection," American Heart Association, Washington, D.C., November 1988.
38. "Mechanisms of Laser Revascularization," Laser Symposium: Current and Future Cardiovascular Applications at Texas Heart Institute, Houston, Texas, January 1989.
39. "High Tech Cardiology: Digital Angiography, Laser Angioplasty, and the Ultrasound Catheter," Medicine Grand Rounds at University of Washington, Seattle, Washington, February 1989.

40. "Mechanism of Action of the Hot Tip," Laser One International Symposium on Advanced Interventional Techniques on Coronary Artery and Cardiovascular Disease, Newport Beach, California, May 1989.
41. "Ultrasound and Lasers," ACS Symposia for Cardiac Catheterization Laboratory and Allied Faculty and Staff at Marriott Hotel, Irvine, California, August 1989.
42. "Use of Intraluminal Echocardiographic Imaging in Diagnosis and Results of Treatment," Conference on Recent Advances in Cardiology, Diagnosis, Treatment and Intervention for the Southern California Heart Institute, Marinadel Rey, California, August 1989.
43. "Historical Perspective and Potential Clinical Applications in Peripheral Vascular Disease," International Symposium on Cardiovascular Ultrasound Applications of New Technologies at Mayo Clinic, Rochester, Minnesota, September 1989.
44. "Intravascular Ultrasound Assessment of Arterial Anatomy Following Mechanical Atherectomy and Balloon Angioplasty," Tufts University Symposium, New Orleans, Louisiana, November 1989.
45. "Update on Laser Angioplasty in Cardiology," Cardiology Conference at Daniel-Freeman Memorial Hospital, Inglewood, California, December 1989.
46. "Quantitative Analysis of Cross-Sectional Coronary Anatomy by Intravascular Ultrasound Before and After Interventional Therapy," Tufts University-New England Medical Center Symposium, New Orleans, Louisiana, March 1990.
47. "Laser Coronary Angioplasty" and "Intravascular Ultrasound," Cardiovascular-Symposium at French Hospital Medical Center, San Luis Obispo, California, May-1990.
48. "Intravascular Ultrasound Imaging of Human Peripheral and Coronary Arteries," North American Society for Cardiac Radiology Annual Meeting, Washington, D.C., May 1990.
49. "Intravascular Ultrasound Imaging During Balloon or Laser Angioplasty," Angioplasty Society of Arizona, Phoenix, Arizona, September 1990.
50. "Quantitative Measurements of Coronary Arterial Anatomy from Intravascular Ultrasound Images," "Percutaneous Balloon Coronary Angioplasty: Current Advances and Ongoing Problems," and "Laser Coronary Angioplasty: Mechanism of Recanalization," Intravascular Imaging and Therapy: New Approaches Seminar at American College of Cardiology-Heart House Learning Center, Bethesda, Maryland, October 1990.
51. "Percutaneous Intravascular Ultrasound," Coronary Interventions: 1990 at Scripps Clinic and Research Foundation, La Jolla, California, October 1990.

52. "Endovascular Imaging: Ultrasound Versus Angioscopy in Peripheral Interventions," Annual Meeting of the American Society of Cardiovascular Interventionists, Dallas, Texas, November 1990.
53. "Intravascular Echocardiography: Case Studies with Emphasis on Management Decision Making and Future Directions," Visiting Professor Luncheon at Loma Linda University Medical Center, Loma Linda, California, December 1990.
54. "Intravascular Ultrasound Imaging," Medicine Grand Rounds at University of Southern California, Los Angeles, California, January 1991.
55. "Combined Ipsilateral Retrograde and Antegrade Recanalization of Long Superficial Femoral Artery Occlusions," Annual Meeting of the Society of Cardiovascular and Interventional Radiology, San Francisco, California, February 1991.
56. "Intracoronary Ultrasound in Humans: Should It be the Gold Standard to Assess Coronary Disease?", Tufts University-New England Medical Center Symposium, Atlanta, Georgia, March 1991.
57. "Intravascular Ultrasound," Medicine Grand Rounds at St. Joseph Hospital, Orange, California, March 1991.
58. "Intravascular Ultrasound," Visiting Professor and Lecturer at University of Michigan, Ann Arbor, Michigan, March 1991.
59. "Ultrasound Arterial Imaging," Biotechnology Corporate Affiliates Meeting, Irvine, California, May 1991.
60. "Intravascular Imaging and Therapy: New Approaches," American College of Cardiology- Heart House Learning Center, Bethesda, Maryland, October 1991.
61. "The Place of Intravascular Ultrasound in Coronary Artery Disease", Mercy Institute for Cardiovascular Services, Pittsburgh, Pennsylvania, April 1992.
62. "Coronary Ultrasound," American College of Cardiology, Dallas, Texas, April 1992.
63. "From Research to Revenues," Medical Research and Education Society Business Symposium at The Arnold and Mabel Beckman Center for the National Academies of Sciences and Engineering, Irvine, California, May 1992.
64. "Intravascular Ultrasound Imaging," American College of Cardiology-Conference on Advanced Echocardiography and Doppler Ultrasound-1992, San Diego, California, June 1992.
65. "Intravascular Ultrasound," New Modalities of Noninvasive Cardiac Testing Symposium for Cardiology Fellows at University of Southern California, Long Beach, California, August 1992.

