



## Dr. David Fieno M.D., Ph.D.

Thank you so much for visiting my site! I am a dad, doctor, and believer in success coming to anyone willing to work for it.

I have spent more than 2 decades in medicine, the past 13 years as a licensed attending physician. I am a board certified internist and my speciality is surgical cardiology. I currently practice at both Brookwood Baptist and Grandview Medical Center. My undergraduate degree, masters, Ph.D. and M.D. are all in medicine, which speaks to my love of helping others. I have always been passionate about teaching others to live their best life.

The era in which we live ... flooded with mass shootings, terrorists attacks, and general medical scares like e-coli breakouts, there is a legitimate need for a medical expert on television, radio, and social media. Daily, I see a real divide in what the viewing public knows when it comes to medical issues and what physicians convey. My education, years of training others, and public speaking has put me in a position to be able to close the gap. I can take a complex topic and distill it down so a 12 year old can understand. We live in a culture where people turn to google if they see something in the press relating to medicine, yet that does not quench ones need for accurate and relevant information. In fact, it only exacerbates it. And when misinformation spirals down it creates unnecessary panic among our communities and cities.

Bottom line, I am the doctor you can call ... your medical expert for interviews on television, radio, and social media. I view this as a public service and will always make myself available, knowing that my education and training can safe the life of a viewer or listener. I am also willing to travel to highlight relevant medical topics on the regional or national stage. I am accessible and can speak confidently on the vast majority of medical issues – from simple topics like allergy season and obesity to complex topics like mass casualties and cardiac arrest.

Again, thank you for stopping by and hope to chat with you soon!

Dr. David Fieno M.D., Ph.D.

## CURRICULUM VITAE

Name: David Steven Fieno

Professional Address: Heart South Cardiovascular, P.C.  
1022 North 1<sup>st</sup> Street, Suite 500  
Alabaster, AL 35007

Phone: (205) 663-5775  
(866) 663-5775

Fax: (205) 664-2112

E-mail Address: [dfieno@heartsouthpc.com](mailto:dfieno@heartsouthpc.com)

Place of Birth: Cincinnati, Ohio, USA

Date of Birth: April 28th, 1974

Status: Board Certified  
Internal Medicine  
Cardiology and Cardiovascular Diseases  
Cardiac and Vascular Imaging

Status: Attending Cardiologist and  
Cardiovascular Specialist

Career: Cardiovascular and Imaging Specialist  
Board-Certified Clinical Internist  
Board-Certified Cardiovascular Specialist  
Basic Scientific Researcher  
Clinical Scientific Researcher  
Cardiac Imaging Specialist

## EDUCATION

- 2003: **Doctor of Medicine,**  
Northwestern University Medical School
- Research in the Radiology, Cardiology,  
Feinberg Cardiovascular Research Institute,  
and Department of Biomedical Engineering,  
Chicago, Illinois
- 2000 - 2003: **Postdoctoral Fellowship,**  
Department of Radiology, Department of  
Internal Medicine, Division of Cardiology, and  
Feinberg Cardiovascular Research Institute  
Northwestern University Medical School,  
Chicago, Illinois
- 2000: **Doctor of Philosophy,**  
Biomedical Engineering,  
McCormick Graduate School of Engineering,  
Northwestern University, Evanston, Illinois  
Overall GPA: 3.7, Biomedical GPA: 3.9  
Graduated *Summa Cum Laude*
- 1998: **Master of Science,**  
Biomedical Engineering,  
McCormick Graduate School of Engineering,  
Northwestern University, Evanston, Illinois  
Overall GPA: 3.7, Biomedical GPA: 3.9  
Graduated *Summa Cum Laude*

1996: **Bachelor of Science,**  
Electrical Engineering,  
Ohio University,  
Athens, Ohio  
Overall GPA: 3.7, Engineering GPA: 4.0  
Graduated *Summa Cum Laude*

1996: **Bachelor of Science,**  
Chemistry,  
Ohio University,  
Athens, Ohio  
Overall GPA: 3.7, Chemistry GPA: 3.9  
Graduated *Summa Cum Laude*

GRADUATE MEDICAL TRAINING

2007 - 2010:

**Fellowship in Cardiology and  
in Cardiovascular Diseases**

Division of Cardiology

Department of Medicine

Cedars-Sinai Medical Center

In association with

University of California at Los Angeles and

Westside Los Angeles Veterans Administration

Los Angeles, California

Board Certified, Cardiology

Level II – III training in echocardiography,

nuclear medicine, computed tomography,

magnetic resonance imaging, device

implantation, heart failure, arrhythmias and

cardiac catheterization

2004 - 2007:

**Residency in Internal Medicine,**

Department of Medicine

Cedars-Sinai Medical Center

In association with

University of California at Los Angeles and

Westside Los Angeles Veterans Administration

Los Angeles, California

Board Certified in Internal Medicine

License to practice medicine, California

License to prescribe, Drug Enforcement Agency

2003 - 2004:

**Imaging Fellow,**  
Cardiac SPECT, PET, CT and  
Magnetic Resonance Imaging,  
S. Mark Taper Foundation Imaging Center,  
Department of Imaging  
Cedars-Sinai Medical Center  
Los Angeles, California

Able to readily acquire, interpret, troubleshoot  
and confer results of cardiac and cardiovascular  
magnetic resonance imaging  
Proficient in interpretation and acquisition of  
cardiac SPECT, PET, and CT

