

CURRICULUM VITAE**Michael Robert Zile, M.D.****Address**

Medical University of South Carolina
Department of Medicine
Division of Cardiology
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Education

1974 Knox College, Galesburg, Illinois: Bachelor of Arts
1977 Rush University Medical School, Chicago, Illinois: Doctor of Medicine

Post Graduate Training

1977-80 Internal Medical Residency (PGY 1-3): Rush-Presbyterian St.Luke's Hospital, Chicago, IL.
1980-82 Cardiology Clinical Fellowship: Tufts University School of Medicine (Tufts) - New England Medical Center Hospital, Boston, MA.
1982-83 Cardiology Research Fellowship: Department of Veterans Affairs Medical Center Boston, MA. (BVAMC).

Professional Experience and Hospital Appointments

1982-1988 Department of Veterans Affairs Medical Center, Tufts University, Boston, MA
1980-82 Instructor in Medicine, Tufts
1982-88 Assistant Professor of Medicine, Tufts
1988-89 Associate Professor of Medicine, Tufts
1983-88 Staff Cardiologist, BVAMC
1983-88 Director, Cardiac Catheterization Laboratory, BVAMC
1986-88 Director, Cardiovascular Research Laboratories, BVAMC
1984-87 Animal Studies Subcommittee of the Research and Development Committee, BVAMC
Member (1984-1986), Chairperson (1986-1987)
1984-88 Cardiac Arrest Committee, BVAMC
Member, Chairperson (1984-1988)
1986-88 Research and Development Committee, BVAMC
1986-88 Radiation Safety Committee, BVAMC

1988- Medical University of South Carolina School of Medicine (MUSC), Ralph H. Johnson
Department of Veterans Affairs Medical Center Charleston (CVAMC), Charleston, SC
1988-93 Associate Professor of Medicine, MUSC
1991-95 Research and Development Committee, CVAMC
Member (1991-1995), Chairperson (1994-1995)

1996-97 Faculty Senate Academic Affairs Committee, MUSC
 1995-97 Dean's Committee for Departmental Review, Physical Medicine & Rehabilitation, MUSC
 1999-00 Dean's Committee for Departmental Review, Department of Emergency Medicine, MUSC
 2000-04 Director, Cardiovascular Clinical Trials Program, MUSC
 2002-04 Faculty Senate, MUSC
 Member
 Executive Committee, Vice-Chairperson of Executive Committee
 2003-04 Grants and Contracts Working Group, MUSC
 2003-04 Corporate Clinical Trials Working Group, MUSC
 2003-04 University Research Council, MUSC
 Member, Chairperson
 2003-04 Executive Research Council, MUSC
 2005-06 Dean's Search Committee, Department of Anesthesia Chair

Present Position

1993- Professor of Medicine with Tenure, MUSC
 1999- Charles Ezra Daniel Professor of Medicine, MUSC
 1992- Graduate Faculty, College of Graduate Studies, MUSC
 1994- Adjunct Professor, Department of Bioengineering, Clemson University, Clemson, SC
 1988- Senior Scientist, Gazes Cardiac Research Institute
 1988- Staff Cardiologist, MUSC
 1988- Staff Cardiologist, CVAMC
 1989- Director, Medical Intensive Care Unit, CVAMC
 1989- Chairperson, Medical Intensive Care Unit Committee, CVAMC
 1999- Member, Cardiology Fellowship Selection Committee, MUSC
 2005- Co-Director of The Cardiovascular Translational Research Center
 2006- Director of Center of Economic Excellence: Molecular Proteomics in Cardiovascular Disease, Prevention and Treatment
 2007- University Conflict of Interest Committee

Honors and Awards

1987 Outstanding Faculty Teacher Award, Boston Veterans Affairs Medical Center.
 1996 Member, Southern Society for Clinical Investigation
 1997 Horace Smithy Award for Heart Research in South Carolina, American Heart Association
 1999 Charles Ezra Daniel Endowed Chair in Cardiology
 2002-2007 Member, ABIM Subspecialty Board on Cardiovascular Disease
 2007-2011 Chair, ABIM Subspecialty Board on Cardiovascular Disease
 2007-2011 Member, ABIM Board of Directors, Internal Medicine
 2003 Member, Association of University Cardiologists

