

CURRICULUM VITAE, SEPTEMBER 2017
Ross Arena, PhD, PT, FAHA, FESC, FAACVPR, FESPM, FACSM

PERSONAL INFORMATION

Name: Ross Anthony Arena
Date of birth: June 28, 1970 in Norwalk, Connecticut, USA

Home Address: 100 E. 14th Street
Unit 1401
Chicago, IL 60605

Office address: Department of Physical Therapy
College of Applied Health Sciences
University of Illinois Chicago
1919 W. Taylor St.
Chicago, IL 60612
raarena@uic.edu
Office: 312.355.3338

LICENSURE & CERTIFICATION

Licensure: Physical Therapist, Illinois, 2013
License # 070.019836

Physical Therapist, New Mexico, 2011-2013
License # 3960

Physical Therapist, Virginia, 1998-2011
License # 2305006054

Certification: Clinical Exercise Specialist, 1998, # 2964
Issuing Agency: American College of Sports Medicine

EDUCATION

Ph.D. degree in Physiology, 2001. Medical College of Virginia, Virginia Commonwealth University, School of Medicine, 1998-2001. Dissertation: Ventilatory Expired Gas Analysis During Exercise: Implications for the Patient with Heart Failure.

M.S. degree in Physical Therapy, 1997. Medical College of Virginia, Virginia Commonwealth University, School of Allied Health Professions, 1994-1997.

B.S. degree in Human Performance, 1993. Southern Connecticut State University, 1988-1993.

CLINICAL/RESEARCH APPOINTMENTS AND RELATED ACTIVITIES

2013-Present	Member, Integrative Physiology Laboratory, College of Applied Health Sciences, University of Illinois Chicago
2015-2016	Member, Clinical and Research Expert Committee, Terminology Harmonization in Exercise Medicine and Exercise Science (THEMES), University of California Irvine CTSA
2008-2015	Researcher, National Institutes of Health/National Heart, Lung, and Blood Institute, Translational Medicine Branch, Bethesda, MD
2012-2013	Affiliated Faculty, Advanced Heart Failure Program, Division of Cardiology, Department of Internal Medicine, University of New Mexico, Albuquerque, NM
2011-2013	Affiliated Faculty, Latin American and Iberian Institute, University of New Mexico, Albuquerque, NM
2011-2013	Internal Service Provider, Division of Cardiology, Department of Internal Medicine, University of New Mexico, Albuquerque, NM
2009-2011	Physical Therapy Specialist, Noninvasive Cardiology, Virginia Commonwealth University Health System, Richmond, VA
2008-2011	Medical Advisory Board, MET-TEST, Atlanta, GA
2008-2011	Head Clinical Exercise Physiologist, Cardiopulmonary Exercise Testing Laboratory, Pauley Heart Center, Virginia Commonwealth University Health System, Richmond, VA

2007-2011	Research Consultant, Cardiology Consultants, Calgary, Canada
2004-2008	Research Consultant, Heart Center, Community Hospital, Munster, Indiana
2003-2008	Head Clinical Exercise Physiologist, Cardiopulmonary Exercise Testing Laboratory, General Clinical Research Center, Virginia Commonwealth University, Richmond, VA
2006-2007	Advisory Committee, Metabestes Institute, Irving, TX
2003-2007	Researcher, National Institutes of Health/National Heart, Lung, and Blood Institute, Cardiovascular Branch
2002-2007	Researcher, Pulmonary Wellness and Rehabilitation Center, New York, NY.
2003-2004	Program Planning Chair: Virginia Association of Cardiovascular and Pulmonary Rehabilitation Annual Conference, Charlottesville, Virginia
2002	Researcher, Veterans Hospital, Palo Alto, CA.
1997-2001	Cardiopulmonary Physical Therapist, Medical College of Virginia Hospitals, Richmond, VA.
1997-2001	PRN Physical Therapist, Bon Secours, Richmond, VA.
2000	Clinical Instructor, Vmax system, SensorMedics, Yorba Linda, CA.
1993-1994	Staff Exercise Physiologist, Norwalk Hospital, Norwalk, CT.
1992-1994	Staff Exercise Physiologist, Orthopedic and Sports Medicine Rehabilitation Unit, Incorporated, Stamford, CT.

