

Curriculum Vitae

Samuel C. Dudley Jr., M.D., Ph.D.

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EDUCATION

- | | |
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| 1989 | M.D., Medicine,
Virginia Commonwealth University
Medical College of Virginia
Richmond, VA, USA |
| 1989 | Ph.D., Physiology
Virginia Commonwealth University
Medical College of Virginia
Richmond, VA, USA |
| 1985 | B.A., Special Scholar Program
University of Virginia-Main Campus
College of Arts and Sciences
Charlottesville, VA, USA |

POSTGRADUATE TRAINING

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| 1993 - 1997 | Cardiology Fellow, University of Chicago, Chicago, IL, |
| 1991 - 1993 | Postdoctoral Fellow, University of Chicago, Chicago, IL, Harry Fozzard, MD |
| 1989 - 1991 | Internal Medicine Resident, University of Chicago, Chicago, IL |

HONORS & AWARDS

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|------|--|
| 2012 | Chancellor's Discovery Fund Award, University of Illinois at Chicago |
| 2011 | CCTS Professional Development Award, UIC Center for Clinical and Translational Science |
| 2011 | Carolyn L. Kuckein Student Research Fellowship, Alpha Omega Alpha |
| 2007 | American Society Clinical Investigation (ASCI), University of Illinois at Chicago |
| 2003 | Tenure, Emory University |

2001	Fellow, American Heart Association
1999	Cardiovascular Young Investigator, AstraZeneca
1999	Fellow, American College of Cardiology
1994	Electrophysiology Fellow, Wyeth-Ayerst
1989	Postdoctoral Fellowship (declined), American Heart Association/Virginia Affiliate
1989	Individual National Research Service Award (F32-HL08104), National Institutes of Health
1989	Foote and Levy Grant, Medical College of Virginia Foundation
1988	Merck Scholarship for Academic Ability, Medical College of Virginia
1988	National Dean's List, Medical College of Virginia
1988	Sidney Barham Scholarship for Academic Ability, Medical College of Virginia
1988	Dean's Book Award, Medical College of Virginia
1988	All-American Scholar Collegiate Award, Medical College of Virginia
1988	National Collegiate Student Government Award, Medical College of Virginia
1988	Merck Scholarship for Academic Ability, Medical College of Virginia
1987	Aubrey H. Straus Microbiology Award, Medical College of Virginia
1986	National Dean's List, Medical College of Virginia
1986	National Collegiate Medical Professions Award, Medical College of Virginia
1986	Lange Book Award, Cell Biology, Medical College of Virginia
1986	McGraw Hill Book Award, First in the Class, Medical College of Virginia
1986	Dean's Book Award, Medical College of Virginia
1986	Merck Book Award, Gastroenterology Medical College of Virginia
1985	A.D. Williams Scholarship Award for Academic Achievement in the School of Medicine, Medical College of Virginia
1985	Sigma Xi Anniversary Prize for Excellence in Undergraduate Research, Medical College of Virginia
1984	Intermediate Academic Honors, University of Virginia
1982	Echols Scholar, University of Virginia

LICENSURE & BOARD CERTIFICATION

2013 - 2014	State of Rhode Island – Physician, MD14147
1991 - 2014	State of Illinois – Physician, 036-086624
1997 - 2013	State of Georgia – Physician, 044910
2007 - 2017	Cardiovascular Disease, American Board of Internal Medicine

2006 - 2016 Internal Medicine, American Board of Internal Medicine

ACADEMIC APPOINTMENTS

2013	Director, Division of Cardiology, Department of Medicine, The Warren Alpert Medical School of Brown University, Providence, RI
2007 - 2013	Professor of Medicine, University of Illinois at Chicago, Chicago, IL
2007 - 2013	Professor of Physiology, University of Illinois at Chicago, Chicago, IL
2007 - 2012	Chief of Cardiology, University of Illinois at Chicago, Chicago, IL
2007 - 2010	Co-Director of the Center for Cardiovascular Research, University of Illinois at Chicago, Chicago, IL
2005 - 2007	Petit Institute for Bioengineering and Bioscience, Georgia Institute of Technology, Atlanta, GA
2003 - 2007	Molecular and Systems Pharmacology Program Faculty, Emory University, Atlanta, GA
2000 - 2007	Biomedical Engineering Program Faculty, Emory University/Georgia Institute of Technology, Atlanta, GA
2000 - 2007	Biochemistry, Cell Biology and Development Program Faculty, Emory University, Atlanta, GA
2003 - 2007	Associate Professor of Physiology, Emory University, Atlanta, GA
2003 - 2007	Associate Professor of Medicine, Emory University, Atlanta, GA
1997 - 2003	Assistant Professor of Medicine, Emory University, Atlanta, GA
1997 - 2003	Assistant Professor of Physiology, Emory University, Atlanta, GA

HOSPITAL APPOINTMENTS

3/2013	Director, Division of Cardiology, Rhode Island Hospital and The Miriam Hospital, Providence, RI
3/2013	Staff Cardiologist, Rhode Island Hospital and The Miriam Hospital, Providence, RI
2007 - 2013	Staff Cardiologist, Jesse Brown VA, Chicago, IL
2004 - 2007	Chief of Cardiology, Atlanta VA Medical Center, Atlanta, GA
2000 - 2007	Chief of Cardiology, Atlanta VA Medical Center, Atlanta, GA
1997 - 2000	Cardiologist, Atlanta VA Medical Center, Atlanta, GA

OTHER APPOINTMENTS OR ROLES

NATIONAL & INTERNATIONAL

2013	Abstract Grader, American Heart Association Scientific Sessions 2013, Dallas, TX
2013	Session Chair, Heart Rhythm 2013, Denver, CO

2013	Distinguished Editor for the NIH Director's New Innovator Award Second Stage Review Panel
2013	Session Chair and Organizing Committee Member, 3rd International Conference on Clinical & Experimental Cardiology
2013	Abstract Reviewer and On-Site Poster Reviewer, ASCI/AAP Joint Meeting
2013	Chair, Session No. 916 - European Heart Rhythm Association (EHRA) EUROPACE 2013 Congress, Athens, Greece
2013	Member of the Scientific Advisory Board of the International Academy of Cardiology and of the 18 th World Congress on Heart Disease Annual Scientific Sessions 2013, Vancouver, BC, Canada
2012	Chair, NIH – Member conflict special emphasis panel in cardiovascular sciences
2012	Chair, Special Emphasis Panel/Scientific Review Group 2013/01 ZHL1 CCT-J (F2) 1 – NHLBI Vascular Innovations
2012	Chair, Vascular Interventions/Innovations and Therapeutic Advances (VITA) Stage-A (Concept to Proof and Principle) and Stage B (Proof of Principle to IND or IDE) - BAA-NHLBI-CSV-HV-2013-02-JS
2012	Chair, Vascular Interventions/Innovations and Therapeutic Advances (VITA) Program Coordinating Center - NHLBI-CSB-HV-2013-04-PDM
2012	Reviewer, NIH - ZGM1 GDB-7 (CP)
2012	Grant Reviewer, Earth and Life Sciences
2012	Poster Session Judge, ASCI/AAP Joint Meeting
2012	Panelist, American Physician Scientists Association 8 th Annual Meeting
2012	Executive Leadership Committee, AHA Heart Ball
2012	Poster Session Judge, ASCI/AAP Joint Meeting
2012	Session Chair, Sodium Channels and Arrhythmia - Heart Rhythm
2011	Grant Reviewer, Department of Veterans Affairs (VA) CARA Fall Merit Review
2011	Reviewer, Special Emphasis Panel/Scientific Review, 2012/05 HLBP 2 Workgroup
2011	Executive Leadership Committee, AHA Heart Ball Committee
2011	Reviewer, NIH – ZRG1 CVRS-F (02)
2011	Grant Reviewer, Research Grant Council of Hong Kong, (T13-706/11)
2011	Reviewer, NIH - ZRG1 VH-H Special Emphasis Panel
2011	Reviewer, Special Emphasis Panel/Scientific Review, 2011/05 ZRGI CVRS-B (10) – Small Business: Cardiovascular Sciences
2011	Ad Hoc Reviewer, NHLBI - Developmental Basis of Heart Disease by TGFB Dysfunction
2011	Abstract Reviewer, Cardiac Electrophysiology Society