## AWARDS, SCHOLARSHIPS, AND DISTINCTIVE AFFILIATIONS

- 2010: Standing Ovation Award, given by Mr. Thomas Priselac, President and Chief Executive Officer of Cedars-Sinai Medical Center, for outstanding patient care in nuclear cardiology, cardiac PET, CT, and MRI
- 2007, 2008, 2009: Winner, Sports Spectacular Fellowship, Award given to a Fellow with full funding of training for exceptional research and clinical skills
- 2007: Winner, The Paul Rubenstein, MD, Award for Outstanding Research by a Resident, given by Cedars-Sinai Medical Center, May 23, 2007
- 2007: Winner, The Ben Neumann Award, given to the Internal Medicine Resident who demonstrated special compassion and humanism in care of patients, given by the Department of Medicine, Cedars-Sinai Medical Center, June 14, 2007
- 2006: Funding, National Institutes of Health, Loan Repayment Program, \$114,000 of direct loan reimbursement annually for continued research progress; project proposal entitled, "Cardiac magnetic resonance imaging of autologous stem cell therapy in patients with acute myocardial infarction: Comparison of stem cell therapy with revascularization to revascularization alone," faculty sponsorship provided by Dr. Raj Makkar and Dr. Daniel Berman, given by the National Institutes of Health, Bethesda, Maryland (NIH LRP award L30 HL085906-01)
- 2006: Winner, Laurence Seigler, MD, Medical Education Grant, Award for an internal medicine resident to attend a scientific conference, given courtesy of Dr. Seigler, Cedars-Sinai Medical Center

## AWARDS, SCHOLARSHIPS, AND DISTINCTIVE AFFILIATIONS (continued)

- 2006: Standing Ovation Award, given by Mr. Thomas Priselac, President and Chief Executive Officer of Cedars-Sinai Medical Center, for outstanding patient care and communication with nursing staff
- 2003: Lee F. Rogers Award for Outstanding Research by a Medical Student, given by the Department of Radiology, Northwestern University, Northwestern Memorial Hospital
- 2002: Student Stipend Award to deliver an oral presentations at the International Society for Magnetic Resonance held in Medicine, Honolulu, Hawaii, May 18-26, 2002
- 1998: Student Stipend Award to deliver an oral presentation at the International Society for Magnetic Resonance in Medicine held in Sydney, Australia, April 18-26, 1998
- 1997: Whitaker Foundation National Graduate Fellowship in Biomedical Engineering, providing \$225,000 full academic support (tuition, stipend, books, travel) for five years of Doctoral Study (Grant FE-97-0185)
- 1996: Murphy Fellowship, Full Graduate Support (tuition, stipend) from Northwestern University
- 1996: *Phi Beta Kappa*, honor society whose membership requires academic excellence, scientific achievement, personal development, and humanitarian skills



## AWARDS, SCHOLARSHIPS, AND DISTINCTIVE AFFILIATIONS (continued)

- 1996: *Phi Kappa Phi* National Scholarship, Support in final undergraduate year of Chemistry and Electrical Engineering and admittance to a national society of recognition
- 1995: *Tau Beta Pi*, National Engineering Honors Society with GPA and extracurricular requirements for admission
- 1994: Barry M. Goldwater National Scholarship, Full Undergraduate Tuition coverage \$36,000 for junior (1994-5) and senior (1995-6) years
- 1994: Cooper Industries Scholarship, Support in final two undergraduate years of Electrical and Computer Engineering
- 1992: Winner, First Place, 43<sup>rd</sup> International Science and Engineering Fair Exhibition, Project Title: Chemical Chaos: Computer Modeling of the Belousov-Zhabotinskii Reaction, Nashville, TN.

PROFESSIONAL EXPERIENCE

2010 – present:

Attending Cardiologist,  
**Heart South Cardiovascular, P.C.**

2007 – 2010:

**Fellowship,**  
Division of Cardiology,  
Department of Medicine,  
Cedars-Sinai Medical Center, Los Angeles, CA

Responsibilities include ward and out-patient medical care, care of funded and unfunded patients, full months in cardiac and surgical intensive care units, cardiac catheterization laboratory, echocardiography, heart failure, nuclear medicine, and advanced cardiac imaging (MRI, CT, PET, and peripheral techniques).

Training includes pulmonary arterial and left heart catheterization, endomyocardial biopsy, bedside echocardiography, venous and arterial cannulation, temporary and permanent pacemaker placement, internal cardioverter-defibrillator placement, pericardiocentesis, and direct cardioversion as well as ability to independently perform advanced imaging.

2004 – 2007:

**Resident Physician**, Department of Medicine,  
Cedars-Sinai Medical Center. Los Angeles, CA

Responsibilities included travel to outside hospitals and clinics, full months in medical and respiratory intensive care units, emergency medicine, and care of post-surgical patients.

Certified to perform intubation, central venous and arterial cannulation, dialysis catheter placement, bedside ultrasound, paracentesis, arthrocentesis, and thoracentesis, among others.

2003 – present:

**Research Scientist**,  
Cedars-Sinai Medical Center  
S. Mark Taper Department of Imaging  
Nuclear Cardiology / Cardiac Imaging  
Los Angeles, California

Responsibilities include writing manuscripts, implementing cardiac imaging for patients, and facilitating many research protocols.

PROFESSIONAL EXPERIENCE (continued)

2003 – present:

**Engineering Consultant,**  
Individual venture

Independent contractor to multiple corporations with written reports detailing completion of projects, presentations, and interdisciplinary collaborations in biomedical technology.

2006 – present:

**Hospital Physician,**  
**Critical Care Physician and Intensivist,**  
**Medical Consultant,**  
Los Angeles, California

Paid contractor for hospitalist, critical care, and out-patient care specialties with privileges for independent decisions in internist medicine.

1999 – 2000:

**Professional Engineer,**  
Consultant

Paid independent contractor to several corporations for work done in the fields of cardiac magnetic resonance instrumentation, clinical applications, front-end software development, development of scientific protocols, and post-processing applications.