ACADEMIC EXPERIENCE

2013-Present	Professor and Head, Department of Physical Therapy, College of Applied Health Sciences, University of Illinois Chicago, Chicago, IL
2012-Present	Visiting Professor, Heart Failure Unit, IRCCS San Donato University Hospital, University of Milano School of Medicine, Milan, Italy
2014-Present	Adjunct Professor Appointment, Department of Physical Medicine and Rehabilitation, Feinberg School of Medicine, Northwestern University, Chicago, IL
2014-Present	Joint Appointment, International Visiting Professor, PhD Program: Science and Technologies in Health, University of Brasilia, Brasilia, Brazil
2014-Present	Oversees Advisor for the Department Staffing Committee, Department of Rehabilitation Sciences, The Hong Kong Polytechnic University, Hong Kong.
2015-2017	Interim Head, Department of Kinesiology and Nutrition, College of Applied Health Sciences, University of Illinois Chicago, Chicago, IL
2010-2014	Joint Appointment, International Associate Professor, Interdisciplinary Graduate Program, University of Brasilia, Brasilia, Brazil
2011-2013	Joint Appointment, Professor, Department of Internal Medicine, Division of Cardiology, University of New Mexico, Albuquerque, NM
2012-2013	Professor and Chief, Division of Physical Therapy, Department of Orthopaedics and Rehabilitation, University of New Mexico, Albuquerque, NM
2011-2012	Professor and Director, Physical Therapy Program, Department of Orthopaedics and Rehabilitation, University of New Mexico, Albuquerque, NM
2010-2011	Professor, Department of Physical Therapy, School of Allied Health Professions, Virginia Commonwealth University/MCV Campus, Richmond, VA

- 2010-2011 Joint Appointment, Professor, Department of Physiology and Biophysics, School of Medicine, Virginia Commonwealth University/MCV Campus, Richmond, VA
- 2010-2011 Joint Appointment, Professor, Department of Internal Medicine, School of Medicine, Virginia Commonwealth University/MCV Campus, Richmond, VA
- 2008-2010 Joint Appointment, Associate Professor, Department of Internal Medicine, Division of Cardiology, School of Medicine, Virginia Commonwealth University/MCV Campus, Richmond, VA
- 2007-2010 Associate Professor, Department of Physical Therapy, School of Allied Health Professions, Virginia Commonwealth University/MCV Campus, Richmond, VA
- 2007-2010 Joint Appointment, Associate Professor, Department of Physiology and Biophysics, School of Medicine, Virginia Commonwealth University/MCV Campus, Richmond, VA
- 2003-2007 Joint Appointment, Assistant Professor, Department of Physiology, School of Medicine, Virginia Commonwealth University/MCV Campus, Richmond, VA
- 2002-2007 Assistant Professor, Department of Physical Therapy, School of Allied Health Professions, Virginia Commonwealth University/MCV Campus, Richmond, VA
- 2001-2002 Assistant Professor, Department of Physical Therapy, The Steinhardt School of Education, New York University, New York, NY
- 2000-2001 Teaching Assistant, Department of Physiology, School of Medicine, Virginia Commonwealth University, Medical College of Virginia Campus, Richmond, VA

1997-2001 Guest Lecturer/Teaching Assistant, Department of Physical Therapy, School of Allied Health Professions, Virginia Commonwealth University, Medical College of Virginia Campus, Richmond, VA