2011	Session Chair, 14th World Congress of the Society of Arrhythmias/ICPES 2011 – Athens, Greece
2011	Session Chair, Cardiac Metabolism and Arrhythmogenesis –Heart Rhythm Scientific Session 2011
2010	Reviewer, Role of Inflammation, Oxidative Stress and Fibrosis in the Initiation and Progression of Human Atrial Fibrillation, Swiss National Science Foundation
2010	Member, NHLBI Translational Research in Vascular Diseases
2010	Reviewer, NIH Director’s Opportunity 5 Theme Hematology and Cardiovascular-Respiratory Sciences
2010	Member, Jefferson Scholars Foundation – Chicago, Illinois Region Selection Committee
2010	Reviewer, Template-Based Critiques and Scoring
2010	Grant Reviewer, NHLBI PPG Review – Pathobiology of Cardiac Dyssynchrony & Resynchronization
2010	Presenter, AHA Scientific Sessions
2009	Member, NHLBI eMentoring Initiative
2009	Grant Reviewer, National Institute on Aging Cardiac Progenitor Cells and Aging
2009	Grant Reviewer, Department of Veterans Affairs (VA) Scientific Merit Review Board Subcommittee for Cardiovascular Studies
2009	Grant Reviewer, NHLBI PPG review
2009	Moderator and Presenter, AHA Scientific Sessions
2009	Abstract Grader, AHA Scientific Sessions
2008	Grant Reviewer, NHLBI ZHL1 CSR-J F3 Progenitor cell Consortium
2008	Grant Reviewer, National Institute of General Medical Sciences Special Emphasis Panel – Human Embryonic Stem Cells
2008	Abstract Reviewer, American College of Cardiology
2008	Poster Session Moderator, Heart Rhythm Society
2008	Session Chair, Midwestern Section American Federation for Medical Research – Moderated Poster Session Leader
2008	Session Chair, Atrial Fibrillation III – Cardiostim 2008
2008	Reviewer, Center for Clinical and Translational Science CCTS Pilot Grant Program
2008	Member, Federation of American Societies for Experimental Biology
2007	Grant Reviewer, Nora Eccles Treadwell Foundation
2007	Grant Reviewer, Raine Medical Research Foundation
2007	Ad Hoc Reviewer, VA Career Development Review Panel
2006	Reviewer, ZRG1 CVS D - 02 M Special Emphasis Panel

2006	Reviewer, EmTech Review Panel
2006	Abstract Reviewer, American College of Cardiology
2006	Session Chair, Arrhythmias and Biological Therapies: Promises and Pitfalls - AHA Scientific Sessions 2006
2006	Session Chair, Thomas Smith Memorial Lecture: New Paradigms in Atrial Fibrillation Mechanisms and Therapy - AHA Scientific Sessions 2006
2006	Session Chair, Sodium and Calcium Channels - AHA Scientific Sessions 2006
2005 - 2009	Standing Member, Electrical Signaling, Ion Transport, and Arrhythmias Study Section
2005	Chair, NIH Cardiovascular Sciences Small Business Activities Study Section
2005	Session Chair, Cardiac Electrophysiology Society
2005	Session Chair, Cardiac Electrophysiology Society Annual Meeting - Molecular and Stem Cell Medicine
2004	Ad Hoc Reviewer, NIH Cardiovascular Sciences Small Business Activities
2004	Ad Hoc Reviewer, CVS BRP Review Committee
2004	Non-Standing Member NIH ZRG1CVS-G(02) Special Emphasis Review Panel
2004	Reviewer, NIH Cardiovascular Differentiation and Development Study Section
2004	Grant Reviewer, United States-Israel Binational Science Foundation
2004	Poster Session Moderator, American Heart Association
2004	Abstract Reviewer, American College of Cardiology
2004	Session Chair, Ion Channels and Membrane Transporters: American Heart Association Annual Scientific Session
2004	Session Chair, Cardiovascular Tissue Engineering: From Basic Biology to Cell-Based Therapies
2003 - Current	Ad Hoc Reviewer, National Medical Research Council Singapore
2003 - 2005	Member, VHA Physician Productivity and Staffing Advisory Committee
2003 - 2004	Member, VA Cardiology Field Advisory Committee
2003	Grant Reviewer, Nora Eccles Treadwell Foundation
2003	Ad Hoc Reviewer, NIH Cardiovascular B Study Section
2003	Ad Hoc Reviewer, DOE Radiopharmaceuticals and Molecular Nuclear Medicine Science Research Review
2003	Session Chair, Atrial Remodeling: American Heart Association Annual Scientific Session
2003	Session Chair, VA National Heart Failure Conference
2002 - 2003	Member, American Heart Association Cardiovascular (Patho)Physiology 3 Study Group

2002	Session Chair, Fozzard Symposium/Ion Channel in Heart Disease/International Society for Heart Research
2001 - 2007	Abstract Reviewer, American Heart Association
2001 - 2002	Consultant, AstraZeneca Speaker Bureau
2000	Abstract Reviewer, American Federation of Medical Research
2000	Session Chair, Sodium Channels: Biophysical Society
1998	Session Chair, Potassium Channels and Coronary Vascular Tone: American College of Cardiology

EDITORSHIPS & EDITORIAL BOARDS

2011 - Current	Editorial Board, <i>Frontiers in Cardiac Electrophysiology</i>
2011 - Current	Editorial Board, <i>Journal of the American College of Cardiology</i>
2007 - Current	Editorial Board, <i>The Open Biochemistry Journal (OBIO)</i>
2003 - Current	Editorial Board, <i>Journal of Cardiovascular Pharmacology and Therapeutics</i>

MANUSCRIPT REVIEWER

2008 - Current	<i>Biomaterials</i>
2008 - Current	<i>Heart Rhythm</i>
2007 - Current	<i>Circulation – Arrhythmias and Electrophysiology</i>
2007 - Current	<i>Human Genetics</i>
2007 - Current	<i>Cardiovascular Research</i>
2007 - Current	<i>Cardiovascular Genomics</i>
2007 - Current	<i>Age</i>
2007 - Current	<i>Human Genetics</i>
2006 - Current	<i>Experimental Biology and Medicine</i>
2006 - Current	<i>Journal of Molecular and Cellular Cardiology</i>
2006 - Current	<i>Experimental Biology and Medicine</i>
2006 - Current	<i>Stem Cells</i>
2005 - Current	<i>Genomics</i>
2004 - Current	<i>FASEB Journal</i>
2004 - Current	<i>Journal of Physiology</i>
2004 - Current	<i>Stem Cells</i>
2003 - Current	<i>Development</i>
2003 - Current	<i>Circulation Research</i>

2003 - Current	<i>Journal of the American College of Cardiology</i>
2003 - Current	<i>Trends in Cardiovascular Medicine</i>
2003 - Current	<i>Journal of Experimental Biology</i>
2002 - Current	<i>American Journal of Medical Sciences</i>
2002 - Current	<i>British Journal of Pharmacology</i>
2002 - Current	<i>Journal of Neurochemistry</i>
2001 - Current	<i>General Pharmacology</i>
2001 - Current	<i>PACE</i>
2001 - Current	<i>Life Sciences</i>
1999 - Current	<i>Circulation</i>
1999 - Current	<i>Cells, Tissues, Organs</i>
1999 - Current	<i>Biophysical Journal</i>
1998 - Current	<i>American Journal of Physiology</i>

UNIVERSITY COMMITTEES

2009 - 2010	Member, Selection Committee for the Clinical Practice and Business Development Director, University of Illinois at Chicago
2009 - 2010	Chair, Selection Committee for the Chair of the Emergency Medicine Department, University of Illinois at Chicago
2007 - Current	Member, Junior Faculty Development Committee University of Illinois at Chicago
2007	Member, Institutional Research Faculty Advisory Group, Emory University
2005 - 2007	Member, Faculty Development Advisory Committee, Emory University
2005	Member, University of Virginia Jefferson Scholars Selection Committee
2004 - 2007	Reviewer, Emory Egleston Children's Research Center Seed Grants
2004 - 2005	Committee Member, Search Committee for the Assistant Dean for Faculty Development, Emory University
2003 - 2006	Member, MD/PhD Admissions Committee, Emory University
2001 - 2003	Member, Commission on Research at Emory

HOSPITAL COMMITTEES

2008 - 2009	Member, Selection Panel for the Chief, Medical Service at the Jesse Brown VA
2002 - 2003	Member, Heart Center Research & Technology Advancement Subcommittee, Atlanta VA Medical Center
1999 - 2000	Chairman, VA Clinical Pathway Guidelines Committee, Ischemic Subcommittee, Atlanta VA Medical Center