## PROFESSIONAL EXPERIENCE (continued)

2000-2003:

**Medical Student,**  
Northwestern University,  
Feinberg School of Medicine  
Chicago, Illinois

2000-2003:

**Postdoctoral Fellow and  
Research Associate,**  
Northwestern University,  
Department of Radiology  
Chicago, Illinois

Responsibilities included leading experimental protocols, bridging between Radiology and Cardiology, and mentoring students and fellows.

2000:

**Postdoctoral Fellow,**  
Northwestern University,  
Feinberg Cardiovascular Research Institute  
Department of Medicine  
Chicago, Illinois

1996-2000:

**Graduate Student,**  
Northwestern University,  
Department of Biomedical Engineering,  
McCormick Graduate School of Engineering,  
Evanston, Illinois

1996:

**Research Fellow,**  
Northwestern University,  
Feinberg Cardiovascular Research Institute  
Department of Biomedical Engineering  
Evanston, Illinois

## CERTIFICATIONS AND LICENSING

**Board Certified, Internal Medicine, Cardiology**

**Medical License, State of California**

**Medical License, State of Alabama**

**Drug Enforcement Administration License, United States Department of Justice**

**Board Certified and Level II trained, Echocardiography and Nuclear Imaging**

**Advanced Cardiac Life Support and Basic Life Support**

**Completed United States Medical Licensing Exam Parts I, II, and III**

**United States Trained Researcher and Scientist, specifically:**

**Skilled in veterinary medicine, surgery, post-operative care, anesthesia**

**Formally trained in magnetic resonance imaging hardware and software**

**Formally trained as an imaging and clinical scientist**

## MANUSCRIPT REVIEWER -

Have reviewed numerous manuscripts for the following journals:

*Circulation*

*Magnetic Resonance in Medicine*

*American Heart Journal*

*Journal of Magnetic Resonance Imaging*

*International Journal of Cardiology*

*Journal of the American College of Cardiology*

*Life Sciences*

*The Annals of Thoracic Surgery*

## PEER-REVIEWED PUBLICATIONS

Codella NC, Lee HY, **Fieno DS**, Chen DW, Hurtado-Rua S, Kochar M, Finn JP, Judd R, Goyal P, Schenendorf J, Cham MD, Devereux RB, Prince M, Wang Y, Weinsaft JW. Improved left ventricular mass quantification with partial voxel interpolation: in vivo and necropsy validation of a novel cardiac MRI segmentation algorithm. *Circ Cardiovasc Imaging*. 2012 Jan;5(1):137-46. Epub 2011 Nov 21.

Bello D, Einhorn A, Kaushal R, Kenchaiah S, Raney A, **Fieno D**, Narula J, Goldberger J, Shivkumar K, Subacius H, Kadish A. Cardiac magnetic resonance imaging: infarct size is an independent predictor of mortality in patients with coronary artery disease. *Magn Reson Imaging*. 2011 Jan;29(1):50-6. Epub 2010 Oct 25.

**Fieno DS**, Czer LS, Schwarz ER, Simsir S. Left ventricular assist device placement in a patient with end-stage heart failure and human immunodeficiency virus. *Interact Cardiovasc Thorac Surg*. 2009; 9(5):919-20.

**Fieno DS**. Cardiac magnetic resonance: Physics, Pulse Sequences, and Clinical Applications. *Rev Cardiovasc Med*. 2008; 9(3):174-86.

**Fieno DS**, Thomson LE, Slomka P, Abidov A, Friedman JD, Germano G, Berman DS. Quantitation of infarct size in patients with chronic coronary artery disease using rest-redistribution Tl-201 myocardial perfusion SPECT: correlation with contrast-enhanced cardiac magnetic resonance. *J Nucl Cardiol*. 2007;14(1):59-67. Note: Figure 2 from this article appeared on the cover of the journal with comment. Dilsizian V. Cardiac magnetic resonance versus SPECT. *J Nucl Cardiol*. 2007;14(1):9-14.

Shellock FG, Fischer L, **Fieno DS**. Cardiac pacemakers and implantable cardioverter defibrillators: in vitro magnetic resonance imaging evaluation at 1.5-tesla. *Journal of Cardiovascular Magnetic Resonance*. 2007;9(1):21-31.

Slomka PJ, **Fieno DS**, Thomson L, Friedman JD, Hayes SW, Germano G, Berman DS. Patient motion correction for multi-planar, multi-breath-hold cardiac cine MR imaging. *J Magn Reson Imaging*. 2007;25(5):965-73.

Thomson LEJ, **Fieno DS**, Abidov A, Chien D, Slomka PJ, Hachamovitch R, Saouaf R, Friedman JD, Berman DS. Added value of rest to stress study for recognition of artifacts in perfusion cardiovascular magnetic resonance. *Journal of Cardiovascular Magnetic Resonance*. 2007;9(5):733-40.

## PEER-REVIEWED PUBLICATIONS (continued)

2006

**Fieno DS**, Thomson LEJ, Slomka PJ, Abidov A, Chien D, Hayes SW, Saouaf R, Friedman JD, Berman DS.

Rapid assessment of left ventricular segmental wall motion, ejection fraction, and volumes with single breath-hold, multi-slice TrueFISP MR imaging.

*Journal of Cardiovascular Magnetic Resonance*. 2006;8(3):435-44.

**Fieno DS**, Saouaf R, Thomson LEJ, Abidov A, Friedman JD, Berman DS.

Cardiac magnetic resonance of primary tumors of the heart: A review.

*Journal of Cardiovascular Magnetic Resonance*. 2006;8(6):839-53.

Berman DS, Hachamovitch R, Shaw LJ, Friedman JD, Hayes SW, Thomson LEJ, **Fieno DS**, Germano G, Wong ND, Kang X, Rozanski A.