MEMBERSHIPS

American Heart Association

Midwest Affiliate

American College of Sports Medicine

European Society of Cardiology

Heart Failure Association of the European Society of Cardiology

European Society of Preventive Medicine

AWARDS & DISTINGUISHED APPOINTMENTS

1993 Graduated Magna Cum Laude, Southern Connecticut State University

1997 Phi Kappa Phi Honor Society, Virginia Commonwealth University

1997 A.D. Williams Scholarship Award, Virginia Commonwealth University, Medical College of Virginia Campus

1998 Ramsey Award Recipient, Department of Physiology, Virginia Commonwealth University, Medical College of Virginia Campus

2002 Physical Therapy Editorial Review Board, Slack Incorporated

2003 Physical Therapy Item Writer and Review Committee, Federation of State Board of Physical Therapy

2003 Metabolic Stress Testing Consultant, National Institutes of Health/National Heart, Lung, and Blood Institute, Cardiovascular Branch

2003 Editorial Board Member, Journal of Cardiopulmonary Rehabilitation

2004 Fellow, American Association of Cardiovascular and Pulmonary Rehabilitation

- 2005 Fellow, American College of Sports Medicine
- 2005 Associate Editor, Medicine and Science and Sports and Exercise
- 2007 Fellow, American Heart Association
- 2008 Associate Editor, ACSM's Guidelines for Exercise Testing and Prescription Ninth Edition
- 2010 American Chapter Correspondent, CPX International
- 2010 Assistant Director of Research, Cardiac Wellness Institute of Calgary
- 2011 Meta-Analysis Global Group In Chronic Heart Failure (MAGGIC) Investigator
- 2012 Guest Editor, Progress in Cardiovascular Disease: Current Trends in Reducing CVD Risk Factors from Around the World: Focus on Worksite Health and Wellness and Cardiac Rehabilitation
- 2012 Program Co-Chair, Global Congress on Physical Activity: Every Heart Needs Exercise: A Global Call to Action by the American Heart Association. Congress held at 2013 American Heart Association Scientific Sessions, Dallas, Texas
- 2013 Advisory Board Vice Chair, National Cardiorespiratory Fitness Registry
- 2013 Editorial Board Member, Journal of Cardiac Failure
- 2013 Visiting Professor, University of Brasilia and Federal University of Sao Carlos
- 2013 International Advisory Committee, 9th International Conference on Diet and Activity Methods, Brisbane, Australia, September 2015
- 2013 AHA Silver Heart Member Distinction
- 2014 Guest Editor, Progress in Cardiovascular Disease: 2013 Global Congress on Physical Activity - All Hearts Need Exercise: A Global Call to Action by the AHA
- 2014 Faculty Member, UIC Graduate College

Ross Arena, PhD, PT, FAHA, FESC, FESPM, FAACVPR, FACSM

- 2014 Guest Editor, Heart Failure Clinics: Exercise and Rehabilitation in Heart Failure: A Physiologic and Clinical Perspective
- 2014 Guangdong Center Research Advisory Committee, Guangdong Work Injury Hospital in Guangzhou, China
- 2014 Editorial Board Member, Progress in Cardiovascular Diseases
- 2014 Clinical Research Expert Committee Member, University of California Irvine Institute for Clinical and Translational Science
- 2014 CPX Core Lab Director, Fitness Registry and the Importance of Exercise: A National Data Base (FRIEND)
- 2015 ACSM President's Lecture: ACSM Annual Conference, San Diego, CA, May 2015
- 2015 Personality of the Year Award, Department of Physical Therapy of the Sao Paulo State Society of Cardiology, Sao Paulo, Brazil
- 2015 Editorial Board Member, Lifestyle Medicine Journal
- 2015 Fellow, European Society of Cardiology
- 2016 Trustee, European Society of Preventive Medicine
Member of the European Union Platform for Action on Diet, Physical Activity and Health
- 2016 Chairman, European Society of Preventive Medicine
Member of the European Union Platform for Action on Diet, Physical Activity and Health
- 2016 Founding Fellow, European Society of Preventive Medicine
- 2016 Guest Editor, Progress in Cardiovascular Disease: Conceptualizing a New Model for Healthcare: Focus on Healthy Living and Prolonging the Healthspan
- 2016 Board of Directors, American Heart Association, Chicago Affiliate
- 2016 Director of Preventive Medicine Research for SARENA Medical Center & P4 Research Institute
- 2016 Associate Editor, Current Problems in Cardiology
- 2017 Director of Research and Development, MET-TEST