1998 - 2003 Member, VA Research and Development Committee, Atlanta VA Medical Center
 1998 - 2000 Chairman, VA CPR Committee, Atlanta VA Medical Center

MEMBERSHIP IN SOCIETIES

2012 - Current Member, Association of Professors Cardiology
 2010 - Current Member, Association of University Cardiologists
 2009 - Current Member, Heart Rhythm Society
 2002 - Current Member, Cardiac Electrophysiology Society
 2000 - Current Member, Cardiac Muscle Society
 2000 - Current Member, Society of General Physiologists
 1997 - Current Member, American Heart Association Basic Science Council
 1996 - Current Member, American College of Cardiology (Fellow)
 1996 - Current Member, Biophysical Society
 1989 - Current Member, Sigma Zeta - Honorary Science Society
 1989 - Current Member, Alpha Omega Alpha
 1988 - Current Member, New York Academy of Sciences
 1985 - Current Member, Alpha Epsilon Delta - Premedical Honor Society
 1985 - Current Member, Phi Beta Kappa
 1985 - Current Member, Phi Kappa Phi - Honor Society
 1985 - Current Member, Sigma Xi - Research Honor Society

PUBLICATIONS

PEER REVIEWED PUBLICATIONS (PUBLISHED AND ACCEPTED)

1. SOVARI, A., RUTLEDGE, C., JEONG, EM., DOLMATOVA, E., ARASU, D., LIU, H. VADANI, N., GU, L., ZANDIEH, S., XIAO, L., BONINI, MG., DUFFY, HS., DUDLEY, SC. Mitochondria Oxidative Stress, Connexin43 Remodeling, and Sudden Arrhythmic Death. (2013). Circ Arrhythm Electrophysiol. PMID: 23559673.
2. SIMPSON, DL., DUDLEY, SC. Modulation of human mesenchymal stem cell function in a three-dimensional matrix promotes attenuation of adverse remodelling after myocardial infarction. (2013). J Tissue Eng Regen Med. 7(3): 192–202. PMID: 22095744.
3. GAO, G., DUDLEY, SC. RBM25/LUC7L3 Function in Cardiac Sodium Channel Splicing Regulation of Human Heart Failure. (2013). Trends Cardiovasc Med. 23(1):5-8. PMID: 22939879. PMCID: PMC3532530.
4. LIU, M., GU, L., SULKIN, MS., LIU, H., JEONG, EM., GREENER, I., XIE, A., EFIMOV, IR., DUDLEY, SC. Mitochondrial Dysfunction Causing Cardiac Sodium Channel Downregulation in Cardiomyopathy. (2013). J Mol Cell Cardiol. 54:25–34. PMID: 23123323. PMCID: PMC3595554.

5. JEONG, E.M., MONASKY, M.M., GU, L., TAGLIERI, D.M., PATEL, B.G., LIU, H., WANG, Q., GREENER, I., DUDLEY, S.C., SOLARO, R.J. Tetrahydrobiopterin Improves Diastolic Dysfunction by Reversing Changes in Myofilament Properties. (2013). *J Mol Cell Cardiol.* 56: 44-54. PMID: 23247392.
6. BLANCO, R.R., AUSTIN, H., VEST, R.N., VALADRI, R., LI, W., LASSEGUE, B., SONG, Q., LONDON, B., DUDLEY, S.C., BLOOM, H.L., SEARLES, C.D., ZAFARIM, A.M., Angiotensin receptor type 1 single nucleotide polymorphism 1166A/C is associated with malignant arrhythmias and altered circulating miR-155 levels in patients with chronic heart failure. (2012). *J Card Fail.* 18(9):717-723. PMID: 22939041. PMCID: PMC3640363.
7. SOVARI, A., DUDLEY, SC., Gene and Cell Therapies for the Failing Heart to Prevent Sudden Arrhythmic Death. (2012). *Minerva Cardioangiol.* 60(4):363-373. PMID: 22858914. PMCID: PMC3655203.
8. SOVARI, A., DUDLEY, SC., Reactive Oxygen Species-Targeted Therapeutic Interventions for Atrial Fibrillation. (2012). *Front Physiol.* 3:311. PMID: 22934062. PMCID: PMC3429082.
9. SOVARI, A., DUDLEY, SC., Antioxidant Therapy for Atrial Fibrillation: Lost in Translation? (2012). *Heart.* 98(22):1615-1616. PMID: 22895646. PMCID: PMC3651833.
10. LIANG, Y., ROEDE, J., DIKALOV, S., MILLER, N., DUDLEY, SC., QUYYUMI, A., JONES D., Determination of Ebselen-Sensitive Reactive Oxygen Metabolites (ebROM) in Human Serum Based Upon N,N' -Diethyl-1,4-Phenylenediamine Oxidation, (2012). *Clinica Chimica Acta.* 414: 1-6. PMID: 22687643. PMCID: PMC3662006.
11. JEONG, EM., LIU, M., STURDY, M., VARGHESE, S., SOVARI, A., DUDLEY, SC. Metabolic stress, reactive oxygen species, and arrhythmia. (2012). *J Mol Cell Cardiol.* 52(2): 545-463. PMID: 21978629. PMCID: PMC3264827.
12. LOVELOCK, J., MONASKY, M.M., JEONG, E.M., LARDIN, H.A., LIU, H., PATEL, B.G., TAGLIERI, D.M., GU, L., KUMAR, P., POKHREL, N., ZENG, D., BELARDINELLI, L., SORESCU, D., SOLARO, R.J., DUDLEY, SC. Ranolazine Improves Cardiac Diastolic Dysfunction through Modulation of Myofilament Calcium Sensitivity. (2012). *Ci. Res.* 110:841-850. PMID: 22343711. PMCID: PMC3314887.
13. NEGI, S., JEONG, EM., SHUKRULLAH, I., RAICU, M., DUDLEY, SC. Association of Low Plasma Adiponectin with Early Diastolic Dysfunction. (2012). *Congest Heart Fail.* 18(4):187-191. PMID: 22809257. PMCID: PMC3646250.
14. REFAAT, M., LUBITZ, S., SEIKO, S., ISLAM, Z., FRANGISKAKIS, M., MEHDI, H., GUTMANN, R., ZHANG, M., BLOOM, H., MACRFAE C., DUDLEY, SC., SHALABY, A., WEISS, R., MCNAMARA, D., LONDON, B., ELLINOR, P. Genetic Variation in the Alternative Splicing Regulator, RBM20, is associated with Dilated Cardiomyopathy. (2012). *Heart Rhythm.* 9(3):390-6. PMID: 22004663. PMCID: PMC3516872.
15. SIMPSON, D.L., BOYD, N.L., STICE, S.L., DUDLEY, SC. Use of Human Embryonic Stem Cell Derived-Mesenchymal Cells for Cardiac Repair. (2012). *Biotechnol Bioeng.* 109(1):274-83. PMID: 21837664. PMCID: PMC3220775.
16. WANG, T., LANG, G., MORENO-VINASCO, L., HUANG, Y., GOONEWARDENA, S., PENG, Y., SVENSSON, E., NATARAJAN, V., LANG, R., LINARES, J., BREYSSE, P., GEYH, A., SAMET, J., LUSSIER, Y., DUDLEY, SC., PRABHAKAR, N., GARCIA, J.. Particulate Matter Induces Cardiac Arrhythmias

via Dysregulation of Carotid Body Sensitivity and Cardiac Sodium Channels. (2012). *Am J Respir Cell Mol Biol.* 46(4):524-531. PMID: 22108299.