66. "Valvular Disease," Internal Medicine Board Review Course-Cardiology Session at University of California Irvine-UCI Medical Center, Orange, California, August 1992.
67. "Intravascular Ultrasound Cross-Sectional Arterial Imaging Before and After Balloon Angioplasty In Vitro," 5th Annual Conference of the American Society of Cardiovascular Interventionalists, Newport Beach, California, May 1993.
68. "Valvular Disease," Internal Medicine Board Review Course-Cardiology Session at University of California Irvine-UCI Medical Center, Orange, California, September 1993.
69. "Intravascular Ultrasound: Will It Replace Coronary Angiography?," New Directions in Diagnostic and Therapeutic Modalities 1993, St. John's Hospital and Health Center, Santa Monica, California, September 1993.
70. "Intravascular Ultrasound Imaging," Medical Technologies Group Business Meeting, W.L. Gore & Associates Inc., Phoenix, Arizona, October 1993.
71. "East Meets West Simulcast: Coronary Interventions 1993" (Instructor and Panel Member), Scripps Clinic and Research Foundation, La Jolla, California, October 1993.
72. "Clinical Applications of Intravascular Ultrasound" (Session Chairperson), and "Case Presentations in Intravascular Ultrasound Imaging: Decision-Making During Coronary Interventions" (Panel Director), Beyond Angiography, The Cleveland Clinic Foundation, Atlanta, Georgia, November 1993.
73. "Clinical Cardiology: Intravascular Ultrasound -- Guided Revascularization" (Abstract Session Moderator), 66th Annual Scientific Sessions of the American Heart Association, Atlanta, Georgia, November 1993.
74. "Applications of Intracoronary Ultrasound," Medicine Grand Rounds at University of Southern California, Los Angeles, California, January 1994.
75. "Is Intravascular Ultrasound the New Gold Standard for Coronary Imaging?," Cardiology 1994: Concepts and Controversies at Mercy Heart Institute, Sacramento, California, February 1994.
76. "Clinical Decision Making: Stents," Cardiovascular Imaging Systems (CVIS) Sales Force Training Program at CVIS, Sunnyvale, California, February 1994.
77. "Stents" (Workshop Leader), TCT VI: IVUS Workshop, Washington, D.C., February 1994.
78. "Intravascular Ultrasound," University of Arizona/University Heart Center, Tucson, Arizona, March 1994.

79. "Intravascular Ultrasound is Essential for Proper Stent Placement," Fourth Annual Symposium on Coronary Stenting, Scripps Clinic and Research Foundation, La Jolla, California, April 1994.
80. "Intravascular Ultrasound," Noninvasive Cardiology Conference, Saddleback Memorial Medical Center, Laguna Hills, California, April 1994.
81. "Intravascular Ultrasound: The Cutting Edge," Stress Echo and Other Advances: Practical Update, The Hospital of the Good Samaritan, Los Angeles, California, April 1994.
82. "Coronary Artery Disease and Mechanisms of Angina," Mechanisms of Disease, University of California, Irvine, Irvine, California, May 1994.
83. "Current Clinical Stent Experience," "IVUS Guided Stent Placement: Protocols and Techniques," New Developments in Coronary Stent Deployment, Cardiovascular Imaging Systems (CVIS), San Francisco, California, July 1994.
84. "Interventional Cardiology: What's Hot and What's Not," Update in Cardiology, UCI Medical Alumni Association, Orange, California, September 1994.
85. "Intracoronary Ultrasound and Doppler Technique," Clinical Applications for the Diagnosis and Treatment of Coronary Artery Disease, American Heart Association, Greater Los Angeles Affiliate's 61st Annual Fall Symposium, Los Angeles, California, October 1994.
86. "Ultrasound Assessment of Endovascular Stents," Transcatheter Cardiovascular Therapeutics-VII, Seventh Annual Symposium, Washington, D.C. February 1995.
87. "Clinical Applications of Intravascular Ultrasound," Sierra Heart Institute, Reno Nevada, February 1995.
88. "Case Presentation", Clinical Pathologic Conference, UCI-LBVA Medical Program, Orange, CA, April 1995.
89. "IVUS, Is It Really Necessary for Coronary Stenting?", Scripps Clinic and Research Foundation, Fifth Annual Symposium on Coronary Stenting, LaJolla, CA May 1995.
90. "Valvular and Pericardial Disease", Internal Medicine Board Review Course, UCI College of Medicine, Newport Beach, CA, August 1995.
91. "Intravascular Ultrasound", Saddleback Memorial Medical Center, Laguna Hills, CA September 1995.
92. "Intravascular Ultrasound", Valley Presbyterian Hospital, Van Nuys, CA, October 1995.
93. "Intravascular Ultrasound for Measuring Coronary Stenosis", Louisiana Chapter, American College of Cardiology, New Orleans, LA, October 1995.