Medical Licensure and Certification

South Carolina Registration No. 14063

Massachusetts Registration No. 46609

Diplomat, National Board of Medical Examiners, 1978

Diplomat, American Board of Internal Medicine, 1981

Diplomat, American Board of Internal Medicine, Cardiovascular Disease, 11/09/1983;
certificate voluntarily renewed 11/1/2006

Membership in Professional Societies

1979- American College of Physicians

1981- American Federation of Clinical Research

1994- Charleston County Medical Society

1996- Southern Medical Association

2004- Southern Society for Clinical Investigation

1980 American Heart Association (AHA), National

1980 Member

1983 Affiliate

1986 Fellow-Council on Clinical Cardiology

1989 Fellow-Council on Circulation

2001 Fellow-Council on Basic Cardiovascular Sciences

1986-89 National Faculty, Advanced Cardiac Life Support

1991-95 Annual Scientific Session National Program Committee, Clinical Cardiology

1980-88 American Heart Association, Massachusetts Affiliate, Inc.

1984-88 Committee on Emergency Cardiac Care and CPR

Member (1984-1985), Vice-Chairperson (1985-1986), Chairperson (1986-1988)

1984-89 Board of Directors

1986-89 Program Council

1988-98 American Heart Association, South Carolina Affiliate, Inc.

1990-92 Research, Review, and Allocations Committee

1992-94 Research Policy Committee

Member (1992-1996), Vice-chairperson (1992-1994), chairperson (1994-1995)

1994-97 Board of Directors

2000- American Heart Association, Mid-Atlantic Affiliate, Inc.

2000-02 Grant Review Committee: Integrative Physiology

1980- American College of Cardiology (ACC), National

1980 Affiliate

1987 Fellow

1996-00 Annual Scientific Session National Program Committee

1999-02 Awards Committee, ACC Career Development Award

2002 American College of Cardiology, South Carolina Chapter

2002-03 President's Council of the South Carolina Chapter of the ACC

1996-	Heart Failure Society of America
1996	Member
1999-01	Annual Scientific Session National Program Committee
2000-04	Education Committee
2007-	Executive Council
1999-01	International Society of Heart Failure and World Congress on Heart Failure
1999-01	Scientific Advisory Board
1999-	American Physiological Society
2000	Fellow, Cardiovascular Section
2000-01	Program Committee
2002-	Society of Geriatric Cardiology
2002	Member
2003	Board of Directors

Research Support

1) Peer Reviewed Grant Support

a) *Institutional*

1. Diastolic Function during the Development and Regression of LV Volume-Overload Hypertrophy. Medical University of South Carolina Institutional Support, 1989-1991: \$12,500.
2. Mechanical Properties of Isolated Cardiac Muscle Cells: Effects of Ventricular Hypertrophy on Cellular Stiffness, Bioengineering Alliance of South Carolina, 1994, \$5,000.
3. Constitutive Properties of Hypertrophied Myocardium: Effects of Microtubules on Diastolic Stiffness and Viscosity. Medical University of South Carolina, Summer Research Award for Health Professional Students, Sponsor for medical student Todd S. Harris, 1997, \$3,375.00.
4. Prx2, a Regulator of Collagen and Cardiac Function. Co-PI, Heart Research Center Grant, Medical University of South Carolina, 1997-1999, \$150,000.
5. Regulation of Extracellular Myocardial Remodeling in Heart Failure, Co-PI, Heart Research Center Grant, Medical University of South Carolina, 1998-2000, \$150,000.
6. Extracellular Collagen Matrix: Contribution to Systolic Function in Normal vs POH Myocardium. Summer Research) Award for Health Professional Students, Sponsor for medical student Jason D. Stroud, 2001, \$3,986.00.
7. Increased Microtubule Stability Affects both Active and Passive Properties of Murine Cardiomyocytes. Summer Research Award for Health Professional Students, Sponsor for medical student William W. Brabham, 2002, \$4,166.00.