17. ABREU-VELEZ, AM., SMOLLER, BR., GAO, W., GROSSNIKLAUS, HE., JIAO, Z., ARIAS, LF., DUDLEY, SC., HOWARD, MS. Varicella-zoster virus (VZV) and alpha 1 antitrypsin: a fatal outcome in a patient affected by endemic pemphigus foliaceus. (2012). *Int J Dermatol.* 51(7):809–816. PMID: 22715825.
18. REED, A., TANAKA, A., SORESCU, D., LIU, H., JEONG, EM., STURDY, M., WALP, E, DUDLEY, SC., SUTLIFF, RL. Diastolic Dysfunction is Associated with Cardiac Fibrosis in the Senescence-Accelerated Mouse. (2011). *Am J Physiol Heart Circ Physiol.* 301(3):H824-831. PMID: 21724869. PMCID: PMC3191096.
19. SOVARI, A., IRAVANI, S., DOLMATOVA, E., JIAO, Z., LIU, H., ZANHIEH, S., KUMAR, V., WNAG, K., BERNSTEIN K., BONINI, M., DUFFY, H., DUDLEY, SC. Inhibition of c-Src Tyrosine Kinase Prevents Angiotensin II-Mediated Connexin43 Remodeling and Sudden Cardiac Death. (2011). *J Am Coll Cardiol.* 58 (22):2332-9. PMID: 22093512. PMCID: PMC3226807.
20. SOVARI, A., BONINI, M., DUDLEY, SC. Effective Antioxidant Therapy for the Management of Arrhythmia, (2011). *Expert Rev Cardiovas Ther.* 9:797-800. PMID: 21809958.
21. NEGI, S., SOVARI, A., DUDLEY, SC. Atrial Fibrillation: The Emerging Role of Inflammation and Oxidative. (2011). *Cardiovasc Haematol Disord Drug Targets.* 10(4):262-268. PMID: 20932266.
22. IRAVANI, S., B.S. HARRIS, H.D. XIAO, Z. JIAO, E.A. WITHAM, R.G. GOURDIE, K.E. BERNSTEIN, DUDLEY, SC. Connexin43 (Cx43) Phosphorylation State Correlates with Ventricular Tachycardia Risk in a Model of Cardiac Renin-Angiotensin System (RAS) Activation. (2011). *J Mol Med.* 89:677-687. PMID: 21724869.
23. MISHRA, R., VIJAYAN, K., COLLETTI, E.J., HARRINGTON, D.A., MATTHIESEN, T.S., SIMPSON, D., GOH, S.K., WALKER, B., ALMEIDA-PORADA, G., WANG, D., BACKER, C.L., DUDLEY, S.C. JR, WOLD, L.E., KAUSHAL, S., Characterization and Functionality of Cardiac Progenitor Cells in Congenital Heart Patients. (2011). *Circulation.* 4:364-373. PMID: 21242485. PMCID: PMC3320857.
24. IRAVANI, S., SOVARI, A.A., LARDIN, H.A., LIU, H., XIAO, H.D., DOLMATOVA, E., JIAO, Z., HARRIS, B.S., WITHAM, E.A., GOURDIE, R.G., DUFFY, H.S., BERNSTEIN, K.E., DUDLEY, S.C., JR. Inhibition of Renin-Angiotensin System (RAS) Reduces Ventricular Tachycardia Risk by Altering Connexin43. (2011). *J Mol Med.* 89(7):677-687. PMID: 21553032. PMCID: PMC3156477.
25. ABREU-VALEZ, AM., HOWARD, M., JIO, Z., GAO, W., GROSSNIKLAUS, H., DUQUE-RAMIREZ, M., DUDLEY, SC. Cardiac autoantibodies from patients affected by a new variant of endemic pemphigus foliaceus in Colombia, South America. (2011). *J of Clin Immunol.* 31(6):985-97. PMID: 21796504. PMCID: PMC3380437.
26. NEGI, S., SHUKRULLAH, I., VELEDAR, E., BLOOM, H.L., JONES, D.P., DUDLEY, S.C., JR., Satin Therapy for the Prevention of Atrial Fibrillation Trial (SToP AF trial). (2011). *J Cardiovasc Electrophysiol.* 22:414-419. PMID: 20946227. PMCID: PMC3022954
27. GAO, G., XIE, A., HUANG, S. , ZHOU, A., ZHANG, J., HERMAN, A., GHASSEMZADEH, S., JEONG, E.M., SOBIESKI, M., BHAT, G., TATOOLES, A., BENZ, E., KAMP, T., DUDLEY, S.C. JR. The Role of the RBM25/LUC7L3 in Abnormal Cardiac Sodium Channel Splicing Regulation in Human Heart Failure. (2011). *Circulation.* 124:1124-1131. PMID: 21859973. PMCID: PMC3172047.

28. DUDLEY, S.C., JR., Ion channelopathies: A tapped out mine? (2010). Am. J. Physi - Heart Circ. Physiol. 300:H716-H717. PMID: 21193585.
29. LIU, M., LIU, H., DUDLEY, S.C. Reactive Oxygen Species Originating from Mitochondria Regulate the Cardiac Sodium Channel. (2010). Cir Res. 107:967-974. PMID: 20724705. PMCID: PMC2955818.
30. BLOOM, H.L., I. SHUKRULLAH, E. VELEDAR, R. GUTTMAN, B. LONDON, S.C. DUDLEY, Jr. Statins Decrease Oxidative Stress and ICD Therapies. (2009). Cardiology Research and Practice. Cardiol Res Pract. 2010:253803. PMID: 20369058. PMCID: PMC2847377.
31. SILBERMAN, G.A., T.M. FAN, H. LIU, Z. JIAO, H.D. XIAO, J.D. LOVELOCK, B.M. BOULDEN, J. WIDDER, S. FREDD, K.E. BERNSTEIN, B. WOLSKA, S. DIKALOV, D.G. HARRISON, S.C. DUDLEY, Jr. Uncoupled Cardiac Nitric Oxide Synthase Mediates Diastolic Dysfunction. (2010). Circulation. 121:519-528. PMID: 20083682. PMCID: PMC2819317.
32. LIU, M., S. SANYAL, I. GURUNG, X. ZHU, G. GACONNET, L. KERCHNER, L. SHANG, C. HUANG, A. GRACE, B. LONDON, S.C. DUDLEY, Jr. Cardiac Na⁺ Current Regulation by Pyridine Nucleotides. (2009). Circ. Res. 105:737-45. PMID: 19745168. PMCID: PMC2773656.
33. SIMPSON, D., S.C. DUDLEY, Jr. Lost in Translation: What is Limiting Cardiomyoplasty and Can Tissue Engineering Help? (2009). Curr. Stem. Cell Res Ther. 4:210-23. PMID: 19492979. PMCID: PMC3164232.
34. GAO, G. S.C. DUDLEY, Jr. Redox regulation, NF-κB, and atrial fibrillation. (2009). Antioxidants & Redox Signaling. 11:2265-2277. PMID: 19309257. PMCID: PMC2819799.
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36. ALI B., S.C. DUDLEY, Jr., A.M. ZAFARI. Time to Defibrillation after In-Hospital Cardiac Arrest. (2008). N. Engl. J. Med. 358:1632-3. PMID: 18411426.
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INVITED PRESENTATIONS

INVITATIONS TO NATIONAL OR INTERNATIONAL CONFERENCES

1. 51st National Congress of the Romanian Society of Cardiology, Monitoring the Risk for Sudden Cardiac Death, 2012
2. ESC Press Conference, ESC Congress 2012, A Blood Test for Sudden Death, 2012
3. American Heart Association's Specialty Conference 2012 – Scientific Sessions, Mitochondria and Sodium Channel Function, 2012
4. Heart Rhythm 2012, 33rd Annual Scientific Session, Kinases and Phosphatases – Novel Targets for Antiarrhythmic Therapy, 2012
5. 14th World Society of Arrhythmias Congress, Experimental Rationale for Upstream Targets, 2011
6. Heart Failure Society of America- 15th Annual Scientific Meeting, Mitochondrial ROS and Arrhythmias, 2011
7. American Heart Association's Specialty Conferences in 2010 - Scientific Sessions , Alternative Cardiac Sodium Channel Splicing in Circulating White Blood Cells of Heart Failure Patients, 2010
8. American Heart Association's Specialty Conferences in 2010 - Scientific Sessions , c-Src Tyrosine Kinase Is a Potential Therapeutic Target to Prevent Angiotensin-II Mediated Connexin43 Remodeling and Ventricular Arrhythmia, 2010
9. American Heart Association's Specialty Conferences in 2010 - Scientific Sessions , Impaired Sympathetic Activity in Diastolic Dysfunction, 2010
10. American Heart Association's Specialty Conferences in 2010 - Scientific Sessions , Ranolazine Improves Cardiac Diastolic Dysfunction Through Modulation of Myofilament Calcium Sensitivity, 2010
11. American Heart Association's Specialty Conferences in 2010 - Scientific Sessions , Low Plasma Adiponectin Levels are Associated with Early Diastolic Dysfunction Independent of Obesity, 2010
12. 30th Annual Scientific Sessions, Science. Discovery. Innovation. Leading Experts Collaborating to Share Today's Innovations and Meet Tomorrow's Challenges, 2009
13. American Society for Clinical Investigation and Association of American Physicians, The ASCI/AAP Joint Meeting, 2009
14. Gordon Conference , Cardiac Arrhythmia Mechanisms , 2009
15. Gordon Conference , Cardiac Regulatory Mechanisms , 2008
16. California Heart Rhythm Symposium, The renin-angiotensin axis and human arrhythmias, 2007
17. Keystone Conference, Heart failure is associated with abnormal C-terminus splicing variants in cardiac sodium channel, 2007