94. "Intravascular Ultrasound", Cardiology Grand Rounds, University of California, Irvine, October 1995.
95. "Intracoronary Ultrasound During Coronary Interventions-Coronary Stenting", University of California, Los Angeles, CA November 1995.
96. "Clinical Utility of Intravascular Ultrasound", American Heart Association 68th Scientific Session, Anaheim, CA, November 1995.
97. "Beyond Angiography III", Symposium by The Cleveland Clinic Foundation at the American Heart Association, 68th Scientific Sessions, Anaheim, CA, November 1995.
98. "Intravascular Ultrasound for the Interventionalist-Stent/IVUS Overview", Stanford University Medical Center, January 1996.
99. "Intravascular Ultrasound and Other Adjunct Imaging Modalities" and "IVUS/Doppler Wire Case Studies", Transcatheter Cardiovascular Therapeutics-VIII, Eighth Annual Symposium, Washington, D.C., February 1996.
100. "Meet the Experts", American College of Cardiology, 45th Annual Scientific Sessions, Orlando, FL, March 1996.
101. "Coronary Artery Disease and Mechanisms of Angina", Mechanisms of Disease, University of California, Irvine, Irvine, California, May 1996.
102. "Strategies for Coronary Intervention: 1996", The Schaetzel Center for Health Education, Scripps Memorial Hospital, LaJolla, CA, May 1996.
103. "Role of IVUS in Coronary Stenting", Advanced Stenting for Cardiologists, Lenox Hill Hospital, May 1996.
104. "Intravascular Ultrasound", Santa Monica, CA, July 1996.
105. "Is Intravascular Ultrasound Necessary During Stent Implantation?", Beyond Angiography IV in conjunction with the American Heart Association, New Orleans, LA, November 1996.
106. "Applied Intravascular Ultrasound for the Interventionalist", Stanford University and Cardiology Research Foundation, San Francisco, CA, January 1997.
107. "Intravascular Ultrasound: Fireside Panel", American College of Cardiology, 46th Annual Scientific Sessions, Anaheim, CA, March 1997.
108. "An Inside View of Vascular Pathology", American Society for Artificial Internal Organs, 43rd Annual Conference, Atlanta, GA, May 1997.

109. "Coronary Artery Disease and Mechanisms of Angina", Mechanisms of Disease, University of California, Irvine, Irvine, California, May 1997.
110. "Intravascular Ultrasound Imaging", Family Medicine Grand Rounds, Loma Linda University, Loma Linda, California, June 1997.
111. "Online Video Telecommunication Between Cardiac Catheterization Laboratories: A New Technology to Facilitate Clinical Trials", Society for Computer Applications in Radiology (SCAR), Rochester, MN, June 1997.
112. "Live Televised Cases #28, #29, #30 and #31 from Washington Hospital Center", Transcatheter Cardiovascular Therapeutics, Ninth Annual Symposium, Washington, D.C., September 1997
113. "Angiographic and Ultrasound Predictors for In-stent Restenosis", University of Southern California, Los Angeles, CA, January 1998.
114. "IVUS Certification Workshop III", Complex Coronary and Vascular Interventions, San Francisco, CA, May 1998.
115. "Role of IVUS in Interventional Cardiology", St. Charles Medical Center, Bend OR, August 1998.
116. "Overcoming the Inherent Limitations of Angiography with Transaxial IVUS Imaging", Transcatheter Cardiovascular Therapeutics, 10th Annual Symposium, Washington, D.C., October 1998.
117. "Can Atherosclerosis Be Reversed?", UCI Dept. Of Medicine Summer CME Course, Newport Beach Marriott, July 21, 1999.
118. Transcatheter Cardiovascular Therapeutics Live Demonstration Course, 11th Annual Symposium, Washington D.C., September 1999
119. Current Applications of Intravascular Ultrasound, Cardiology Rounds, Kaiser Permanente Hospital, Sunset, Los Angeles, June 12,2000.
120. Transcatheter Cardiovascular Therapeutics Live Demonstration Course, 12th Annual Symposium, Washington D.C., October 2000.
121. Cardiology Grand Rounds, Harbor General Hospital, October 30, 2000
122. "Advances in the Treatment of Coronary Artery Disease" a series of lectures held for the Los Angeles Community during the winter of 2000-2001
 - Mission Hills November 30, 2000
 - Sherman Oaks December 14, 2000
 - Oakland January 6, 2001
 - Sacramento January 11, 2001
 - San Francisco January 18, 2001

Costa Mesa	February 28, 2001
Thousand Oaks	March 14, 2001
Riverside	March 28, 2001
Pasadena	April 18, 2001