2017 External Reviewer, Department of Physical Therapy, College of Public Health, Temple University

MAJOR COMMITTEES

Department/Division

Department of Physical Therapy (University of Illinois at Chicago)

- Founder and Chair, Healthspan Advisory Board
- Promotion and Tenure Paper Preparer (2013-Present)

Department of Kinesiology and Nutrition (University of Illinois at Chicago)

- Promotion and Tenure Paper Preparer (2016)

Division of Physical Therapy (University of New Mexico)

- Accreditation committee Chair (2011-2013)

Department of Physiology (Virginia Commonwealth University)

- Thesis Advisor, Short Term Reliability of Oxygen Uptake On-Kinetics, Brian Weber (2004)

Departments of Physical Therapy and Health, Physical Education and Recreation (Virginia Commonwealth University)

- Ad hoc Committee on the development of a doctoral program in Rehabilitation and Movement Sciences (2002)

Department of Physical Therapy (Virginia Commonwealth University)

- Promotion Committee, Loir Michener: committee chair (2010)
- Professional Program Curriculum committee (2002-2007)
- Admissions Committee (2002-2010)
- Tenure committee, Scott Sullivan: student member (1997)

Department of Physical Therapy (New York University)

- Professional Student Progress (2001)
- Personnel (2001)
- Faculty Development, Research and Technology (2001)
- Web page (2001)

School/College

College of Applied Health Sciences (University of Illinois Chicago)

- Department Head Committee (2013-Present)
- Search Committee Chair: Biomedical and Health Information Sciences (2014-Present)

Ross Arena, PhD, PT, FAHA, FESC, FESPM, FAACVPR, FACSM

- Program Planner – UIC AHA Pre-conference: Obesity & Cardiovascular Disease from Cell to Community: Implications for Primary & Secondary Prevention (2014)

School of Medicine (University of New Mexico)

- Interdisciplinary Education Committee (2011-2013)
- Education Subcommittee-Master Planning (2012-2013)

School of Nursing (Virginia Commonwealth University)

- Dissertation Committee, Health promoting lifestyle and quality of life in patients with chronic obstructive pulmonary disease, Saichol Janwijit (2005-2007)

School of Medicine (Virginia Commonwealth University)

- Thesis Committee, The effect of cobalt protophyrin and cobalt Chloride on heme oxygenase expression and protection from deoxycholate-induced apoptosis, Tina Lawson (2010)
- Dissertation Committee Chair, The use of cardiopulmonary exercise testing in the detection of myocardial ischemia, Sherry Pinkstaff (2008-2010)
- Thesis Committee, Development of a software application to measure the diameter of the aorta and to verify if diameter is a predictor of mean wave velocity, Sumeet Sudhir Shelar (2007)
- Dissertation Committee, The role of the microcirculation in skeletal muscle dysfunction associated with Chronic Heart Failure, Michael Tevald (2003-2005)
- Dissertation Committee, Effects of emphysema and chronic hypoxemia on skeletal muscle oxygen supply and demand, John Lowman (2002-2004)

School of Allied Health (Virginia Commonwealth University)

- SAHP Curriculum Committee (2002-Present)
- Tenure Committee (2007)
- Promotion Committee, Alexander F. Tartaglia: committee chair (2009)

School of Education (Virginia Commonwealth University)

- Thesis Committee: Effect of insulin resistance on oxygen uptake kinetics following an exercise intervention. Katie Bowen (2010)

The Steinhardt School of Education (New York University)

- Outside Reader, Dissertation: The lived experience of a small number of women whose husbands have congestive heart failure. Rhonda Weller (2001)

The Steinhardt School of Education (New York University)