b) *American Heart Association*

1. Myocardial Relaxation and Left Ventricular Filling. Research Fellowship, American Heart Association, Massachusetts Affiliate, Inc., 1982-83: \$16,500.
2. Myocardial Relaxation and Left Ventricular Filling. Grant-In-Aid, American Heart Association, Massachusetts Affiliate, Inc., 1984-86: \$38,000

c) Department of Veterans Affairs

1. Myocardial Relaxation and Left Ventricular Filling. Associate Investigator Award, Boston Veterans Administration Medical Center, 1983-84: \$76,000.
2. Diastolic Function during the Development and Regression of LV Pressure-Overload Hypertrophy. Medical Research Funds from the Veterans Administration (Merit Review Grant #1), 1988-92: \$213,200.
3. Diastolic Dysfunction in Hypertrophy: Cellular & Extracellular Mechanisms, Medical Research Funds from the Veterans Administration (Merit Review Grant #2), 1992-97: \$585,000.
4. Stiffness in Hypertrophy - Role of the Cardiac Cytoskeleton. Medical Research Funds from the Veterans Administration (Merit Review Grant #3), 1997-01: \$400,000.
5. Research Enhancement Award Program (REAP). Medical Research Funds from the Veterans Administration. PI: George Cooper, IV. Title: Cardiac Hypertrophy and Failure. 1998-2003, \$1,350,000. Project 4, PI: Michael R. Zile. Title: Cytoskeletal Role in Myocardial Failure in Man, \$200,000.
6. Diastolic Heart Failure: Role of the Extracellular Matrix. Medical Research Funds from the Veterans Administration (Merit Review Grant #4), 2001-06: \$750,000.
7. Diastolic Heart Failure: Role of AGE/RAGE in ECM Remodeling. Medical Research Funds from the Veterans Administration (Merit Review Grant #5), 2006-2010; \$500,000.

d) National Institutes of Health

1. Program Project Grant #1, PI: George Cooper IV, Title: Load-Induced Cardiac Hypertrophy in the Adult Mammal. National Institutes of Health, 1993-98, \$4,497,904. 1PO1-HL48788. Project 5, PI: Michael R. Zile, Title: Growth Regulation In Adult Cardiac Muscle Cells. NASA\ NHLBI, 1994-98, \$431,971.
2. Stiffness in Hypertrophy - Role of the Cardiac Cytoskeleton. National Institutes of Health: 1 RO1 HL555444, 1997-01: \$907,603.
3. Program Project Grant #2. PI: George Cooper, IV, Title: Load-induced Cardiac Hypertrophy in the Adult Mammal. National Institutes of Health, 1998-2003, \$8,094,402. 2 PO1 HL48788-06. Project 5, PI: Michael R. Zile, Title: Mechanisms for Load Induction in Hypertrophy, \$1,115,004. Core C, PI: Michael R. Zile, Title: Animal Model Core, \$710,747.
4. NIH-NCRR Shared Instrumentation Grant. I S10 RR15723-01. High Resolution Echocardiography System. 2001-2002, \$291,408.
5. Cardiovascular Tissue Engineering. SC NASA EPSCoR Research Grant Program. PI: Roger R. Markwald. 2001 - 2004, \$ 898,709. Project 5, PI: Michael R. Zile, Title: Biomechanical Evaluation of Stem Cell-inoculated Scaffold Matrices, \$ 250,000.
6. Collagenase Inhibition in Heart Failure RO1 HL59165-04 (PI: Francis Spinale). National Institutes of Health. 1/1/98-1/31-05: \$312,443. Michael R. Zile Co-investigator 5%.
7. The Cardiovascular Proteomics Center. NHLBI RFP-NIH-BAA-HL-02-04, PI Daniel Knapp. National Institutes of Health. 2002-2009. \$15,200,000. Project 1, PI: Michael R. Zile, Title: Application of proteomic analysis to cardiovascular research in diastolic heart failure. \$1,500,000.
8. Program Project Grant #3. PI: George Cooper, IV, Title: Load-induced Cardiac Hypertrophy in the Adult Mammal. National Institutes of Health, 2003-2008, \$10,794,098. 2 PO1 HL48788-06. Project 5, PI: Michael R. Zile, Title: Diastolic Heart Failure: Defining Cardiocyte Mechanisms, \$857,644. Core C, PI: Michael R. Zile, Title: Animal Model Core, \$715,597.

e) State of South Carolina

1. Molecular Proteomics in Cardiovascular Prevention and Treatment. PI: Michael R. Zile. South Carolina Research Centers of Economic Excellence/Endowed Professorship Program. 2006-2011. \$5/\$5 million philanthropic gifts/matching funds from State of South Carolina.
 - a. Point of Care Proteomics. Duke Endowment Award from HSSC. PI: Michael R. Zile. \$120,000.
 - b. Duke Endowment

f) Industry

1. Effect of inhibition of PDE-5 on hypertrophic response to pressure overload. PI: Michael R. Zile. Pfizer, Inc., 12/22/2005-12/21/2006: \$109,000.
2. Role of PYK-2 on cardiac hypertrophic growth response to pressure overload. PI: Michael R. Zile. Pfizer, Inc. 12/1/2006-6/30/2007: \$80,630.