123. "Emerging Therapies in Interventional Cardiology", the 2nd Annual Cardiology Symposium at Mammoth Mountain, Feb 2-4, 2001.
124. Preceptorship on CAD for Pfizer, UCLA, Directed by Dr. Fonarow, February 12, 2001.
125. "Evolving Concepts in Coronary Artery Disease". Cardiology Grand Rounds, Loma Linda University, May 16, 2001.
126. "Directional Atherectomy", Course on Interventional Cardiology, Beaver Creek, Colorado, June 8-9, 2001.
127. UCLA Medical Grand Rounds, "Advances in Interventional Cardiology", June 20, 2001.
128. USC Cardiology Grand Round, "Evolving Concepts in CAD", Jan.29,2001.
129. UCLA CardioThoracic Surgery Grand Rounds, "Advances in Interventional Cardiology", Feb 19, 2002.
130. UCLA Vascular Biology Seminar Series, "An Interventional Cardiologist's View of Atherosclerosis", Feb 26, 2002.
131. St. Joseph Hospital of Orange County 7th Annual Cardiac Symposium, Grand California Hotel, Disneyland, "New Concepts in the Development of Atherosclerosis and Vulnerable Plaque", January 25, 2003.
132. UCLA CardioThoracic Surgery Grand Rounds, "Cryptogenic Stroke and Percutaneous Closure of PFO/ASDs", January 28, 2003.
133. Cardiology Symposium at Mammoth Mountain, "Cryptogenic Stroke and Percutaneous Closure of PFO/ASDs", March 7, 2003.
134. UCLA Neurology Conference: Brain Attack! 2003, "Cardioembolic Stroke: Novel Endovascular Therapies for Patent Foramen Ovale and Atrial Fibrillation", May 17, 2003. Beverly Hills Hilton Hotel.
135. Cardiology Grand Rounds, University Of California, Irvine. "Review of Current Research", August 27, 2003.
136. Neurology grand Rounds, UCLA. "Percutaneous Closure of Patent Foramen Ovale for Cryptogenic Stroke", September 11, 2003

137. American College of Physicians Southern California Regional Meeting, Rancho Bernardo. "Update in Cardiology 2004" October 25, 2003
138. Department of Medicine Grand Rounds, UCLA "Updates in Internal Medicine", December 17, 2003.
139. Cardiology Division Grand Rounds, University of California San Diego, April 28, 2004. "Cryptogenic Stroke, Patent Foramen Ovale, and Migraine Headaches".
140. Society of Cardiovascular Angiography and Interventions (SCAI) 2004 Scientific Sessions, San Diego April 28-May 1, 2004. "Cryptogenic Stroke, Patent Foramen Ovale, and Migraine Headaches", and Meet the Experts Session on Intravascular Ultrasound Imaging. As Program Director for this Meeting, I also moderated several of the scientific sessions as well as the Live Case Demonstrations.
141. Cardiology Division Conference, UCLA, May 10, 2004. "Cryptogenic Stroke, Patent Foramen Ovale, and Migraine Headaches: a New hypothesis".
142. Long Beach Veterans Administration Hospital Spinal Cord Injury Service Medical Conference, "An Update in Coronary Artery Disease", June, 2004.
143. UCLA Medical Grand Rounds January 26, 2005. "Cryptogenic Stroke, Patent Foramen Ovale and Migraine Headaches: Help Is on the Way"
144. Texas Heart Institute Symposium: Current Issues in Cardiology. "Patent Foramen Ovale Closure", Orlando, Florida March 5, 2005
145. UCLA Neurology Grand Rounds March 23, 2005 "Cryptogenic Stroke, Patent Foramen Ovale and Migraine Headaches"
146. RESPECT Trial Update, "PFO and Stroke-a Cardiologist's Perspective". Society of Cardiac Angiography and Interventions Symposium, Ponte Vedra Beach, Florida May 5, 2005.
147. UCLA Brain Attack Symposium 2005. Beverly Hills, California. "Patent Foramen Ovale, Cryptogenic Stroke, and Migraine Headaches". May 14, 2005.
148. Summer in Seattle 2005. Interventional Cardiology Conference July 18 -22, 2005. "Cryptogenic Stroke, Patent Foramen Ovale, and Migraine Headaches."
149. Harbor General Hospital Internal Medicine Grand Rounds. . "Patent Foramen Ovale, Cryptogenic Stroke, and Migraine Headaches". August 23, 2005.
150. Bakersfield Memorial Cardiology Symposium. "Percutaneous Treatment of Valvular Heart Disease". October 1, 2005
151. Visiting Professor at the University of Colorado. "Percutaneous Treatment of Valvular Heart Disease". October 3, 2005

152. Visiting Professor at the University of Colorado. An evening symposium on stroke and Migraine headaches. "Cryptogenic Stroke, Patent Foramen Ovale, and Migraine Headaches." October 3, 2005
153. Long Beach Memorial Hospital Cardiology Symposium. "Cryptogenic Stroke, Patent Foramen Ovale, and Migraine Headaches." October 7, 2005
154. Transcatheter Cardiovascular Therapeutics (TCT) Conference October 16-21, 2005. Two lectures on the use of intravascular ultrasound for complex lesions and for bifurcations.
155. Westwood veterans hospital Grand Rounds January, 2005. The Use of the Tandem Heart For High Risk Coronary Procedures.
156. Foothills Cardiology Group Symposium. Pasadena. "Cryptogenic Stroke, Patent Foramen Ovale, and Migraine Headaches." March 29, 2006
157. Society of Cardiovascular Angiography and Interventions. Chicago May 10 -12, 2006. "Current Recommendations for Treatment of PFO with Cryptogenic Stroke".
158. Science Innovation Synergy - SIS 2006. A Live Demonstration Course in Cardiac Therapeutics. Seattle, Washington July 18-22, 2006. Two lectures: PFO and Cryptogenic Stroke Update, and, Percutaneous Mitral Annuloplasty. Live Case Demonstration of ASD closure with the Amplatzer device.
159. UCLA Adult Congenital Heart Disease. September 29, 2006. ASD and PFO Closure.
160. Advances in Cardiac and Endovascular Therapies Conference. New York, New York, October 10, 2006. Balloon Aortic Valvuloplasty.
161. Transcatheter Cardiovascular Therapeutics (TCT) Conference October 22-27, 2006. Five lectures: Left main stenting IVUS guidance, PFO and ASD Closure: Interesting cases, Main arena PFO closure for Stroke and Migraines,.Interesting cases reviews for ASD or PFO and New PFO Devices: the Premium Study.
162. UCLA Neurology Grand Rounds December 14, 2006 "Patent Foramen Ovale and Migraine Headaches
163. Scottsdale Interventional Forum, Scottsdale, Arizona February 8 -11, 2007
164. UCLA Cardiology Conference, Snowbird, Utah February 22-25, 2007
165. Lecture St. Joseph Hospital, Burbank ,CA February 27, 2007. PFO and Structural Heart Disease
166. American Cardiology Conference (ACC) New Orleans, LA March 23-25, 2007