18. Keystone Conference, Diastolic Dysfunction: The Role of Oxidative Stress and Uncoupled Nitric Oxide Synthase, 2007
19. Keystone Conference, Molecular Biology of Cardiac Diseases and Regeneration , 2005
20. Gordon Conference, Cardiac Arrhythmia Mechanisms , 2005
21. 25th Annual Scientific Sessions of NASPE, CONTROVERSIES IN BASIC/TRANSLATIONAL SCIENCE: Cardiac Cell Transplantation is Inherently Proarrhythmic and Unsafe, 2004
22. Gordon Conference, Cardiac Arrhythmia Mechanisms, 2003
23. European Society of Cardiology, Arrhythmogenic risk of embryonic stem cells, 2003
24. Gordon Conference , Cardiac Regulatory Mechanisms, 2002
25. Gordon Conference, Ion Channels, 2002
26. Gordon Conference, Cardiac Regulatory Mechanisms , 2000
27. Gordon Conference, Cardiac Regulatory Mechanisms , 1998

LECTURESHIPS, SEMINAR INVITATIONS, AND VISITING PROFESSORSHIPS

1. Career and Seminar, STEM Symposium, Malcolm X College, Chicago, 2012
2. The Continuing Value of Arts & Sciences Education, Echols Scholars Program, University of Virginia, 2012
3. Mitochondrial Reactive Oxygen Species and Arrhythmias, Pulmonary Hypertension Seminar Series, University of Illinois at Chicago, 2012
4. New Treatments for Heart Failure with Preserved Left Ventricular Function, Fuwai Hospital, Peking Union Medical College, Beijing, China, 2012
5. Steps and Missteps of a Clinical Scientists, The Second Hospital of Lanzhou University, Lanzhou, Gansu, China, 2012
6. How to be a Good Medical Scientist, The Second Hospital of Lanzhou University, Lanzhou, Gansu, China, 2012
7. Na⁺ Channels and Heart Failure, Ion Channels Course, University of Illinois at Chicago, 2012
8. Mitochondrial Reactive Oxygen Species and Arrhythmias, Feinberg Cardiovascular Research Institute, Northwestern University, Chicago, IL, 2011
9. Role of Statins, 14th World Congress of the Society of Arrhythmias/ICPES, Athens, Greece, 2011
10. A Blood Test to Predict Arrhythmic Risk, European Society of Cardiology Congress Paris, France, 2011
11. New treatments for Heart Failure with Preserved Left Ventricular Function, 9th Annual CHFR Symposium, University of Oslo, Oslo, Norway, 35th Meeting of the ESC Working Group on Cardiac Cellular Electrophysiology, Oslo, Norway, 2011
12. Linking Cardiac Metabolism and Arrhythmic Risk, 55th Biophysical Society Annual Meeting, Baltimore, Maryland, 2011

13. Abnormal cardiac sodium channel mRNA splicing in human heart failure and the possibility of a blood test to help predict arrhythmic risk, Association of University Cardiologists, Phoenix, Arizona, 2011
14. Linking Cardiac Metabolism and Arrhythmic Risk, University of Utah, 2010
15. Second Annual Biology Career Seminar, Malcolm X College, Chicago, 2010
16. The California Heart Rhythm Symposium, Metabolism and Excitability in Arrhythmias, David Geffen School of Medicine at UCLA, Los Angeles, 2010
17. Implantable Cardioverter Defibrillator Therapy for Patients Presenting with Cardiac Arrest in the Context of Acute Myocardial Infarction, ACC.10 & i2 Summit Final Program, Atlanta, 2010
18. c-Src tyrosine kinase inhibition improves renin-angiotensin system-induced connexin 43, downregulation, Paradigm Shift to Integrated Cardiology – Gene, Function and Life XX World Congress ISHR, Kyoto, Japan, 2010
19. Statin Therapy for Prevention of Atrial Fibrillation Trial (SToP AF trial), The Quality of Care and Outcomes Research in Cardiovascular Disease and Stroke, Washington, DC, 2010
20. Use of Cardiac Patch in the Delivery of Stem Cells, AHA Scientific Sessions, Orlando, 2009
21. Cardiac Diastolic Dysfunction: Is NO the Right Answer?, Thorek Memorial Hospital, Chicago, 2009
22. Risk Stratification and Sudden Cardiac Death Outcomes, Heart Rhythm Society 30th Annual Scientific Sessions, Boston, 2009
23. The tail of the sodium channel: A possible explanation of the CAST Trial, Massachusetts General Hospital CV Research Center, Boston, 2009
24. Steps and missteps of a clinician scientist, UIC Medical Scientist Training Program Graduation Seminar and Banquet, 2009
25. HaRASSing the heart: The renin-angiotensin system, connexin 43, and arrhythmias, Beth Israel Deaconess Medical Center, Harvard Medical School, 2009
26. HaRASSing the heart: The renin-angiotensin system and arrhythmias, Northwestern University Cardiology Grand Rounds, 2008
27. Cardiac Diastolic Dysfunction: Is NO the right answer?, University of Cincinnati Cardiology Grand Rounds, 2008
28. The shocking truth about resuscitation, Heart Rhythm Society VA Electrophysiology Group meeting, 2008
29. Sodium channel arrhythmias – genetics, treatment & mechanism, The University of Calgary, 2008
30. The renin-angiotensin axis and arrhythmias, The University of Chicago, 2008
31. Heart Failure – New ideas on the mechanism of diastolic dysfunction and on approaches for cell replacement, Rush University, 2007
32. Works in Progress - A tail of the cardiac Na⁺ channel, University of Illinois at Chicago, 2007
33. MD/PhD retreat speaker, Medical College of Virginia, 2007

34. Oxidative stress and the pathogenesis of arrhythmia, UCLA, 2007
35. Oxidative stress and the pathogenesis of arrhythmia, Medical College of Virginia, 2007
36. Why are angiotensin II inhibitors antiarrhythmic?, Boehringer Ingelheim, 2007
37. Oxidative stress and the pathogenesis of arrhythmia, Emory University - Physiology Department, 2007
38. Oxidative stress and diastolic heart dysfunction, Biomarin, Inc., 2007
39. What do atrial fibrillation & CAD have in common?, Grady Memorial Hospital Grand Rounds, 2007
40. Oxidative stress and the pathogenesis of arrhythmia, University of Illinois at Chicago, 2006
41. Oxidative stress and the pathogenesis of arrhythmia, University of Louisville, 2006
42. Sodium channel regulation and arrhythmic risk, CV Therapeutics, 2006
43. Oxidation and arrhythmias: results of clinical trials, Grady Memorial Hospital Grand Rounds, 2006
44. Oxidative stress and the pathogenesis of arrhythmia, University of Utah, 2006
45. Preventing Health Failure: Cardiac Regenerative Medicine, Predictive Health Conference - Emory University, 2005
46. Oxidative stress and the pathogenesis of arrhythmia, Medical Grand Rounds - Emory University, 2005
47. Oxidative stress and the pathogenesis of atrial fibrillation, University of Iowa, 2005
48. Endocardial Remodeling During Atrial Fibrillation: The Origin of Redox, Heart Rhythm 26th Annual Scientific Sessions, 2005
49. Cardiac cell transplantation: how does it work, and is it arrhythmogenic?, Greece 20th International Meeting on Clinical Cardiology, 2005
50. Oxidative Stress & Arrhythmias: Two New Trials, Emory University, 2005
51. Stem Cell Therapy for Cardiac Disease: How Does it Work and is it Safe?, GTEC Cardiovascular Retreat, 2005
52. Oxidative stress in the pathogenesis of atrial fibrillation, University of Alabama Cardiology Grand Rounds, 2005
53. Atrial fibrillation and inflammation: New data, Vascular Biology Working Group, 2004
54. Electrophysiology of stem cell derived cardiomyocytes, University of Maryland, 2004
55. Electrophysiology of stem cell derived cardiomyocytes, University of Alabama, 2004
56. Stem Cell-Mediated Changes in Cardiac and Coronary Function After Myocardial Infarction, Eighth Annual Hilton Head Workshop on Cardiovascular Tissue Engineering, 2004
57. Molecular alterations in endocardial and atrial myocyte function in atrial fibrillation: Similarities to atherosclerosis, 9th Annual Global Chapter Meeting of the Vascular Biology Working Group, 2003