2) Multicenter Clinical Trial Grant Support

1. A Platelet Aggregation Inhibitor via Blockade of Glycoprotein IIb/IIIa Receptors, for Prevention of Thrombosis During Coronary Angioplasty, Unstable Angina Pectoris, and Acute Myocardial Infarction (PURSUIT), PI for Charleston VAMC Site, COR Therapeutics, 1995-1996, \$50,000.
2. Study of Patients Intolerant of Converting Enzyme Inhibitors (SPICE), PI for MUSC and Charleston VAMC Site, Astra Hassle AB, 1996 - 1997, \$12,000.
3. Prospective Randomized Amlodipine Survival Evaluation - 2 (PRAISE 2), PI for Charleston VAMC Site, Pfizer, 1996 - 1999, \$32,000.
4. Beta-Blocker Evaluation of Survival Trial (BEST), PI for site 534 Charleston VAMC, NHLBI/Department of Veterans Affairs, 1995 - 2000, \$200,000.
5. Beta-Blocker Evaluation of Survival Trial (BEST), PI for substudy site: Charleston VAMC, Substudy: Significance of Concomitant Changes in Left Ventricular Size, Mass and Geometry in Heart Failure Patients Receiving Beta Adrenergic Blockade, 1995 - 2000, \$20,000.
6. Combination Hemotherapy and Mortality Prevention (CHAMP), PI for Charleston VAMC Site, VA Cooperative Studies, Site #387, 1992-1998, \$387,985.
7. A Phase 3 Open Label Titration Study of the Chronic Efficacy and Safety of OPC-18790 for the Treatment of Patients with Heart Failure (Toborinone), PI for Charleston VAMC Site, Otsuka American Pharmaceutical, Inc., 1997-1998, \$49,000.
8. A Phase IIa, Double-blind, Placebo-controlled Study in Subjects with Heart Failure Due to Left Ventricular Diastolic Dysfunction, Undergoing Cardiac Catheterization, to investigate the Safety, Tolerability, and Pharmacokinetics of a Single Intravenous Dose of MCC-135, PI for Charleston, South Carolina site, Mitsubishi Chemical of America, Inc. 1998-2000, \$297,000.
9. Randomized Etanercept North America Strategy to Study Antagonism of Cytokines (Renaissance), PI, Charleston, South Carolina site, Immunex Corporation, 1998-2000, \$20,000.
10. Phase II Double-blind, Placebo-controlled, Sequential, Multiple Dose Evaluation of CP-424,391 for its Safety, Toleration and Efficacy in Men and Women with Mild-to-Moderate Heart Failure. P.I. for Charleston, South Carolina Site, Pfizer, 1998-2000, \$100,000.
11. A 12-Week, Double-Blind, Placebo-Controlled, Multicenter Study of Oral YM087 (CI-1025) to assess Functional Capacity in Patients With Class III Chronic Heart Failure , P.I. for Charleston, South Carolina Site, Parke-Davis, 1998-2000, \$125,000.