167. Scripps IVUS Conference, San Diego, CA April 26-27, 2007
168. SCAI Conference- Two lectures: Optimizing DES Implant Results. PFO-ASD Closure: Who to Treat and Why? Orlando, Florida May 10-12, 2007
169. Lecture Topic: Stent Controversy. Providence Holy Cross Medical Center CME Program Mission Hills, CA – May 15, 2007
170. Lecture: PFO Closures, Los Robles Hospital June 6, 2007
171. Lecture: University California Irvine – PFO and Migraine June 20, 2007
172. Percutaneous Interventional Cardiology Symposium (PICS): PFO and Structural Heart Disease, Las Vegas, Nevada July 22-25, 2007
173. Summer in Seattle 2007, Interventional Cardiology Conference August 2-4, 2007. "Patent Foramen Ovale, and Migraine Headaches"
174. Antonio Columbo Alumni Association (ACAA). Innovation in Interventional Cardiovascular Therapy, August 22-23, 2007
175. UCLA Grand Rounds: Percutaneous Aortic Valves Replacement (PAVR), August 31, 2007
176. Lenox Hill ACE Meeting, New York City, New York, October 6-10, 2007
177. Transcatheter Cardiovascular Therapeutics (TCT) Washington, DC October 22-25, 2007
178. UCLA Grand Rounds Neurology: Patent Foramen Ovale (PFO), November 8, 2008
179. UCLA Noon conference "Management of Cardiovascular Risk Factors: Evidence-base Practice and Approaches" December 7, 2008
180. SCAI Interventional Cardiology Fellows Course to be held December 11-14, 2007 at the Mirage Hotel & Convention Center in Las Vegas.
181. UCLA Cardiology Conference, Snowbird, Utah February 21-24, 2008
182. Intravascular ultrasound imaging. Odessa, Texas - March 5, 2008
183. ACC and SCAI joint meeting in Chicago, IL. – April 29- May 1, 2008
PFO and migraine headaches

184. Cardiology Grand Rounds at Harbor-UCLA Medical Center. May 27, 2008. Update on PFO, Stroke, and Migraine Headaches
185. Summer in Seattle 2008, Interventional Cardiology Conference July 10-12, 2008. "Patent Foramen Ovale, and Migraine Headaches"
186. Bethesda, Maryland FDA Meeting for Coherex stent, July 15, 2008
187. Pediatric Interventional Cardiology Symposium (PICS) July 19-23, 2008 at Las Vegas: debate with Ted Feldman on closure of PFO for stroke
188. UCLA lecture to CCU residents on PTCA July 29, 2008
189. Complex Interventional Cardiovascular Therapy (CICT). Innovation in Interventional Cardiovascular Therapy, August 23-24, 2008.
190. Transcatheter Cardiovascular Therapeutics (TCT) October 2008 Washington, DC six presentations on intravascular ultrasound, patent foramen ovale, structural heart disease, coronary artery disease.
191. University of Utah conference on cardiovascular disease, Park city, Utah February 25-28, 2009
192. American College of Cardiology Annual Scientific Sessions, Orlando, Florida March 28-April 1, 2009. Three lectures:
 1. Complications of PFO Closure
 2. PFO Closure: Indications Results and Current Challenges. State-Of-The-Art Lecture
 3. Adults with Congenital Heart Disease: Debate: Should PFO Be Closed for Migraine?
193. Complex Intervention Cardio Therapy (CICT). Interventional Cardiovascular Therapy, July 30-August 2, 2009.
194. Transcatheter Cardiovascular Therapeutics (TCT). September 21-25, 2009.
195. Mercy Heart & Vascular Institution. Sacramento, CA Lecture on PFO, Stroke and Migraine. Sept 26, 2009.
196. UCLA Winter Update 2010: Clinical Breakthroughs in Cardiology Conference. Snowbird, Ut, January 15-17, 2010. Lecture on PFO: Stroke, Migraine and The Bends and Orthotheoxia Platypnea.
197. American Cardiology Conference. March 14-16, 2010, Atlanta, GA.
198. CCI and SCAI Conference. May 5-8, 2010, San Diego, CA.
199. CICT 4th Annual Conference. "Complications and Management of PFO Closure." San Francisco, CA, July 29-31, 2010.