- Outside Reader, Dissertation: Psychosocial responses of school-aged children to cardiac surgery. Dana Connolly (2002)

University

University of Illinois at Chicago

- PCORI CDRN "CAPriCORN" Application Committee (2013)

University of New Mexico

- UNM HSC Health and Wellness Committee (2012-2013)
- UNM HSC SRMC Senior Center Planning Committee (2012-2013)

Virginia Commonwealth University

- General Clinical Research Center Advisory Board Committee (2004-2008)
- MCV Campus Recreational Sports Advisory Committee (2004-2006)
- A.D. Williams Research Advisory Committee (2004-2009)
- MCV Alumni Association (2003-2006)
- Alternate member: Faculty Senate (2002-2003)

Community

- Core Committee, Grant Park Healthy Lifestyle Space Initiative, Chicago IL (2016)

State

Virginia Association of Cardiovascular and Pulmonary Rehabilitation

- Past President (2005)
- President (2004-2005)
- President Elect (2003-2004)
- Member at large (2002-2003)
- Chair, Technology Committee (2000-2001)

Virginia Physical Therapy Association

- Co-chair, Research Committee (1997-1998)

Grant Park Advisory Board

- Vice President, (2017)

National

American Association of Cardiovascular and Pulmonary Rehabilitation

- Publications Committee (2002-2003)
- Research Committee (2002-2004)
- Chair, Research Committee (2004-2005)
- Annual Conference Program Planning Committee (2004-2006)
- Disease Management Task Force (2005-2007)
- Board of Directors (2005-2007)
- Document Oversight Committee (2010-Present)
- Writing Committee Member: The Role of Cardiac Rehabilitation Facilities in Disability Assessment, Job Task Physical Requirements, and Rehabilitation (2011)

American College of Sports Medicine

- Ethics and Professional Conduct Committee (2005-2007)
- Chair, Ethics and Professional Conduct Committee (2007-2013)
- ACSM Liaison to AHA Exercise, Cardiac Rehabilitation and Secondary Prevention Committee, Clinical Cardiology Council (2009)

American Heart Association

- Writing Committee Chair: Revision of Assessment of Functional Capacity in Clinical and Research Settings, A Scientific Statement From the American Heart Association Committee on Exercise, Rehabilitation, and Prevention of the Council on Clinical Cardiology, and Cardiovascular Nursing Council (2007-2008)
- Writing Committee Member: Revision of Guidelines for Clinical Exercise Testing Laboratories A Statement for Healthcare Professionals From the Committee on Exercise and Cardiac Rehabilitation, (2007-2008)
- Writing Committee Member: A Clinician's Guide to Cardiopulmonary Exercise Testing in Adults: A Scientific Statement from the American Heart Association (2008-2010)
- Exercise, Cardiac Rehabilitation and Secondary Prevention Committee, Clinical Cardiology Council (2007-Present)
- Clinical Cardiology Program Planning Committee: 2010 Scientific Sessions (2009)
- Patient Services Advisory Group (2010-2015)
- Writing Committee Member: Revision of Exercise Standards for Testing and Training, A Scientific Statement From the American Heart Association Committee on Exercise, Rehabilitation, and