12. Prospective Randomized Clinical Trial of MVR: Complete Versus Partial Chordal Preservation. St. Jude Medical, Inc. 1996 -1999, \$100,000.
13. Candesartan Cilexetil in Heart Failure Assessment of Reduction in Mortality and Morbidity (CHARM), Astra, 1999-2002, \$150,000.
14. The Effect of Losartan Versus Hydrochlorothiazide on Exercise Tolerance in Patients With Exercise Induced Hypertension and Asymptomatic Diastolic Dysfunction. Merck, 2001-2003, projected budget: \$40,000.
15. A Phase II, Double-Blind, Randomized, Placebo-Controlled, Dose Comparative Study of the Efficacy, Tolerability and Safety of MCC-135 in Subjects With Chronic Heart Failure, NYHA Class II/III. Mitsubishi-Tokyo Pharmaceuticals (MCC-135 GO1 Trial), 2001-2003, projected budget: \$250,000.
16. Irbesartan in Heart Failure with Preserved Systolic Function (I-PRESERVE). Bristol-Myers Squibb, 2002-2006, projected budget: \$150,000.
17. Diastolic dysfunction improvement with ALT-711 remodeling (The DIAMOND Study). Alteon, 2002-2003, projected budget: \$120,000.
18. HF ACTION – A CHF Trial investigating outcomes of exercise training. NIH funded, 2003-2006, budget: \$110,000.
19. A phase II, double blind, randomized placebo controlled study of the efficacy, safety and tolerability of MCC-135 comparing QD vs BID doses in patients with congestive heart failure, NYHA class II/III. Takeda, 2002-2003, projected budget: \$50,000.
20. Chronicle offers management to patients with advanced signs and symptoms of heart failure (Compass-HF), Medtronic, 2003-2007, projected budget: \$100,000.
21. A randomized, double-blind, placebo-controlled, dose-ranging, pilot study evaluating the efficacy and safety of YMO87 in patients with decompensated chronic heart failure, Protocol 087-CL-071, Yamanouchi Pharma America, Inc, 2002-2004, projected budget: \$50,000.
22. A multicenter, randomized, double-blind, parallel group, placebo controlled study of a 200 mg oral dose of PG-116800 given as the sodium salt (PG-530742) twice daily for 90 days to patients with acute myocardial infarction with post treatment follow up (PREMIER), Proctor and Gamble Pharmaceuticals Inc, 2003-2005, estimated budget: \$100,000.
23. A multi-center, randomized, placebo controlled, double-blind study to evaluate the effect of the angiotensin II antagonist valsartan on diastolic function in patients with hypertension and diastolic dysfunction (VALIDD), Novartis, 2005-2006, \$51,024.
24. Treatment of preserved cardiac function heart failure with an Aldosterone antagonist (Topcat), NIH, 2005-2010, \$100,000.
25. FDHF01, A Phase 2 Randomized, Double-Blind, Placebo-Controlled Exploratory Efficacy Study of Sitaxsentan Sodium to Improve Impaired Exercise Tolerance in Subjects with Diastolic Heart Failure, Encysive, 2006-2008, \$100,000.
26. A Randomized, Double-blind, Placebo-controlled, Multiple-dose Study to Evaluate the Effects of Alagebrium in Subjects with Heart Failure and Preserved Systolic Function, Alteon Inc., 2006-2008, \$100,000.
27. COMPASS-HF Exercise Sub-study in Diastolic and Systolic Subjects, Medtronic, Inc., 2005-2008, \$50,000.
28. Synvista

3) Industry Based Support

1. Consultant to Mitsubishi Chemical America, Inc. for drug development (1997-).
2. Consultant to Quest Medical, Inc. for device development (1997-1998).
3. Consultant to Advanced Neuromodulation Systems, Inc. for device development (1998-00)

4. Consultant to Pharmacia for drug development (1999-02)
5. Consultant to Sankyo for drug development (2000-02)
6. Consultant to Alteon for drug development (2002-)
7. Consultant to Takeda Pharmaceuticals for drug development (2002-)
8. Consultant to Forest Laboratories for drug development (2002-03)
9. Consultant to Orqis Medical for medical device development (2003-)
10. Consultant to BMS/Sanofi-Aventis for drug development (2002-)
11. Consultant to Encysive for drug development (2004-2005)
12. Consultant to Medtronic for medical device development (2003-)
13. Consultant to Guidant for medical device development (2003-)
14. Consultant to Cor Assist for medical device development (2005-)
15. Consultant to Pfizer for drug development (2005-)
16. Consultant to Novartis for drug development (2005-)