200. Transcatheter Cardiovascular Therapeutics (TCT). Washington, DC, Sept 21-25, 2010.
- 200B. ACC SCAI 60th Annual Conference. New Orleans, LA April 2-4, 2011.
201. ACC SCAI 60th Annual Conference. "How to Prevent and Treat Complication of PFO Closure." New Orleans, LA April 2-4, 2011.
202. Bakersfield Memorial Hospital Guest Speaker. "Bifurcation Stenting." Bakersfield, CA, November 15, 2011.
203. SCAI Fellowship Conference. "Transeptal Approach." Las Vegas, NV, December 4-8, 2011.
204. ACC Conference. "Pros and Cons of Closure for Migraine with Aura." Chicago, IL, March 24-26, 2012.
205. SCAI Fellows Conference. "Reason for Still Closing PFOs." Las Vegas, NV, May 9-13, 2012.
206. UCLA Cardiology Core Curriculum Lecture. "Percutaneous Revascularization for Coronary Artery Disease." Los Angeles, CA, September 26, 2012.
207. TCT Conference. "Orthodeoxia Helix + Amplatzer Device," "Has PFO Closure for Stroke Prevention gotten Enough RESPECT?" Miami, FL, October 22-25, 2012.
208. SCAI Fellows Conference. "Reapproach to Transeptal Approach." Las Vegas, NV, December 6-8, 2012.
209. "Defining Critical Stenosis in Today's World of Appropriate Use and Courage." Bakersfield Memorial Hospital. October 20, 2012.
209. ACC Conference. IVUS and ASD/PFO Closure lecture. San Francisco. March 9-11, 2013.
210. SCAI Fall Fellows Course. Las Vegas, NV. May 9-11, 2013
211. CICT Conference. San Francisco, Ca. August 2-3, 2013.
212. TCT Conference. San Francisco, CA. October 28-31, 2013.
213. School of Engineer, UCLA. "PFO/ASD Devices." November 6, 2013.
214. SCAI Fall Fellows Course. Las Vegas, NV. December 9-11, 2013.
215. Harbor UCLA Cardiology Grand Rounds. "PFO and the association with Migraine and Stroke." April 28, 2014. Torrance, CA
216. CICT Conference. San Francisco, CA July 25 -27, 2014.
217. USC Cardiology Grand Round. "PFO and the Association with Migraine and Stroke." September 26, 2014. Los Angeles, CA.
218. ACC Fellowship Device Conference. Vancouver, Canada. October 23-24, 2014.

219. UCLA Cardiology Grand Round. "IVUS" December 3, 2014. Los Angeles, CA
220. SCAI Fall Fellows Course. Las Vegas, NV. December 7-10, 2014.
221. UCLA Cardiology Noon Conference. "Mitral Regurgitation." December 1, 2014.
222. ACC Conference. San Diego, CA. March 14-16, 2015.
223. Harbor UCLA Cardiology Fellows Conference. "Mitral Regurgitation" Torrance, CA, April 8, 2015.
224. Albert Einstein College of Medicine Grand Rounds. "PFO and the Association with Migraine and Stroke." May 26, 2015.
225. Texas Heart Institute Cardiology Grand Rounds. The Connection Between PFO, migraine and stroke. Sept 2015
226. Cardiology Update, Phoenix, Arizona The Connection Between PFO, migraine and stroke. Sept 2015.

INTERNATIONAL CONFERENCE PRESENTATIONS

1. "Applications of Digital Subtraction Angiography in Assessment of Left Ventricular Function," International Symposium and Tutorial on Digital Radiology, Kiel, West-Germany, May 1982.
2. "Clinical Applications of Digital Subtraction Angiography," Newer Techniques in Evaluation of Left Ventricular Function, Aalst, Belgium, May 1982.
3. "Laser Techniques: Peripheral and Coronary Application," Stato Attuale Della Angioplastica Coronarica, Cernobbio, Italy, April 1988.
4. "Intravascular Ultrasound Cross-Sectional Arterial Imaging Before and After Balloon Angioplasty," Interventional Symposium at Nihon University, Tokyo, Japan, May 1989.
5. "Visualization of the Atherosclerotic Plaque Before and After Balloon Angioplasty," (Section Chair at) Eighth Symposium on Echocardiography at Erasmus University, Rotterdam, The Netherlands, June 1989.
6. "Intravascular Ultrasound Imaging," International Congress Centrum on New Processes and Technologies in Operative Medicine (Medtech '89) at Freie University of Berlin and Laser-Medizin-Zentrum, Berlin, Germany, November 1989.
7. "Intravascular Doppler and Its Applicability to Guidance of Interventional Procedures," Ludwig-Maximilians Universität München, Klinikum Großhadern, Munich, West Germany, November 1989.