Roles of Nuclear Cardiology, Cardiac Computed Tomography, and Cardiac Magnetic Resonance: Assessment of Patients with Suspected Coronary Artery Disease.

*J Nucl Med*. 2006;47:1-9.

Shellock FG, **Fieno DS**, Thomson LEJ, Talavage TM, Swerdlow CD, Berman DS.

Cardiac Pacemaker: In Vitro Assessment of MR Safety at 1.5-Tesla

*Am Heart J*. 2006 Feb;151(2):436-43.

Dey D, Slomka P, Chien D, **Fieno D**, Abidov A, Saouaf R, Thomson L, Friedman JD, Berman DS.

Direct quantitative in vivo comparison of calcified atherosclerotic plaque on vascular MRI and CT by multimodality image registration.

*Journal of Magnetic Resonance Imaging*. 2006 Mar;23(3):345-54.

2005

Bello D, **Fieno DS**, Kim RJ, Pereles FS, Betts T, Wesson A, Passman R, Song G, Dibs S, Kadish A, Goldberger J.

Infarct morphology identifies patients with substrate for ventricular tachycardia.

*Journal of the American College of Cardiology*. 2005 Apr 5;45(7):1104-8.

Shea SM, **Fieno DS**, Schirf BE, Bi X, Huang J, Omary RA, Li D.

T2-prepared steady-state free precession blood oxygen level-dependent MR imaging of myocardial perfusion in a dog stenosis model.

*Radiology*. 2005 Aug;236(2):503-9.

Slomka PJ, **Fieno D**, Thomson L, Friedman JD, Hayes SW, Germano G, Berman DS.

Automatic detection and size quantification of infarcts by myocardial perfusion SPECT: clinical validation by delayed-enhancement MRI. *J Nucl Med*. 2005 May;46(5):728-35



## PEER-REVIEWED PUBLICATIONS (continued)

2004

**Fieno DS**, Hillenbrand HB, Rehwald WR, Harris KR, Decker RS, Parker MA, Klocke FJ, Kim RJ, Judd RM.

Infarct Resorption, Compensatory Hypertrophy, and Differing Patterns of Ventricular Remodeling following Myocardial Infarction of Varying Sizes.

*Journal of the American College of Cardiology.*

2004. Jun 2;43(11):2124-31.

**Fieno DS**, Shea SM, Li Y, Harris KR, Finn JP, Li D.

High Resolution, Steady-State Myocardial Perfusion Imaging Using Native Contrast Blood Oxygen Level Dependent MRI.

*Circulation.*

2004 Sep 7;110(10):1284-90.

2003

Shors SM, Fung CW, François CJ, Finn JP, **Fieno DS**.

Accurate Quantification of Right Ventricular Mass at MR Imaging by Using Cine True Fast Imaging with Steady-State Precession: Study in Dogs.

*Radiology.*

2003 Dec 29.

(Electronic publication ahead of print; citation is 2004 Feb;230(2):383-8)

François CJ, **Fieno DS**, Shors SM, Finn JP.

Left Ventricular Mass: Manual and Automatic Segmentation of True FISP and FLASH Cine MR Images in Dogs and Pigs.

*Radiology.*

2003 Dec 29.

(Electronic publication ahead of print; citation is 2004 Feb;230(2):389-95.)

## PEER-REVIEWED PUBLICATIONS (continued)

2002

**Fieno DS**, Jaffe WC, Simonetti OP, Judd RM, Finn JP. TrueFISP: Assessment of accuracy for measurement of left ventricular mass in an animal model. *J Magn Reson Imaging*. 2002 May;15(5):526-31.

Rehwald WG, **Fieno DS**, Chen EL, Kim RJ, Judd RM. Myocardial magnetic resonance imaging contrast agent concentrations after reversible and irreversible ischemic injury. *Circulation*. 2002 Jan 15;105(2):224-9.

2001

Klocke FJ, Simonetti OP, Judd RM, Kim RJ, Harris KR, Hedjbeli S, **Fieno DS**, Miller S, Parker MA. Limits of Detection of Regional Differences in Vasodilated Flow in Viable Myocardium using First-Pass MRI Perfusion Imaging. *Circulation*. 2001 Nov 13; 104 (20): 2412-6. 2001

Simonetti OP, Kim RJ, **Fieno DS**, Hillenbrand HB, Wu E, Bundy JM, Finn JP, Judd RM. An improved MR imaging technique for the visualization of myocardial infarction. *Radiology*. 2001 Jan;218(1):215-23.

2000

**David S. Fieno**

Contrast-Enhanced MRI of Infarct Resorption and Compensatory Hypertrophy Following Myocardial Infarction

Doctor of Philosophy Dissertation, June 2000, Department of Biomedical Engineering  
The Graduate School of Northwestern University, Evanston, Illinois

**Fieno DS**, Kim RJ, Chen EL, Lomasney JW, Klocke FJ, Judd RM.

Contrast-enhanced magnetic resonance imaging of myocardium at risk: distinction between reversible and irreversible injury throughout infarct healing.

*Journal of the American College of Cardiology*. 2000 Nov 15;36(6):1985-91.

Hillenbrand HB, Kim RJ, Parker MA, **Fieno DS**, Judd RM.

Early assessment of myocardial salvage by contrast-enhanced magnetic resonance imaging. *Circulation*. 2000 Oct 3;102(14):1678-83.

## PEER-REVIEWED PUBLICATIONS (continued)

1999

Kim RJ, **Fieno DS**, Parrish TB, Harris K, Chen EL, Simonetti O, Bundy J, Finn JP, Klocke FJ, Judd RM. Relationship of MRI delayed contrast enhancement to irreversible injury, infarct age, and contractile function.