- Prevention of the Council on Clinical Cardiology, and Cardiovascular Nursing Council (2011-2014)
- Writing Committee Chair: Increasing Referral Rates to Outpatient Cardiac Rehabilitation: The valuable role of health care professionals in the acute care and home health setting A Scientific Statement From the American Heart Association Committee on Exercise, Rehabilitation, and Prevention of the Council on Clinical Cardiology, and Cardiovascular Nursing Council (2011-2012)
 - Committee Chair: CLCD Exercise, Cardiac Rehab and Secondary Prevention Committee (2011-2013)
 - Committee Member: CLCD Leadership Committee (2011-2013)
 - Writing Committee Co-Chair: Clinical Recommendations for CPX Data Assessment: Identification of the Correct Variables in Specific Patient Populations. American Heart Association and European Association for Cardiovascular Prevention and Rehabilitation joint statement (2011-2012)
 - Writing Committee Member: Achieving AHA's 2020 goals; population and individual strategies (2012-2014)
 - Writing Committee Member: Supervision of Exercise Testing for Non-Physicians (2012-2013)
 - Writing Committee Co-Chair: The Importance of Aerobic Fitness in the U.S.: The Need for a National Registry (2012-2013)
 - Writing Committee Co-Chair: Physical Activity and Exercise Recommendations for Stroke Survivors (2012-2014)
 - Request for Applications Review Group: the ASA/Bugher Foundation Centers of Excellence in Stroke Collaborative Research for Regeneration, Resilience and Secondary Prevention (2012)
 - Co-chair, International Congress on Physical Activity: Every Heart Needs Exercise: A Global Call to Action by the American Heart Association (2012-2013)
 - Leadership Committee, Council on Clinical Cardiology (2013-2014)
 - Writing Committee Chair: The Role of Worksite Health Screening: A Policy Statement from the American Heart Association (2013-2014)
 - Writing Committee Member: Heart Failure Management in Skilled Nursing Facilities. A Scientific Statement from the American Heart Association (2011-2014)
 - Writing Committee Member: Training physicians for lifestyle counseling in prevention and treatment of cardiovascular diseases – from medical school curriculum to continuing education (2013-2015)
 - Writing Committee Member: Guidelines for Adult Stroke Rehabilitation and Recovery (2013-2015)

- Ex-Officio Member: CLCD Exercise, Cardiac Rehab and Secondary Prevention Committee (2013-2015)
- Member at Large: CLCD Leadership Committee (2013-2015)
- Writing Committee Member: Cardiorespiratory Fitness as a Component of Cardiovascular Disease Risk Assessment. (2014-2016)
- Writing Committee Chair: Policy Statement - Healthy Lifestyle Promotion, Education, and Interventions: Defining Key Stakeholders, Their Roles, Connectivity, and Who they Impact (2014-2015)
- Policy Development Working Group Member: Physical Education and Physical Activity in Schools (2014-2015)
- Committee Member – International Mentoring Program Liaison: CLCD Leadership Committee (2014-2015)
- 2014-2015 Workplace health steering committee (2015)
- Writing Group Vice Chair: Prioritizing Functional Capacity as a Principal Endpoint for Therapies Oriented to Older Adults with CVD (2015-2016)
- Advocacy Ambassador of the Leadership Committee for the Council of Clinical Cardiology (2015)
- Worksite Wellness Committee, AHA Midwest Affiliate (2015-2016)
- EPI Statistics Committee (2017)

American Physical Therapy Association

- Chair, Task Force on Benchmarks for Scholarship: Research Intensive Physical Therapy Program Consortium (2013-2015)

Association of Schools of Allied Health Professions

- Research Committee (2010-2011)
- Writing Committee Member: Research in Allied Health Professions White Paper (2011)

Prescription for Physical Activity Task Force

- Task force member (2016-Present)

International

Federal University of Health Sciences of Porto Alegre, Porto Alegre, Brasil

- Dissertation Committee, Inspiratory muscle training reduces blood pressure and sympathetic activity in hypertensive patient: A randomized controlled trial, Janaina Ferreira (2010-2012)

Curtin University, Perth West Australia

- Dissertation Examiner, The impact of elevated pulmonary artery pressure on exercise responses, Robert Margaret Fowler (2012)

International Advisory Committee, 9th International Conference on Diet and Activity Methods, Brisbane, Australia, (2015)

SCHOLARLY, RESEARCH, PROFESSIONAL EXPERIENCES

Abbreviations frequently used:

AACVPR - American Association of Cardiovascular & Pulmonary Rehabilitation

ACC – American College of Cardiology

ACSM - American College of Sports Medicine

AHA - American Heart Association

APTA - American Physical Therapy Association

MCVH - Medical College of Virginia Hospitals

VACVPR - Virginia Association of Cardiovascular & Pulmonary Rehabilitation

VCU- Virginia Commonwealth University

Funded Projects

- 2016 Heart rate variability-guided exercise training in type 2 diabetes. American Diabetes Association, 552,000 (Co-investigator).
- 2016 Facilitating functional independence in patients requiring prolonged mechanical ventilation. RO1 National Institutes of Health, 1,536,016 (Co-investigator).
- 2014 Comparing aerobic training to combined aerobic and inspiratory Muscle training in patients with pulmonary arterial hypertension: A Randomized controlled trial. Brazilian National Council for Scientific and Technological Development, 346,000 Reals (Visiting Professor Exterior).
- 2014 Peripheral Muscle Oxygenation and Ventilation during Dynamic Exercise High Intensity Players in Football: A randomized trial of the effects of the Respiratory Muscle Training Improves Exercise Tolerance clinical trial. Brazilian National Council for Scientific and Technological Development, 518,186 Reals (Investigator).
- 2014 Feasibility of urgent care partial pressure of end-tidal carbon dioxide measurement for heart failure patients: prognostic and randomized controlled study. Special program of international cooperation, Brazilian National Council for Scientific and Technological Development, 536,000 Reals (Special Visiting Researcher).

- 2013 Visiting Scholar Grant: Brazilian National Council of Scientific and Professional Development, \$5,000 Reals (visiting scholar).
- 2013 Interleukin-1 blockade in recently decompensated heart failure. NHLBI, \$677,769 (co-investigator)
- 2013 Intestinal ischemia as a stimulus for systemic inflammatory response after cardiac arrest. American Heart Association, \$154,000 (Consultant)
- 2012 Heart failure substudy: A randomized, double-blind, placebo-controlled, event driven trial of quarterly subcutaneous canakinumab in the prevention of recurrent cardiovascular events among stable post-myocardial infarction patients with elevated hsCRP (CANTOS). Novartis Pharmaceuticals, 150,000 (Co-investigator)
- 2012 Exercise therapy to reduce heart failure symptoms; sorting mechanisms and benefits. VA Merit Award, \$1,100,000 (Co-investigator)
- 2012 Soft-hard technologies to assist the accessibility in patients with heart failure: The effect of a five week electrical myostimulation program. Brazilian Council for Scientific and Technological Development, Science without Borders Program, \$34,200 Reals (International Co-Investigator)
- 2011 Pilot Study: Managing Muscle Autophagy through the Heat Shock Response. UNM CTSA Grant, \$25,000 (Co-investigator)
- 2011 Pilot study of the safety and efficacy of anakinra (recombinant human Interleukin-1 receptor antagonist) in heart failure. VCU CTSA Grant, \$25,000 (Co-investigator)
- 2011 Ubiquitin Proteolysis in Skeletal Muscle in Heart Failure. VA Merit Award, 615,000 (Consultant)
- 2010 Anakinra to prevent adverse cardiac remodeling following acute myocardial infarction. VCU Presidential Research Incentive Program Award, \$35, 000 (Co-Investigator)
- 2010 Interleukin-1 blockade in acute myocardial infarction. AHA Scientist Development Grant, \$300,000 (Consultant)

- 2006 Global function for a rare disease gene: clinical significance of the regulation of mitochondrial respiration by tumor suppressor p53 in Li-Fraumeni syndrome. Collaborative NIH Intramural-Extramural Investigations, \$100,000 (Co-Investigator)
- 2006 The effect of a five week electrical myostimulation program in patients with heart failure. A.D. Williams Grant, Virginia Commonwealth University, \$14,950 (Principal Investigator)
- 2006 Effect of exercise training on arterial stiffness in patients with heart failure. Clinical Research Feasibility Funds, General Clinical Research Center, Virginia Commonwealth University, \$23,049 (Principal Investigator)
- 2005 Effects of endurance exercise on bio-behavioral outcomes of fatigue in subjects with breast cancer. National Institutes of Health (Consultant)
- 2002 Short-term reliability of oxygen uptake kinetics. The Steinhardt School of Education, New York University, \$2035 (Principal Investigator)
- 2002 Short-term reliability of oxygen uptake kinetics. A.D. Williams Grant, Virginia Commonwealth University, \$6830 (Principal Investigator)
- 2001 Enhancing the Instruction of ECG Analysis via Real Time Simulation. Center for Teaching Excellence, New York University, \$650 (Principal Investigator).