8. "The Changing World of Radiology," (Invited Speaker at) CARVAT 10th International Meeting, Rome, Italy, January 1990.
9. "Intracoronary Echocardiography," Symposio Internazionale Rivascolarizzazione Coronarica Anni '90 at Villa Olmo, Como, Italy, June 1990.
10. "Intravascular Ultrasound Imaging Following Coronary Angioplasty," Seminar of Intravascular Ultrasound for the Japanese College of Cardiology and the Japanese Societies of Echocardiography, Interventional Cardiology, and Ultrasound, Tokyo, Japan, April 1991.
11. "Intravascular Ultrasound of Coronary Arteries After Balloon Angioplasty," Med Tech 91: 3rd German Symposium on Laser Angioplasty, Interventional Cardio-Angiology: States-of-the-Art and Trends for Laser-Medizin Centrum, Berlin, Germany, May 1991.
12. "Coronary Imaging with Intravascular Ultrasound After Balloon Angioplasty," 8th Course in Interventional Cardiology, Geneva, Switzerland, June 1991.
13. "Ultrasound Imaging of Coronary Arteries Following Balloon Angioplasty," 9th Symposium on Echocardiography, Rotterdam, The Netherlands, June 1991.
14. "Intravascular Ultrasound in Interventional Cardiology," Como, Italy, October 1992.
15. "Intravascular Ultrasonography During Coronary Interventions: Clinical Experience," "The Patient with Severe Peripheral Vascular Ischemia and a Threatened Limb: The Role of Intravascular Intervention in Avoiding Surgery," "Ultrafast Computed Tomography (CT) for Defining Coronary Anatomy: Will it Replace Coronary Angiography Some Day?", and "Cardiovascular Therapy in the Next Century: Some Predictions by the Experts," 1st Joint Symposium on New Directions in Cardiovascular Surgery and Cardiology in the 90's, New Delhi, India, December 1992.
16. "Intravascular Ultrasound Imaging as a Guide During Interventions," Toulouse, France, March 1993.
17. "Intravascular Ultrasound for Coronary Artery Imaging," Second Symposium of IVUS, 4th Meeting of the Japanese Society of Echocardiography, Tokyo, Japan, April 1993.
18. "Intravascular Ultrasound," Curso de Cardiologia Intervencionista, Mexico City, Mexico, June 1993.
19. "Intravascular Ultrasound in Interventional Cardiology," Corso Dimostrativo Sull 'Impianto Di Stent Coronarici con L'Ausilio Dell 'Ecografia Intracoronarica, Milano, Italy, October 1994.

20. "Interventional Cardiology Assessed by Intravascular Ultrasound", 15th Hellenic Congress of Cardiology, Athens, Greece, November 1994.
21. "Mechanisms of Intervention", 6th Coronary Symposium and 11th Symposium on Echocardiology, Sao Paulo, Brazil, June 1995.
22. "Stents", 1st Congress of the Latin American Society of Interventional Cardiology(SOLACI), Rotterdam, The Netherlands, July 1995.
23. "The Role of IVUS for Cardiovascular Stenting", 3rd Live Demonstration Course of Interventional Cardiology, Seoul, Korea, March 1996.
24. "Role of IVUS in Coronary Stenting", Advanced Stenting for Cardiologists, Columbus Hospital, Milan, Italy, May 1996.
25. "In-Stent Restenosis: Angiographic and Intravascular Ultrasound Descriptors", Japanese Circulation Society, 61st Annual Scientific Sessions, Tokyo, Japan, April 1997.
26. "Live Demonstration Course Operator", Vascular Interventions '98, Milan, Italy, May 1998.
27. "Pre-Stenting IVUS: Small Vessel Stenting", European Heart House, Sophia Antipolis (Nice), France, October 1998.
28. "Interventional Cardiology", Live Demonstration Course, Ohta General Hospital, Ohta, Japan, November 1998.
29. "Intravascular Ultrasound: Current Applications", 12th Asean Congress of Cardiology, Manila, Philippines, December 1998.
30. "Live Demonstration Course Operator", Vascular Interventions '99, Milan, Italy, June 1-3, 1999.
31. "Live Demonstration Course Operator", Alcohol Septal Ablation, Vascular Interventions 2000, Milan, Italy, May 17-19, 2000.
32. "IVUS Guided Coronary Stenting and Angiography", Kanagawa Live Course at Kawasaki Hospital, Kawasaki, Japan Nov 17-21, 2000.
33. "Tips and Tricks When Using IVUS" The European Percutaneous Catheter Revascularization Course, Paris, France. May 22-25, 2001.
34. "Live Demonstration Course" transmitted from Milan, Italy to Washington, DC during the TCT Course, September 7-16, 2001.
35. Joint Interventional Demonstration Course: Milan, Italy and Seiburg, Germany, February 15-19, 2002.