58. Vascular biology of atrial fibrillation: Potential mechanisms for thrombosis and stroke, VBWG AF National Faculty Update Conference, 2003
59. Stem cells and arrhythmia: Will cardiac cell transplantation be safe?, University of Pittsburgh, 2003
60. Cardiotoxicity assays, National Academy of Sciences, 2003
61. Atrial fibrillation: Are we treating the right disease?, Washington, DC VA Medical Center, 2003
62. Atrial fibrillation: Are we treating the right disease?, Loyola University, 2003
63. Stem cells and arrhythmia: Will cardiac cell transplantation be safe?, Northwestern University, 2003
64. Stem cells and arrhythmia: Will cardiac cell transplantation be safe?, Cell Transplant Society Annual Meeting, 2003
65. Do we need more clinical trials in atrial fibrillation?, Emory Center for Outcomes Research, 2003
66. Stem cells and arrhythmia: Will cardiac cell transplantation be safe?, Emory University/MSP Program, 2003
67. Atrial fibrillation and atherosclerosis: What do they have in common?, Emory University. 2003
68. Disordered Sarcoplasmic Reticulum Ca^{2+} Release May Contribute to Arrhythmic Risk in Heart Failure, Molecular Pathology of Cardiac Arrhythmias- a Keystone Symposium, 2003
69. Atrial fibrillation: Are we treating the right disease?, Emory University, 2003
70. Stem Cells and Arrhythmia: Will Cardiac Cell Transplantation be Safe?, Medical College of Virginia, 2002
71. Stem Cell Derived Cardiomyocytes Show Arrhythmic Potential, Georgia Institute of Technology, 2002
72. Genetics and Stem Cells: Biological, Ethical and Institutional Dimensions., Emory University, 2002
73. The Science and Ethics of Stem Cell Research (Everything You Always Wanted to Know), Emory University, 2002
74. Stem Cell Derived Cardiomyocytes Show Arrhythmic Potential, American Heart Association (Dallas), 2002
75. Stem cell derived cardiomyocytes show arrhythmic potential, University of California San Francisco, 2002
76. Stem Cell Derived Cardiomyocytes Show Arrhythmic, AHFMR Visiting Lecturer/Univ. of Calgary, 2001
77. Potential Refining a Model of the Na Channel Outer Vestibule, Based on Interactions with Several Toxins, AHFMR Visiting Lecturer/Univ. of Calgary, 2001
78. Modeling Arrhythmia with Stem Cell Derived Cardiomyocytes, University of North Carolina, 2001
79. Nitric Oxide Modulation by Hydrogen Peroxide, Angiotensin II, and Atrial Fibrillation, University of North Carolina, 2001
80. Modeling Arrhythmia with Stem Cell Derived Cardiomyocytes, Loyola University, 2001

81. Modeling Arrhythmia with Stem Cell Derived Cardiomyocytes, Vanderbilt University, 2001
82. The Stem Cell Debate: Perspectives from Research, Ethics, and Journalism, American Medical Writers Association/Southeast Chapter, 2001
83. Sodium channel structural biology and possible clinical implications, University of Pittsburgh 2000
84. The Na⁺ channel domain architecture revealed by toxin/channel interactions, University of Calgary, 1999
85. Interactions of μ -conotoxin GIIIA the outer vestibule of the sodium channel localized by mutant cycle analysis, University of Vienna, 1998

PATENTS

ISSUED

1. Method for Predicting Onset/Risk of Atrial Fibrillation
Patent No. US 7,550,299
Issue date: 06/23/2009
2. Modulation of Sodium Channels by Nicotinamide Adenine Dinucleotide
Patent No. US 8,003,324
Issue date: 08/23/2011

PENDING

1. Human Sodium Channel Isoforms
Application No. 11/707,882
Filing date: 02/20/2007
2. Combined provisional patent applications 60/774,226 filed on 02/17/2006 and 60/847,084 filed on 09/26/2006
Methods and Compositions for Treating Diastolic Dysfunction
Application No. 11/895,883
Filing date: 08/27/2007
3. Oxidative Stress Markers Predict Atrial Fibrillation
Application No. 11/882,627
Filing date: 08/03/2007
4. Continuation in part of applications 12/207,985 filed on 9/10/2008 and 60/960,013 filed on 09/11/2007
Marker for Arrhythmia Risk
Application No. 12/725,590
Filing date: 03/17/2010
5. Potential drug targets to prevent arrhythmia in heart disease
Application No. PCT/US2010/034271, US PPA 61/430,462
Filing date: 05/08/2009

6. Late sodium channel blockade for treatment of heart failure with preserved left ventricular function
Application No. PCT/US2010/048650, US 61/443,378
Filing date: September 11, 2009
7. A blood test to differentiate systolic from diastolic heart failure
Application No. PCT/US2010/54096
Filing date: 10/27/2009
8. Prevention of sudden death by modulation of Src family
Application No. 13/032,629
Filing date: 2/19/2010
9. Modulating mitochondrial reactive oxygen species to increase cardiac sodium channel current and mitigate sudden death
Application No. CIP 12/929786
Filing date: 10/17/2008
10. Treatment of heart failure with preserved left ventricular function with antifibrotic agents
Application No. 61/326,300
Filing date: 04/21/2010
11. Biomarkers for Prediction of Stroke Risk in Atrial Fibrillation
Application No. 61/368,941
Filing date: 7/29/2010
12. Sodium channel mRNA splicing in hypertrophic cardiomyopathy
Application No. 61/415,040
Filing date: 11/18/2010
13. Mitochondrial anti-oxidants for prevention of sudden death by raising connexin43 levels
Application No. 61/503,096
Filing Date of 6/30/2011
14. Abnormal Cardiac Sodium Channel mRNA Splicing in Human Heart Failure, a blood test to help predict arrhythmic risk
Application No. 61/430,462
Filing date: 01/06/2011
15. SCN5A Splice Variants for Use in Methods Relating to Sudden Cardiac Death and Need for Implanted Cardiac Defibrillators
Application No. PCT/US2010/20564
Filing date: 11/12/2011
16. Mitochondrial Antioxidants and Diabetes
Application No. 61/728,302
Filing date: 11/20/2012

GRANT SUPPORT

FEDERALLY FUNDED ACTIVE SUPPORT

1. P.I.
NIH STTR
A blood test to predict sudden death risk
\$270,000
07/02/2012-07/01/2013
2. P.I.
NIH R01
Na⁺ channel mRNA splicing in heart failure
\$1,250,000
04/01/2011-3/31/2016
3. P.I.
NIH R01
Metabolic regulation of sodium channels
\$1,250,000
07/01/2011-06/30/2016
4. P.I.
VA Merit
Renin angiotensin system and connexin43
\$600,000
10/1/2010-09/30/2014
5. Co Inv. on NIH P01 (PI Harrison)
R01 within P01 (PI Dudley)
Oxidative stress and left ventricular dysfunction
1,250,000
04/01/2009 -11/30/2013
6. P.I.
NIH T32
Training in the Mechanisms of Cardiovascular Disease
\$2,546,058
08/01/2009 - 07/31/2014

OTHER ACTIVE SUPPORT

1. P.I.
UIC – Office of Technology Management (Proof of Concept)
A Blood Test to Differentiate Systolic from Diastolic Heart Failure
\$75,000

07/02/2012-12/31/2013

PAST FEDERAL SUPPORT

1. P.I.
NIH R01
Stem cell therapy and arrhythmia
\$1,000,000
04/01/2005 - 03/31/2010
2. P.I.
NIH R01
Oxidative Stress and Diastolic Dysfunction
4/1/2008 -3/31/2009 (overlapped with P01 above, relinquished by PI)
3. P.I.
NIH R01
Angiotensin converting enzyme, angiotensin II, and arrhythmia
\$1,000,000
07/01/2007 - 06/30/2011
4. P.I.
VA Merit
Nitric Oxide and the Pathogenesis of Atrial Fibrillation
\$560,000
04/01/2003 - 03/31/2007
5. P.I.
VA MERIT - declined
Evaluation of the Sodium Channel Outer Vestibule
\$0.00
01/01/2000 – 12/31/2004
6. P.I.
VA MERIT - declined
Angiotensin converting enzyme, angiotensin II, and arrhythmia
\$0
04/01/2007 - 03/31/2011
7. Co-P.I.
NHLBI, NIH
Regulation of Vascular Function by the Endothelium
\$1,318,953
01/01/2001 - 01/01/2006
8. P.I.
NHLBI, NIH