4) Multicenter Clinical Trial Leadership

1. Member, Event Classification Committee for PRAISE 2 (clinical trial grant #3 above), 1996-2000.
2. Member, Data Safety and Monitoring Board for BioDiv Ysio™ Stent in Randomized Control Trial (Distinct), 1998- 2000.
3. Member, Event Classification Committee for Omapartilat versus enalapril randomized trial of utility in reducing events (Overture), 2000-2003.
4. Chairperson, Executive Committee, International Principle Investigator for MCC-135 GO1 Trial (clinical trial grant #15 above), 2000-2003.
5. Chairperson, Event Classification Committee & member, Executive Committee for I-PRESERVE (clinical trial grant #16 above), 2001-2005.
6. Member, Advisory Committee, The proof of pharmacological effort (POPE) and dose-finding clinical protocol for a randomized, double-blind, placebo-controlled, parallel-group study of early SD-7300 treatment in post-myocardial infarction subjects. 2002-2004.
7. Member, Executive Committee Takeda study (clinical trial grant #19 above), 2002-2004.
8. Chairperson of Event Classification Committee, member of Coordinating Committee, member of Steering Committee, member of Design and Analysis Committee for HF ACTION (clinical trial grant #18 above), 2003-2006.
9. Member, Executive Committee, A Phase IIa, randomized, double blind, placebo-controlled clinical trial to examine the safety and efficacy of intravenous MCC-135 as an adjunct to standard therapy with primary PCI in patients diagnosed as having an ST elevation acute myocardial infarction, (EVOLVE) 2003-2005.
10. Member, Executive Committee, Compass-HF (clinical trial grant # 20 above), 2003-2005.
11. Member, Advisory Board, Orqis Medical Corporation, Momentum Trial, 2004-2008.
12. Chairperson, Data Safety and Monitoring Board, Selective endothelin-A receptor inhibitor following Cardiac Surgery: a safety and feasibility study, Encysive, 2004-2006.
13. Member, Executive Committee, TOP CAT (clinical trial grant #24 above), 2005-2010.
14. Chairman, Executive Committee, Encysive, 2006-2008.
15. Member, Executive Advisory Committee, A Randomized, Double-blind, Placebo-controlled, Multiple-dose Study to Evaluate the Effects of Alagebrium in Subjects with Heart Failure and Preserved Systolic Function, Alteon Inc., 2006- .
16. Director, Hemodynamic Core Lab for the Multi-center Trial of the Orqis Medical Cancion System for the Enhanced Treatment of Heart Failure Unresponsive to Medical Therapy (MOMENTUM), 2006-2008.
17. Director, Echo Core Lab, COMPASS-HF Exercise Sub-study in Diastolic and Systolic Subjects,

Medtronic, Inc., 2005- .

18. Member, Executive Committee, A multi-center, randomized, placebo controlled, double-blind study to evaluate the effect of the angiotensin II antagonist valsartan on diastolic function in patients with hypertension and diastolic dysfunction (VALIDD), Novartis, 2005-2007.
19. Member, Clinical Events Classification Committee, Placebo-controlled Randomized study of the selective A₁ adenosine receptor antagonist KW-3902 for patients hospitalized with acute heart failure and volume Overload to assess Treatment Effect on Congestion and renal function (PROTECT Trial), NovaCardia Inc., 2007-2009.

5) Disclosures/Patents

1. Detecting Diastolic Heart Failure by Protease and Protease Inhibitor Plasma Profiling. Attorney Docket No.: 19113.0133U1
2. Predicting Heart Failure Following Myocardial Infarction by Protease and Protease Inhibitor Plasma Profiling. Attorney Docket No.: 19113.0134U1

Manuscript and Grant Review Process

1) Study Sections

a) American Heart Association

- | | |
|---------|---|
| 1994-95 | Affiliate Study Group, Group B, National Grant Review |
| 1996-00 | Clinical and Integrative Cardiovascular Physiology and Pathophysiology I Study Committee.
Member (1996-2000), Co-Chairperson (1997-1998) |
| 2000-02 | Mid-Atlantic Affiliate Consortium Grant Review Committee: Integrative Physiology |

b) Department of Veterans Affairs

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| 1995 | Beta-Blocker Evaluation of Survival Trial (BEST), Sub-study Review Committee |
| 1997-00 | Merit Review Subcommittee on Cardiovascular Diseases
Member (1997-2000), Chairperson (1998-2000) |
| 1998-00 | Merit Review Council
Member (1998-2000), Chairperson (1998-2000) |
| 1999-01 | Vascular Research Enhancement Program (REAP) Review Committee
Chairperson (1999-2000) |
| 1999-01 | Planning Committee for Cooperative Studies Program #484: Heart Failure in Patients with Preserved Systolic Function. |