*Circulation*. 1999 Nov 9;100(19):1992-2002.

Kim RJ, Judd RM, Chen EL, **Fieno DS**, Parrish TB, Lima JA.

Relationship of elevated  $^{23}\text{Na}$  magnetic resonance image intensity to infarct size after acute reperfused myocardial infarction.

*Circulation*. 1999 Jul 13;100(2):185-92.

**Fieno DS**, Kim RJ, Rehwald WG, Judd RM.

Physiological basis for potassium ( $^{39}\text{K}$ ) magnetic resonance imaging of the heart.

*Circulation Research*. 1999 Apr 30;84(8):913-20.

1998

**David S. Fieno**

Potassium ( $^{39}\text{K}$ ) MRI of the Heart

Master of Science Thesis, November 1998, Department of Biomedical Engineering  
The Graduate School of Northwestern University, Evanston, Illinois

1997

Parrish TB, **Fieno DS**, Fitzgerald SW, Judd RM.

Theoretical basis for sodium and potassium MRI of the human heart at 1.5 T.

*Magnetic Resonance in Medicine*. 1997 Oct;38(4):653-61.

## PUBLICATIONS IN PROGRESS

**Fieno DS** and others.

Improved inversion-recovery cardiac magnetic resonance imaging for assessment of microvascular obstruction.

Under review.

**Fieno DS** and others.

Characteristic pattern of delayed contrast-enhancement on cardiac magnetic resonance in patients with amyloidosis: a case series.

Under review.

**Fieno DS** and others.

Induced left ventricular wall motion abnormalities during adenosine stress:

Detection using rapid cine MRI.

Under review.

**Fieno DS** and others.

Regional wall motion assessment by rest  $^{201}\text{Tl}$  gated SPECT:

Comparison with cardiac magnetic resonance.

Under review.

**Fieno DS** and others.

High-resolution right ventricular myocardial perfusion imaging using BOLD and first-pass cardiac magnetic resonance: A study in dogs

Under review.

**Fieno DS** and others.

SPECT myocardial perfusion image assessment of cardiac geometry changes:

Validation by cardiac magnetic resonance.

Under review

## TRAINEES

In addition to clinical training of residents and medical students, I have mentored or co-mentored the following fellows and students in the fields shown:

**Muneo Oba, M.D., Yasu Suzuki, M.D., and Shoji Suzuki**, principles of clinical cardiac magnetic imaging, data analysis, and research design of imaging studies. Drs. Oba, Suzuki, and Suzuki were research and clinical fellows for three years in the Department of Imaging under Dr. Daniel S. Berman.

**Stephanie M. Shors, M.D.**, principles of cardiac imaging (especially of the right ventricle), analysis, and MRI. Dr. Shors was a research fellow for two years in the Department of Radiology under Dr. J. Paul Finn.

**Christopher J. François, M.D.**, principles of cardiac MRI (especially of the mass determination) and auto-segmentation. Dr. François was a research fellow for one year in the Department of Radiology under Dr. J. Paul Finn.

**Steven M. Shea, M.S., Ph.D.**, principles of perfusion imaging, analysis, and physiologic interpretation. Dr. Shea was a doctoral student in the Department of Biomedical Engineering under Dr. Debiao Li.

**Kevin H. Khalsa, B.S.**, clinical mentor in application from undergraduate to professional school. Mr. Khalsa was an undergraduate at the University of California at Los Angeles.

## ACADEMIC AND INDUSTRY LECTURES

Guest Lecturer to Department of Medicine, Cedars-Sinai Medical Center, *Cardiac MRI for Assessment of Patients with Coronary Artery Disease*, 2007.

Course lecturer, Basic Principles and Clinical Practice of Cardiac Imaging, Physics of Magnetic Resonance, course led by Dr. Damini Dey, Cedars-Sinai Medical Center, Department of Imaging, *Physics of Magnetic Resonance Imaging – Parts I and II*, 2006 – present.

Guest lecturer at proposal to Amgen, Incorporated, led by Dr. Raj Makkar, Cedars-Sinai Medical Center, *Recent Developments in Cardiac MRI*, 2004.

Guest lecturer at Engineering Division afternoon conference led by Mr. Daniel Cooke, Guidant Corporation, Minneapolis, Minnesota, *MRI of the Heart: A New Frontier in Imaging and Diagnosis*, 2004.

Guest lecturer at Rhythm Management Division afternoon conference led by Dr. David Bello, St. Jude Medical, Sylmar, California, *Left Ventricular Remodeling after Myocardial Infarction*, 2003.

Guest lecturer for Biomedical Engineering afternoon conference led by Dr. Matthew Glucksberg, Northwestern University, McCormick School of Engineering, *Left Ventricular Remodeling after Myocardial Infarction*, 2000.

Guest lecturer for Electrical Engineering Physics of Medical Imaging led by Dr. Alan Sahakian, Northwestern University, McCormick School of Engineering, *Sodium ( $^{23}\text{Na}$ ) and Potassium ( $^{39}\text{K}$ ) Magnetic Resonance Imaging of the Heart*, 1998.

## SELECTED ABSTRACTS

2007

Suzuki S, Slomka P, **Fieno D**, et al. SPECT myocardial perfusion image assessment of cardiac geometry changes: Validation by Cardiac Magnetic Resonance. Accepted presentation. Society for Nuclear Medicine, June 4, 2007.

2006:

Slomka P, **Fieno D**, Goyal V, et al. Automated Registration of Multiple Single Breath-hold Cardiac MRI Images. Accepted. International Society for Magnetic Resonance in Medicine.

Oba M, **Fieno D**, Suzuki S, Suzuki Y, Thomson L, Berman D. Regional Wall Motion Assessment by Rest <sup>201</sup>Tl Gated SPECT: Comparison with Cardiac Magnetic Resonance. American Society of Nuclear Cardiology.