Evaluation of the Sodium Channel Outer Vestibule
\$650,000
06/10/2000 - 05/31/2005

9. P.I.
Environmental Protection Agency
A Mechanistic Study of Halocarbon/Epinephrine Induced Arrhythmias
\$74,000
08/01/2004 - 07/31/2004

PAST PRIVATE FOUNDATION SUPPORT

1. P.I.
Takeda Pharmaceuticals
Educational Grant
\$10,000
10/01/2009 - 12/31/2010
2. P.I.
American Heart Association
Established Investigator
\$500,000
01/01/2004 - 12/31/2009
3. P.I.
Pfizer Pharmaceuticals
Atorvastatin therapy for the prevention of atrial fibrillation
\$287,500
4. Co- P.I.
Medtronic
The Relationship Between Angiotensin Converting Enzyme (ACE insertion/deletion [I/D]) and the Angiotensin II Type 1 Receptor (AGTR1 A1166C) Polymorphisms and Ventricular Arrhythmias in a Large Patient Cohort Treated With Implantable Cardiac Defibrillators
\$50,000
07/09/2006 - 07/09/2007
5. P.I.
Procter and Gamble
Development of differentiated mouse embryonic stem cells for the study of arrhythmia
\$150,000
01/01/1998 - 01/01/2002
6. P.I.
Southeast Affiliate American Heart Association
Experimental Evaluation of a Molecular Model of the Na Channel Outer Vestibule
\$60,000
07/01/1998 - 06/30/2000

7. P.I.
Atlanta Research and Education Foundation
A Model of Idiopathic Ventricular Fibrillation
\$25,000
09/21/1998 - 09/21/1999
8. P.I.
Pfizer
A Differentiated Embryonic Stem Cell Model of an Inherited Arrhythmia
\$0
07/01/1998 - 07/01/1998

PAST CONTRACTS

1. P.I.
Guidant
REFLEx
\$13,000
01/01/2004 - 01/01/2006
2. P.I.
Medtronic
MAVRIC VR
\$13,000
01/01/2004 - 01/01/2006
3. P.I.
Guidant
Assessment of Bipolar versus Unipolar Pacing Thresholds Registry (ASSESS)
\$5,250
11/01/2003 - 10/31/2005
4. P.I.
NIH
Home AED Trial
\$43,750
03/01/2003 - 03/01/2008
5. P.I.
Guidant
Silent atrial fibrillation detection with stored EGMs (SAFE Study)
\$28,000
10/01/2001 - 10/01/2004
6. P.I.
Aventis Pharmaceuticals
A Prospective randomized, open-label, multicenter study in patients with acute coronary

syndromes (ACS) (SYNERGY Study)
 \$40,000
 04/01/2001 - 04/01/2004

7. P.I.
 Proctor & Gamble
 A Double-Blind, placebo-controlled, paralalled design study to determine the effect of 75 or 100mg of orally administered Azimilide Dihydrochloride verses Placebo on survival in recent post-myocardial infarction patients at risk of sudden death(ALIVE Study)
 \$45,000
 07/18/1998 - 06/11/2001

TEACHING ROLES

MEDICAL STUDENT TEACHING

2010	CPP Lecture – Fall Semester - Cardiac Arrhythmias (2 Hours)
2009 - 2010	Sodium Channels Course (2 Hours)
2008	Clinical Pathophysiology Fall Semester – Arrhythmias (2 hours)
2008	Medical Science 751.09 Ion Channel Diseases Winter Session - Sodium Channel arrhythmias – genetics, treatment & mechanism (University of Calgary)
2006	MD/PhD Clinical Research Conference
2006	Sophomore electives - Atrial fibrillation
2005	Sophomore electives - Atrial fibrillation: New thoughts on an old disease
2004	Drug Therapy of Cardiac Arrhythmias
2001 - 2004	MD/PhD Program Clinical Conference (4 hours/year)
2001	ACP/ASIM ECG Interpretation for the Practicing Internist (2 hours)
2000	Junior Oral Exam at VA
1999 - 2007	C-02 School of Medicine Clinical Elective - Clinical Cardiology (VAMC) - Course Director
1998 - 2007	Mechanisms in Cardiovascular Diseases: From the Bench to the Bedside (2 hour session/year)
1998	Cardiac Gross Anatomy
1998	Clinical Methods (1 afternoon/week for 9 weeks)

GRADUATE PROGRAM

2008	PhyB 540 - Sodium channel structure, physiology, pharmacology, and channelopathies (UIC Graduate Students, 2 hours)
2008	PHYB 518 Arrhythmogenesis Course (UIC Graduate Students, 2 hours)
2007	BMED6793 - Pathophysiology of Heart Failure (1.33 hours)
2006	Oglethorpe University Biomedical Ethics lecture

2006	BMED6793 - Pathophysiology of Heart Failure (1.33 hours)
2005	Pathophysiology course (BMED6793) - Heart Failure, Arrhythmia, Stem Cell Therapeutics (2 hours)
2005	BMED6793 - Pathophysiology of Heart Failure (1.33 hours)
2004	Biomedical Engineering, Physiologic Systems II, Clinical/Physiological Prospective on Heart Failure (1.25 hours)
2004	BMED/ ME 6793, BMED8121: Systems Pathophysiology
2003 - 2007	BME PhD Qualifying Examination Committee Member
2003	BME Clinical Trials Seminar
2003	Biomedical Engineering, Physiologic Systems II, Introduction to Cardiovascular Physiology (1.25 hours)
2002	IBS 512 - Cell Physiology and Biophysics (1 lecture)
2002	IBS 522 - Hypothesis Design and Scientific Writing (7 hours)
2001 - 2004	BME Problem-Based Learning (2-3 hours/year)
2001 - 2002	IBS 520 - Small Group Sessions (1 lecture/year)
1999 - 2002	Co-Coordinator, Membrane Physiology Journal Club (1 hour/wk)

RESIDENCY/TRAINING PROGRAMS

2008 - 2009	Arrhythmia: Basic principles (1 hour to cardiology fellows)
2007	Stem Cell Technology (1 hour)
2006	Stem Cell Technology (1 hour)
2005	Stem Cell Technology (1 hour)
2005	Drug Therapy of Cardiac Arrhythmias
2004	Stem Cell Technology
2003	Stem Cell Technology
2003	Management of arrhythmias (1 hour)
2002	Stem cells as cell replacement therapy - Grady Grand Rounds (1 hour)
2001 - 2007	ECG Interpretation Lecture for Nuclear Medicine & PET Fellows (2 hours/year)
2001 - 2004	Director - VA Cardiology Joint Laboratory Conference (1 hour/wk)
2001	Modeling Arrhythmia - Vascular Biology Seminar (1 lecture)
2001	Stress Testing (1 hour)
2001	Lecture for Emory Cardiology Conference (40 min)
2000 - 2007	Cardiology Fellowship Journal Club (1 lecture/year)
2000	Genetics of Arrhythmias - Vascular Biology Seminar Series (1 hour)

2000	Indications for Electrophysiologic Testing - Grady Grand Rounds (1 hour)
2000	Na Channel Structural Biology & Possible Clinical Implications - Vascular Biology Seminar Series (1 hour)
2000	ECG Interpretation - VA House Staff Lectures (1 hour)
1999	Ventricular Arrhythmias: Diagnosis & Management Acute & Chronic - VA House Staff Lectures (1 hour)
1999	Supraventricular Arrhythmias: Diagnosis & Management - VA House Staff Lectures (1 hour)
1999	Congenital & Valvular Heart Disease (1 lecture)
1999	Exercise Testing & Nuclear Cardiology (1 lecture)
1999	ECG - Arrhythmias (1 lecture)
1999	Non-invasive Risk Stratification for Arrhythmia - Grady Grand Rounds (1 hour)
1998 - 2007	Principles of Antiarrhythmic Drug Therapy (1 lecture/year)
1998 - 2007	Cardiology Friday Morning Conference (1 lecture/year)
1998 - 2004	Director - VA Cardiology Research Conference (1 hour/week)
1998	Bradyarrhythmias - Emory Cardiology Conference (1 hour)
1998	ECG - Ischemia (2 lectures)
1998	ECG - Bradyarrhythmias (2 lectures)
1998	Genetics of Arrhythmias (1 lecture)
1998	Principles of Tachyarrhythmia Therapy (1 lecture)
1998	Ion Channel Pharmacology (1 lecture)