c) National Institutes of Health

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|------------|--|
| 1990 | Grant Review Committee Cardiovascular A, Ad Hoc Reviewer. |
| 1994, 1999 | Grant Review Committee Cardiovascular B, Ad Hoc Reviewer. |
| 2001- | Grant Review Committee, Shared Instrument Grant |
| 2003 | NHLBI-NIH working group on strategic directions in congestive heart failure |
| 2004 | NHLBI – DCRI Working Group: Heart failure trial endpoints: Where are we heading? |
| 2004 | Grant Review Committee, Special emphasis panel for RFP NIH-NHLBI-01-19: Aldosterone antagonists for the treatment of heart failure with preserved systolic function. |

2) Editorial Board:

1996-2000, 2003- Journal of the American College of Cardiology
 2000- Circulation
 2003- Congestive Heart Failure
 2008-2009 Circulation, Heart Failure

3) Editorial Consultant:*a) Journal Reviewer for:*

Circulation, Journal of Clinical Investigation, American Journal of Physiology, Journal of the American College of Cardiology, Circulation Research, American Journal of Cardiology, Hypertension, Cardiovascular Research, Journal of Molecular and Cellular Cardiology, Journal of Pharmacology and Experimental Therapeutics, Journal of Cardiac Failure, Coronary Artery Disease, Journal of Thoracic and Cardiovascular Surgery, Comparative Biochemistry and Physiology, American Heart Journal, New England Journal of Medicine.

b) AHA National Scientific Sessions:

1989- Abstract Grader for Scientific Session of American Heart Association
 1992 Team leader Clinical Cardiology Category 55: Heart Failure
 1993 Team leader Clinical Cardiology Category 55: Ventricular Function
 1994 Team leader Clinical Cardiology Category 55: Ventricular Function
 1995 Clinical Cardiology Category 55: Ventricular Function
 1996 Clinical Cardiology Category 53: Ventricular Function/Hemodynamics/ Hypertrophy
 1997 Clinical Cardiology Category 61: Ventricular Function/ Hemodynamics/ Hypertrophy
 1998 Clinical Cardiology Category 53: Valvular Heart Disease/ Infective Endocarditis
 1998 Clinical Cardiology Category 54: Ventricular Function/ Hemodynamics/ Hypertrophy
 1999 Clinical Cardiology Category 54: Ventricular Function/ Hemodynamics/ Hypertrophy
 2000 Clinical Cardiology Category 56: Valvular Heart Disease/Infective Endocarditis
 2000- Clinical Cardiology Category 57: Ventricular Function/ Hemodynamics/ Hypertrophy

1999-01 Selection Committee for New Investigator Awards and Abstract Grader for the Scientific Conference on Molecular, Cellular, and Integrated Physiologic Approaches to the Failing Heart.

c) ACC National Scientific Sessions:

1996- Abstract Grader for Scientific Session of American College of Cardiology
 1996 Category 16: Myocardial and Pericardial Function and Disease: Basic
 1997 Category 17: Myocardial/Pericardial Structure, Function and Disease--Basic
 1998 Category 17: Myocardial/Pericardial Structure, Function and Disease--Basic
 1999- Category 27: Myocardial Function/Heart Failure--Basic/Molecular