2005:

Thomson LEJ, **Fieno DS**, Abidov A, Hamilton A, Gill E, Hayes S, Friedman J, Saouaf R, Hachamovitch R, Berman D. Frequency of normal perfusion in infarcted myocardial segments. Journal of Cardiovascular Magnetic Resonance. 2005;7(1);118.

Thomson LEJ, **Fieno DS**, Abidov A, Hachamovitch R, Hamilton A, Gill E, Saouaf R, Hayes SW, Friedman JD, Berman DS. Single adenosine cardiac magnetic resonance imaging and myocardial perfusion single photon emission computed tomography in an unselected population with known or suspected coronary artery disease: added value of rest perfusion magnetic resonance imaging. Proceedings of the Scientific Session of the American Heart Association. 2004.

## SELECTED ABSTRACTS (continued)

2005 (continued):

Kaushal R, **Fieno DS**, Bello D et al. Detection of myocardial infarction in symptomatic patients without coronary disease undergoing electrophysiological testing. *Journal of Cardiovascular Magnetic Resonance*. 2005;7(1);142.

Kaushal R, **Fieno DS**, Radin M, Shaoulian E, Narula J, Goldberger J, Kadish A, Shivkumar K, Bello D. Infarct size is an independent predictor of mortality in patients with coronary artery disease. *Journal of Cardiovascular Magnetic Resonance*. 2005;7(1);142.

Chien D, **Fieno DS**, Saouaf R, Dey D, Yang LD, Gransar H, Thomson H, Friedman J, Berman D. MR and CT imaging of patients with atherosclerotic aortic plaque and evaluation of new MR methods. *Journal of Cardiovascular Magnetic Resonance*. 2005;7(1);64.

Kaushal R, **Fieno DS**, Radin M, Shaoulian E, Narula J, Goldberger J, Kadish A, Shivkumar K, Bello D. Detection of myocardial infarction in ischemic, nonischemic, and mixed cardiomyopathy. *Journal of Cardiovascular Magnetic Resonance*. 2005;7(1);345.



## SELECTED ABSTRACTS (continued)

2005 (continued):

Shellock FG, Fischer L, **Fieno DS**, Berman DS. Pacemakers and ICDs: In Vitro Assessment of Magnetic Resonance Imaging Safety at 1.5-Tesla. Proceedings of the Heart Rhythm Society Meeting, 2005

Slomka P, **Fieno D**, Mehta T, et al. Fast automatic 3D quantification of left ventricular ejection fraction and volumes from multi-planar multi-breath-hold cine cMRI. Under review, International Society for Magnetic Resonance in Medicine.

2004:

ME Haupt, **DS Fieno**, S Dibs, JC Carr, et al. Rapid Determination of Cardiac Output by a Single Breath-held Aortic Flow Quantification. 7th Annual Society for Cardiovascular Magnetic Resonance (SCMR) Scientific Sessions / Euro CMR 2004 Meeting in Barcelona, Spain. February, 2004.

2003:

**DS Fieno**, D Bello, R Passman, S Dibs, A Kadish, J Goldberger et al. Infarct morphology identifies patients with substrate for ventricular tachycardia, International Society for Magnetic Resonance in Medicine, Toronto, Canada, July, 2003, Oral Presentation

2002:

**DS Fieno**, JP Finn, D Li et al. Assessment of Myocardial Perfusion Using a New T2-Prepared TrueFISP Blood Oxygen Level Dependent (BOLD) Pulse Sequence, International Society for Magnetic Resonance in Medicine, Honolulu, Hawaii, 2002, Oral Presentation, Presented by **DS Fieno**.

## SELECTED ABSTRACTS (continued)

- 2001: WC Jaffe, **DS Fieno**, OP Simonetti, JP Finn, TrueFISP: Evaluation of Accuracy of LV Mass Measurement in an Animal Model, International Society for Magnetic Resonance in Medicine, Glasgow, Scotland, Apr 21-27, 2001, Presented by **DS Fieno**.
- 2000: **DS Fieno**, HB Hillenbrand, WG Rehwald, Decker RS, Klocke FJ, Kim RJ, Judd RM. *Time Course of Infarct Shrinkage and Compensatory Hypertrophy after Myocardial Infarction*, Presentation at the 73<sup>rd</sup> Scientific Session, American Heart Association, New Orleans, LA, November 2000
- DS Fieno**, HB Hillenbrand, RJ Kim, FJ Klocke, RM Judd, *Infarct Resorption during the First Four Weeks after Myocardial Infarction*. Society for Cardiovascular Magnetic Resonance, Atlanta, GA, Jan 21-23, 2000.
- HB Hillenbrand, **DS Fieno**, RJ Kim, FJ Klocke, RM Judd, *The Transmural Extent of Viable Myocardium Predicts Wall Motion Recovery After Acute Infarction*. Society for Cardiovascular Magnetic Resonance, Atlanta, GA, Jan 21-23, 2000.
- OP Simonetti, RJ Kim, **DS Fieno**, HB Hillenbrand, E Wu, JM Bundy, JP Finn, RM Judd, *A Comparison of MRI Pulse Sequences for the Visualization of Myocardial Injury*. Society for Cardiovascular Magnetic Resonance, Atlanta, GA, Jan 21-23, 2000.
- WR Rehwald, **DS Fieno**, E-L Chen, RJ Kim, RM Judd, *Relationship of Gd-DTPA Concentration to Myocardial Electrolytes Following Reversible and Irreversible Ischemic Injury*. Society for Cardiovascular Magnetic Resonance, Atlanta, GA, Jan 21-23, 2000.