OTHER

2005	Allied Health Pharmacology - Drug Therapy of Cardiac Arrhythmias
2004	GA Tech - Undergraduate BME Systems Physiology II - Lecture on heart failure
2004	Drug Therapy of Cardiac Arrhythmias for Allied Health Student
2002 - 2007	Emory Physician Assistant students
2001 - 2007	Emory Annual Comprehensive Board Review in Internal Medicine - Arrhythmia lecture (1 hour/year)

PH.D. STUDENTS DIRECTLY SUPERVISED

Beth Boulden	MS - Biomedical Engineering 2005
Santhosh Muruganantham	Semester lab rotation 2004
Lori Ann Rowe	BCBD student lab rotation - 2004
David Simpson	BME lab rotation -Winter 2004
Hak-Joon Sung	Thesis Committee -2004

David Simpson	Graduate Student
Alana Reed	MSP Fall 2004 Laboratory Rotation
Alyssa Tipples	Thesis Committee -2004 to 2007
Priyanka Karan	MS – Bioengineering 2008
Preeti Shanbhag	Thesis Committee, MS - Biomedical Engineering 2005
Alana Reed	MSP - Co-advisor for doctoral thesis (2005-present)
Peter Crapo	Thesis Committee –PhD 2008
Ebony Washington	Thesis Committee Member - 2007

POST-DOCTORAL FELLOWS DIRECTLY SUPERVISED

Ming Zhang, MD, PhD	Psychiatrist, Atlanta, GA
Lisa Shang, PhD	Research Associate, Emory University
Zhong Ming Li, PhD	Research Associate, University of Calgary
Gaurav Choudhary, MD	Asst. Prof., Brown University
Vijay Kasi, MD, PhD	Interventional Cardiology Fellow, William Beaumont Hospital
Arnold Pfahnl, MD, PhD	Cardiac Electrophysiology Fellow, University of Florida
Zhe Jiao, MD	Research Assistant Professor, University of Illinois at Chicago
Shamarendra N. Sanyal, MD, PhD	Post-doctoral Fellow, Emory University
Shahriar Iravanian, MD, MSE	Post-doctoral Fellow, Emory University
Michael Grossman, MD	Ophthalmology resident, Medical College of South Carolina
Hong Liu, MD, PhD	Postdoctoral Fellow, University of Illinois at Chicago
Gad Silberman, MD	Postdoctoral Fellow, Emory University
Ge Gao, MD, PhD	Postdoctoral Fellow, University of Illinois at Chicago, 2007-2012
Dean Ferrera, DO	Cardiology Fellow, University of Illinois at Chicago, 2007-2012
Man Liu, PhD	Postdoctoral Fellow, University of Illinois at Chicago, 2007
Harvey Lardin, PhD	Postdoctoral Fellow, University of Illinois at Chicago, 2008-2012
Susan Varghese, MD, MBA	Postdoctoral Fellow, University of Illinois at Chicago, 2008-2012
Joshua Lovelock, MD	Cardiology Fellow, Emory University, 2008-2009
Ali Alizadehsovari, MD	Cardiology Fellow, University of Illinois at Chicago, 2009-2012
Megan Sturdy, PhD	Postdoctoral, Fellow, University of Illinois at Chicago, 2010-2011
Vikram Brahmanandam, MD	Cardiology Fellow, University of Illinois at Chicago, 2010-2012
Qiongying Wang, MD	Postdoctoral, Fellow, University of Illinois at Chicago, 2011-2012
Euy-Myoung Jeong, PhD	Postdoctoral, Fellow, University of Illinois at Chicago, 2009
An Xie, PhD	Postdoctoral, Fellow, University of Illinois at Chicago, 2011

Jaehoon Chung, MD	Postdoctoral, Fellow, University of Illinois at Chicago, 2011
Ian D. Greenen, PhD	Postdoctoral, Fellow, University of Illinois at Chicago, 2011
Li Zhou, MD, PhD	Cardiology Fellow, University of Illinois at Chicago, 2012
Kai-Chien Yang, PhD	Postdoctoral, Fellow, University of Illinois at Chicago, 2012

RESIDENTS DIRECTLY SUPERVISED

Smita Negi, MD	Research Elective 2008-2009
Narayan Pokhrel, MD	Research Elective 2008-2009
Praveen Kumar, MD	Research Elective 2008-2009
Raul Blanco, MD	Research Elective 2006
Samantha Svarczkopf, MD	Research Elective 2005
Scott Fredd, MD	Research Elective 2007

OTHERS DIRECTLY SUPERVISED

Divya Arasu	Biomedical Engineering Master Thesis Advisor, 2011-2012
Dawen Zhang	Medical Student Summer Research Fellowship, 2011-Present
Thalia A. Torres	Medical Student Summer Research Preceptorship, 2011-Present
Cody A. Rutledge	MSTP Student, PhD Thesis Advisor, 2010-Present
Stephanie R. Humphrey	Undergraduate Student, 2010
Justin C. Malabanan	Undergraduate Student, 2010
Chynna D. Moerlien	Undergraduate Student, 2010
Shyam Saladi	Visiting Student, Fall 2009
Caroline Shin	Visiting Student, Fall 2009
Jing Yu	Visiting Professor 2008-2009
Vladimir Jovic	Undergraduate Senior Thesis
Alice Huang	Instructor of Medicine
Keith Wyche	Cardiologist
Craig Brodsky	Cardiologist
T. Michael Fan	Assistant Professor of Medicine
Andro Kacharava	Assistant Professor of Medicine
Kreton Mavromatis	Assistant Professor of Medicine
Nelli Fink	Visiting Professor
Andreas Goette	Visiting Professor

Keri Allen	Undergraduate student
Daniel Roseman	Undergraduate Senior Thesis
Bobby Bhatti	Undergraduate student
Laura Yount	Medical Student Summer Project
Danny Cheng	Undergraduate Summer Project
William Kanner	Research year prior to medical school
Michael Grossman	Medical Student Summer Project
Sambit Mondal	Visiting Medical Resident
Kelly Mayfield	Medical Student Summer Project
Heather Virginia	Biomedical Engineering graduate student
Litonya Granville	SURE Summer Student
Ruaa N. Al-baldawi	Undergraduate Senior Thesis 2003-2004
Michael Grossman	Third year medical student research elective - 2004
David Kim	Biology Undergraduate Senior Honors Thesis Advisor - 2004-2005
Caelin Ann Cubenas	Undergraduate SURE Program - 2004
Justin S. Golub	Medical School Faculty Mentor
David H. Kim	Undergraduate Senior Thesis Advisor
Vanessa Harrison	Howard Hughes SURE summer student 2005
Emily Witham	Howard Hughes SURE summer student 2005
Omar Bhatti, MBBS	Research Associate
Irfan Shukrullah, MBBS	Research Associate
Francois Rollin	Medical student summer rotation 2005
Robert Neuman	Medical student summer rotation 2005
Andrew Styperek	Medical student summer rotation 2005
Emily Witham	Undergraduate thesis advisor (2005-2006)
Brandon Hirsch	Undergraduate Honors Thesis 2006
Biswashree Chaudhury	Medical student summer rotation 2006
Nilesh V. Patel	Medical student summer rotation 2006
Scott A. Carra	Medical student summer rotation 2006
Nika Howell	Undergraduate Summer Project 2006
Ricquita D. Pollard	SURE Summer Student 2006

OTHER ACTIVITIES

2012	Speaker: VAMC National Research Day, Jesse Brown VA Medical Center
2009	Leadership Development for Physicians in Academic Health Centers, Harvard University, School of Public Health
2009	IPCE Town Hall Meeting, The Institute for Policy and Civic Engagement Presents: A Health Disparities Public Forum, Notes: Respondent Panel Member and Speaker
2003	Biotrek Program, Integrated approaches to the study of cardiovascular disease Notes: Host for 1 afternoon in the lab for Biotrek students (high school students)
2002	Biotrek Program, Stem Cell Therapy Notes: Host for 1 afternoon in the lab for Biotrek students (high school students)
1999	Solvay Pharmaceuticals/Emory Training program, Cardiovascular Disease Notes: Developed and presented a program on cardiovascular disease for Solvay Pharmaceuticals (6 lectures)
1999	American Heart Association Research Tour Presentation Notes: Presentation to the interested parties and potential donors during a tour of Emory Cardiology.