d) *HFSA National Scientific Sessions:*

1998- Abstract Grader for Scientific Session of Heart Failure Society of America

Graduate Students Supervised

1. Kendrick Richardson, Degree: Masters of Science in Mechanical Engineering, Clemson University, 1994. Thesis: Method of Comparing Mechanical Properties of Normal and Hypertrophied Isolated Feline Cardiocytes, Thesis Supervisor
2. Diane Eble, Degree: PhD in Molecular Biology, Medical University, 1995. Thesis: Analysis of Myosin Heavy Chain Protein with Chronic Tachycardia-Induced Heart Failure, Thesis Committee.
3. Monica Kelly, Degree: Masters of Science in Bioengineering, Clemson University, 1997. Thesis: Application of an Iterative Finite Element Analytical Technique in the Determination of the Mechanical Properties of Isolated Mammalian Cardiocytes, Thesis Supervisor.
4. Jason Stroud, Degree: Masters of Science in Bioengineering, Clemson University, 1999. Thesis: Constitutive Properties of Normal and Hypertrophied Myocardium: Cellular and Extracellular Contributions to Changes in Myocardial Stiffness and Viscosity, Thesis Supervisor.
5. C. Allyson Walker, Degree: Masters of Science in Physiology, 2000. Thesis: Endothelin Dynamics in Congestive Heart Failure: Potential Interactions with β -Adrenergic Activity, Thesis Committee.
6. Robert E. Stroud, Degree: Masters of Science in Physiology, 2003. Thesis: Plasma monitoring the myocardial specific matrix metalloproteinase tissue inhibitor-4 (TIMP-4) in patients with developing heart failure, Thesis Committee.
7. Leslie Clark, Degree: PhD in Biostatistics, Bioinformatics, and Epidemiology, 2005. Thesis: The influence of pre-operative use of HMG-CoA reductase inhibitors in cardiac surgery: an eight year retrospective study. Thesis Committee.
8. Ira Matthew Mains, PhD Candidate, Medical University of South Carolina. Thesis Committee.

Post Doctoral Fellows Supervised

- 1988 - 1990 Maasaki Tomita, M.D., Department of Medicine, Medical University of South Carolina. (From Gifu University, Japan)
- 1990 - 1992 Ryuhei Tanaka, M.D., Department of Medicine, Medical University of South Carolina. (From Gifu University, Japan)
- 1992 - 1994 Satoshi Kato, M.D., Department of Medicine, Medical University of South Carolina. (From Gifu University, Japan)
- 1994 - 1996 Hisayasu Wada, M.D., Department of Medicine, Medical University of South Carolina. (From Gifu University, Japan)
- 1995 - 1997 Toshio Nagai, M.D., Department of Medicine, Medical University of South Carolina. (From Gifu University, Japan)
- 1996 - 1997 Andrew Lashus, M.D., Department of Pediatrics, Division of Pediatric Cardiology, Medical University of South Carolina.
- 1997 - 1998 Janet Simsic, M.D., Department of Pediatrics, Division of Pediatric Cardiology, Medical University of South Carolina.
- 1997 - 1998 Greg Schuyler, M.D., Ph.D., Department of Medicine, Division of Cardiology, Medical University of South Carolina.
- 1998 - 1999 Lisa Roten, M.D., Department of Pediatrics, Division of Pediatric Cardiology, Medical University of South Carolina.
- 1998 - 2000 Catalin Baicu, Ph.D., Department of Medicine, Division of Cardiology, Medical University of South Carolina.
- 1999 - 2001 Yukihiisa Isomatsu, M.D., Department of Medicine, Division of Cardiology (From Tokyo Women's Hospital, Japan)

- 2000 - 2001 Anne Hauet, M.D., Department of Medicine, Division of Cardiology, VA REAP Award, Medical University of South Carolina.
- 2001 - 2002 Alexander Johnson, M.D., Department of Medicine, Division of Cardiology, VA REAP Award, Medical University of South Carolina.
- 2002 – 2003 Weems Pennington, M.D., Department of Medicine, Division of Cardiology, VA REAP Award, Medical University of South Carolina.
- 2003 – 2004 A. Hinan Ahmed, M.D., Department of Medicine, Division of Cardiology, HFSA Award, Medical University of South Carolina.
- 2003 – 2004 Carson Webb, M.D., Department of Medicine, Division of Cardiology, Medical University of South Carolina.
- 2004 – 2006 David Dirk Bonnema, M.D., Department of Medicine, Division of Cardiology, Medical University of South Carolina.
- 2006 Chris McCarty, M.D., Department of Medicine, Division of Cardiology, Medical University of South Carolina.
- 2008- Shannon Mehury, M.D., Department of Medicine, Division of Cardiology, Medical University of South Carolina.

Peer Reviewed Publications and Editorials

1. Coffey RL, **Zile MR**, Luskin AT: Immunologic tests of value in diagnosis: Part I. Acute phase reactants and autoantibodies. *Post Graduate Medicine*, 70:163-178, 1981.
2. Coffey RL, **Zile MR**, Luskin AT: Immunologic tests of value in diagnosis: Part II. Complement. *Post Graduate Medicine*, 70:183-188, 1981.
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