## SELECTED ABSTRACTS (continued)

2000: (continued)

HB Hillenbrand, **DS Fieno**, RJ Kim,  
FJ Klocke, RM Judd,  
*Detection of Salvaged Myocardium by Contrast  
Enhanced MR Imaging.*  
Society for Cardiovascular Magnetic  
Resonance, Atlanta, GA, Jan 21-23, 2000.

OP Simonetti, RJ Kim, **DS Fieno**, HB  
Hillenbrand, E Wu, JM Bundy, JP Finn,  
RM Judd,  
*2D and 3D Segmented TurboFLASH for  
Visualization of Myocardial Injury.*  
Submitted to the International Society for  
Magnetic Resonance in Medicine,  
Denver, CO, April, 2000.

JC Carr, OP Simonetti, R Kroeker,  
JM Bundy, **DS Fieno**, S Pereles, JP Finn,  
*Segmented TrueFisp - a New Technique for  
Cine MR Angiography.* Presentation at the  
Radiological Society of North America,  
Chicago, IL, November, 2000.

1999:

**DS Fieno**, RJ Kim, FJ Klocke, RM Judd,  
*Comparison of Contrast Enhancement to  
Histology in Coronary Artery Disease Related  
Myocardial Injury.* Second Annual Meeting of  
the Society for Cardiovascular Magnetic  
Resonance, January 22-24, 1999.

RJ Kim, **DS Fieno**, TB Parrish, K Harris,  
OP Simonetti, JM Bundy, JP Finn,  
FJ Klocke, RM Judd, *Contrast Enhancement  
and Contractile Function Following Reversible  
and Irreversible Ischemic Injury.* Second  
Annual Meeting of the Society for  
Cardiovascular Magnetic Resonance, January  
22-24, 1999.

## SELECTED ABSTRACTS (continued)

1999: (continued)

WG Rehwald, **DS Fieno**, E-L Chen, RJ Kim, RM Judd, *Mechanisms of Gd-DTPA Contrast Enhancement in Acute and Chronic Myocardial Infarction*. Second Annual Meeting of the Society for Cardiovascular Magnetic Resonance, January 22-24, 1999.

OP Simonetti, J Zheng, D Li, J Bundy, **DS Fieno**, FJ Klocke, *Three Dimensional MR Imaging of Myocardial Perfusion*. Seventh Scientific Meeting of the International Society for Magnetic Resonance in Medicine, Philadelphia, PA, May 1999.

**DS Fieno**, RJ Kim, E-L Chen, FJ Klocke, RM Judd, *MRI Delayed Enhancement During Myocardial Infarct Healing*. Presentation at the 72<sup>nd</sup> Scientific Session, American Heart Association, Atlanta, GA, November 1999

**DS Fieno**, RJ Kim, FJ Klocke, RM Judd, *Distinction Between Infarct Resorption and Compensatory Hypertrophy During Post-Infarct Remodeling*. Presentation at the 72<sup>nd</sup> Scientific Session, American Heart Association, Atlanta, GA, November 1999

WG Rehwald, **DS Fieno**, E-L Chen, RJ Kim, RM Judd, *Relationship of Regional Gd-DTPA Concentrations to Myocardial Electrolytes Following Reversible and Irreversible Ischemic Injury*. Presentation at the 72<sup>nd</sup> Scientific Session, American Heart Association, Atlanta, GA, November 1999

## SELECTED ABSTRACTS (continued)

1998:

**DS Fieno**, RJ Kim, RM Judd,  
*Physiological Basis for Potassium ( $^{39}\text{K}$ ) MRI of the Heart.*

Presented as an oral talk by David S. Fieno at the International Society for Magnetic Resonance in Medicine, Sydney, Australia, April 18-26, 1998.

TB Parrish, RJ Kim, **DS Fieno**,  
OP Simonetti, JP Finn, FJ Klocke, RM Judd,  
*High Resolution 3D Contrast Enhanced MRI of Chronic Myocardial Infarction.*

43rd International Society for Magnetic Resonance in Medicine, Sydney, Australia, April 18-26, 1998.

WG Rehwald, **DS Fieno**, E-L Chen,  
RJ Kim, RM Judd,  
*Electron Probe X-Ray Microanalysis Allows Comparison of Cellular-Level Distributions of Gd-DTPA to Myocardial Electrolytes.*  
71<sup>st</sup> Scientific Session, American Heart Association, November 8-11, 1998

1997:

RM Judd, **DS Fieno**, TB Parrish,  
*3D  $^{23}\text{Na}$  Cardiac MRI Examines Myocardial Viability In Vivo.*

Presented at the annual meeting of the International Society for Magnetic Resonance in Medicine, Vancouver, British Columbia, Canada, April 17-25, 1997.

RM Judd, **DS Fieno**, TB Parrish,  
*Strategies for  $^{23}\text{Na}$  and  $^{39}\text{K}$  Imaging.*  
Presented at the annual meeting of the International Society for Magnetic Resonance in Medicine, Vancouver, British Columbia, Canada,  
April 17-25, 1997.