36. Gachon Endovascular Live Demonstration Course. Operator and lecturer. Incheon, Korea September 14-15, 2002.
37. Joint Interventional Demonstration Course: Milan, Italy and Seiburg, Germany, February 13-15, 2003. IVUS operator during live demonstration course. Course Director: Antonio Colombo.
38. 13th Annual International Conference on Atherosclerosis: Kyoto, Japan. "The Use of Intravascular Ultrasound Imaging in Transplant Heart Disease", September 2003.
39. Third annual interventional cardiology course at the Clinica Costantini, Curitiba, Brazil, December 5-6, 2003. I gave 4 lectures on current topics in interventional cardiology and was the primary operator during a live case demonstration.
40. Joint Interventional Demonstration Course: Milan, Italy and Seiburg, Germany, February 12-14, 2004. IVUS operator during live demonstration course. Course Director: Antonio Colombo.
41. Japanese Society of Interventional Cardiology (JSIC) Congress, July 1-4, 2004 Nagoya, Japan: three presentations and participation in live case demonstrations. Changes in Percutaneous Coronary Intervention Strategy in the Drug Eluting Stent Era. Closure of Patent Foramen Ovale to Prevent Paradoxical Embolism and Migraine Headache. Stent workshop: the cobalt chromium Vision stent.
42. Transcatheter Cardiovascular Therapeutics (TCT) Conference September 27 - October 1, 2004. Transmission of Live Case Demonstrations from Milan Italy to Washington DC. Two lectures on the use of intravascular ultrasound for complex lesions and for bifurcations.
43. Joint Interventional Demonstration Course: Milan, Italy and Seiburg, Germany, February 13-16, 2005. IVUS operator during live demonstration course. Course Director: Antonio Colombo.
44. Asia-Pacific Interventional Advances Conference. Newcastle, Australia November 29 -December 2, 2005. Live Case Demonstration of ASD Closure and Lecture on Cryptogenic Stroke and PFO
45. Joint Interventional Demonstration Course: Milan, Italy and Rome, Italy February 16-18, 2006. IVUS operator during live demonstration course. Course Director: Antonio Colombo.
46. Beijing: Great Wall of china Conference. Beijing, People's Republic of China, November 1-3, 2006. PFO, Stroke and Migraine
47. Sydney Asia-Pacific Conference. Sydney, Australia, November 30 – December 2, 2006. Lecture on PFO
48. Joint Interventional Demonstration Course: Milan Italy February 15-18, 2007

49. 55th Japanese College of Cardiology Conference: Series of three lectures, Tokyo, Japan September 9-11, 2007
50. Joint Interventional Demonstration Course: Milan Italy February 13-17, 2008: Use of IVUS to Guide Angioplasty
51. Conference in Frankfurt, Germany. New devices to close PFO: Coherex stent June 25- 28 , 2008
52. 56th Japanese College of Cardiology Conference: Update on Intravascular Ultrasound Imaging, Patent Foramen Ovale Stroke and Migraine Headaches. Tokyo, Japan December 11-14, 2008
53. "Patent Foramen Ovale and Stroke: the Argument for PFO Closure" The French Society of Cardiology Invited Lecture, Paris, France. January 13-18 2009.
54. Joint Interventional Demonstration Course: Milan Italy February 12-15, 2009: Use of IVUS to Guide Angioplasty
55. The 18th Annual Japanese Society of Interventional Cardiology (CCT). Hokkaido, Japan, June 25-27, 2009. Lecture PFO: Stroke and Migraine.

CONFERENCE DIRECTOR

1. Coronary Angioplasty and Applications of Digital Angiography, for the Cardiology-Division, University of California Irvine-UCI Medical Center, Orange, California, October 1985. During this course, I performed coronary angioplasty in the Cardiac Catheterization Laboratory at UCI Medical Center and the procedures were televised live by microwave transmission to an audience of 100 physicians. Our techniques for digital acquisition of angiograms were also presented. Dr. Geoffrey Hartzler moderated the conference.
2. Laser Angioplasty: Discussions and Demonstration of Current Techniques and Applications, for the Cardiology Division, University of California Irvine, Costa Mesa, California, November 1987. Demonstration course on performing laser angioplasty with several internationally known interventional radiologists and cardiologists showing videotapes of patient procedures.
3. Intravascular Ultrasound Imaging: Demonstrations of Current Techniques in Performing Intravascular Ultrasound Imaging During a Variety of Interventional Endovascular Procedures, Anaheim, California, August 1990. Videotaped procedures from several centers formed the basis for discussions about the techniques employed and the selection criteria for appropriate candidates. The

current status of clinical investigations with various intravascular ultrasound imaging devices were presented for discussion.

4. Intravascular Ultrasound and Intracardiac Echocardiography, Atlanta, Georgia, March 1991. Co-Director of symposium on advances in instrumentation and emerging clinical applications, intravascular ultrasound imaging of coronary arteries, applications in balloon coronary angioplasty, mechanical atherectomy, and laser angioplasty; approaches to intracardiac two-dimensional echocardiography and potential applications of dynamic intracardiac echocardiography.
5. "Intravascular Ultrasound on The Cutting Edge" A Live Demonstration Course at UCLA, May 5,2001. Director of symposium on the use of the Cutting Balloon. Live case angioplasties were transmitted by closed television to an audience of 75 physicians at the Jules Stein Auditorium. Antonio Colombo from Milan, Italy was our guest faculty speaker.
6. Program Director for the Society of Cardiovascular Angiography and Interventions (SCAI) 2004 Scientific Sessions. This international meeting was sponsored by the 3000 member SCAI. I was chosen by the executive committee to organize the meeting in terms of content and to choose the invited speakers.
7. UCLA Winter Update in Cardiology, Snowbird. This yearly conference highlighted the UCLA Cardiology faculty. 2008 was the 5th year that I was the Program Director for this UCLA CME course.
8. Program Director for the Society of Cardiovascular Angiography and Interventions (SCAI) Fall Fellows Course. This was a 3 year commitment, first as Assistant, then Co-Director, and then Director of this course in 2015. This is one of the major educational courses for all of the interventional cardiology fellows and this country with 200 attendees plus 50 attendees from outside the US.