## SELECTED SCIENTIFIC PRESENTATIONS

- June 2007: **DS Fieno**  
Quantitation of Infarct Size in Patients with Chronic Coronary Artery Disease Using Rest-Redistribution  $^{201}\text{Tl}$  Myocardial Perfusion SPECT: Correlation with Contrast-enhanced Cardiac Magnetic Resonance.  
Solomon Scholars Program,  
University of California at Los Angeles
- December 2006: **DS Fieno**  
Cardiac MRI for Assessment of Patients with Coronary Artery Disease  
Grand Rounds, Department of Medicine  
Cedars-Sinai Medical Center  
Los Angeles, California
- February 2004: **DS Fieno**  
Cardiac MRI: A new era in cardiac imaging  
Grand Rounds, Department of Imaging  
Cedars-Sinai Medical Center  
Los Angeles, California
- January 2004: **DS Fieno**  
Recent Developments in Cardiac MRI  
Grand Rounds, Division of Cardiology.  
Department of Internal Medicine  
Cedars-Sinai Medical Center  
Los Angeles, California
- September 2003: **DS Fieno**  
Clinical Advances in Cardiac MRI  
Pacific Coast Cardiology and Imaging  
Newport Beach, California
- September 2003: **DS Fieno**  
Applications of Cardiac MRI:  
Viability and Beyond  
Cedars-Sinai Imaging Group  
Los Angeles, California

## SELECTED SCIENTIFIC PRESENTATIONS (continued)

- August 2003: **DS Fieno**  
MRI of Left Ventricular Remodeling following Myocardial Infarction  
Featured Lecture  
Medical Scientist Training Program,  
Annual Retreat, New Buffalo, Michigan
- January 2003: **DS Fieno**  
Left Ventricular Remodeling as Reflected by Contrast Enhancement.  
Plenary Lecture  
Society for Cardiovascular Magnetic Resonance
- January 1999: **DS Fieno, RJ Kim, FJ Klocke, RM Judd,**  
Comparison of Contrast Enhancement to Histology in Myocardial Injury.  
Society for Cardiovascular Magnetic Resonance
- November 1999: **DS Fieno, RJ Kim, E-L Chen, FJ Klocke, RM Judd,** MRI Delayed Enhancement During Myocardial Infarct Healing.  
Presentation at the 72<sup>nd</sup> Scientific Session, American Heart Association
- April 1998: **DS Fieno, RJ Kim, RM Judd,** Physiological Basis for Potassium (<sup>39</sup>K) MRI of the Heart.  
43<sup>rd</sup> International Society for Magnetic Resonance in Medicine, Sydney, Australia
- May 1996: **DS Fieno** and DS Cooper, *Design of a Window Voltage Discriminator for Acquisition of Neuronal Action Potentials*, Senior Design Project in Electrical Engineering, Athens, Ohio
- November 1994: **DS Fieno** and TL Beck, Monte Carlo Simulation of a Quantum Harmonic Oscillator using Feynman Path Integrals, Submitted as a portfolio to the Goldwater Selection Committee, Athens, OH
- May 1992: **DS Fieno** and TL Beck, Chemical Chaos: Computer Modeling of the Belousov-Zhabotinskii Reaction, First Place, 43<sup>rd</sup> International Science and Engineering Exhibition, Nashville, TN.

## INTELLECTUAL PROPERTY

Patents pending for the following original techniques:

**David S. Fieno**, Yiu-cho Chung, Orlando P. Simonetti  
"Multiphase Inversion Recovery TrueFISP Magnetic Resonance Imaging of Myocardial Infarction" *Patent application under review*

**David S. Fieno**, Steven M. Shea, Debiao Li  
"Three-dimensional Blood Oxygen Level Dependent Steady-State Myocardial Perfusion Imaging using T2-Prepared True Fast Imaging with Steady-State Precession" *Patent application under review*

## GRANT SUPPORT

Primary Investigator and Award Recipient, National Institutes of Health, Grant Number L30 HL085906-01, Loan Repayment Program, Awarded September of 2006, with \$114,000 of direct support, for project entitled, **"Cardiac magnetic resonance imaging of autologous stem cell therapy in patients with acute myocardial infarction: Comparison of stem cell therapy with revascularization to revascularization alone,"** with mentors Daniel S. Berman, M.D., F.A.C.C. and Raj R. Makkar, M.D.

Whitaker Foundation National Graduate Fellowship in Biomedical Engineering, Grant number FE-97-0185, \$225,000 of total costs, with full academic support (tuition, stipend, books, travel) for five years of doctoral study, with mentor Robert M. Judd, Ph.D.

## PROFESSIONAL AFFILIATIONS

**American Heart Association**

**American College of Cardiology**

**Society of Cardiovascular Magnetic Resonance Imaging**

**International Society for Magnetic Resonance in Medicine**

**American Society of Nuclear Cardiology**

**American College of Physicians**



## BOOKS AND BOOK CHAPTERS

Thomson LEJ and Fieno DS. "Comparison of function, viability and perfusion assessed by SPECT and cardiac magnetic resonance imaging." In Clinical Gated Cardiac SPECT, 2<sup>nd</sup> edition, by Germano G and Berman DS, Blackwell Publishing, New York, 2006.

David S. Fieno

Potassium (<sup>39</sup>K) MRI of the Heart

Master of Science Thesis, November 1998, Department of Biomedical Engineering  
The Graduate School of Northwestern University, Evanston, Illinois

David S. Fieno

Contrast-Enhanced MRI of Infarct Resorption and Compensatory Hypertrophy Following Myocardial Infarction

Doctor of Philosophy Dissertation, June 2000, Department of Biomedical Engineering  
The Graduate School of Northwestern University, Evanston, Illinois

## EXTRACURRICULAR ACHIEVEMENTS

- |            |  |
|------------|--|
| 2000-2002: | Elected Vice President of Student Senate,<br>Northwestern University Medical School                                  |
|            | Re-elected Senator of Medical Class of 2004  |
| 2000:      | Elected Senator of Medical School Class with<br>responsibilities for Class of 2004                                   |
| 1998:      | Successfully completed 0.5 mile swim, 12.5<br>mile bike, and 3.1 mile Mrs. T's Chicago<br>Triathlon, August 30, 1998 |
| 1996:      | Successfully completed 26.2 mile<br>LaSalle-Banks International Chicago Marathon,<br>October 26, 1996                |
| 1994-1996: | President and Founder,<br>Ohio University Table Tennis Club  |