Other Scholarly Projects

- 2016 Lead Investigator: Scientific Publishing, Amplification and Dissemination Platform. European Union on Diet, Physical Activity and Health, Sponsored by the European Society of Preventive Medicine
- 2016 Lead Investigator: The Healthy Lifestyle Practitioner Discipline. European Union on Diet, Physical Activity and Health, Sponsored by the European Society of Preventive Medicine
- 2014 Member: Science without Borders – Special Program for International Cooperation. National Council for Scientific and Technological Development – Brazil
- 2013 Principal Investigator: The Importance of Cardiorespiratory Fitness in the U.S.: Establishment of a National Registry

- 2012 Co-investigator: Safety and Efficacy of Doxycycline in Patients with Non-Ischemic Cardiomyopathy. Virginia Commonwealth University
- 2012 Co-Principal Investigator: Prognostic value of clinical exercise testing with ventilatory expired gas analysis in patients with heart failure. Multicenter study: Virginia Commonwealth University, Richmond VA; VA Palo Alto Health Care System, Palo Alto CA; LeBauer Cardiovascular Research Foundation, Greensboro, NC; University of Milano, San Paolo Hospital, Milano, Italy
- 2011 Principal Investigator: The Use of Cardiopulmonary Exercise Testing in the Detection of Myocardial Ischemia. Virginia Commonwealth University
- 2011 Co-Investigator: Characterization of cardiac function in patients with hereditary Hemochromatosis who are New York Heart Association functional class I. National Heart Lung and Blood Institute
- 2009 Co-Investigator: General Clinical Research Center: Virginia Commonwealth University. National Institutes of Health
- 2006 Co-Investigator: BNP and MPO in Primary care stage A patients as classified by the ACC/AHA practice guidelines for heart failure. HCA, Dallas, Texas
- 2006 Co-Investigator: Comparison of cardiac rehabilitation, disease management and comprehensive cardiovascular disease management. The Metabetes Institute and HCA, Dallas, Texas
- 2005 Co-Investigator: A Six month double-blind, placebo-controlled Phase 2 Clinical Trial to Determine the safety and efficacy of Idebenone Administered to patients with Friedreich's ataxia. NINDS Neurogenetics Branch, National Institutes of Health
- 2004 Co-Investigator: Therapeutic strategies to delay/prevent cardiovascular complications in subjects with pre-diabetes and type 2 diabetes mellitus. National Heart Lung and Blood Institute
- 2003 Co-Investigator: Genetic Analysis of African-American Hypertensives. National Heart Lung and Blood Institute

Instructional Presentations – Invited Speaker

- Creating the Healthy Living Healthcare System to Combat Chronic Disease. VCU Cardiology Grand Rounds, Virginia Commonwealth University. Richmond, VA, July 2017.

- Recommendations for establishing cardiorespiratory fitness as a vital sign. ACSM Annual Conference, Denver, CO, June 2017.
- Cardiopulmonary stress testing: beyond transplant evaluation. Illinois Chapter of the American College of Cardiology's Hot Topics in Cardiology: Merging the Art and the Business, Lake Geneva, Wisconsin, May 2017.
- The future of chronic disease prevention and treatment: creating the healthy living healthcare system. 2017 CACPR Spring Meeting, Calgary, Canada, April 2017.
- Let's talk about moving: reframing the physical activity and exercise discussion. 2017 CACPR Spring Meeting, Calgary, Canada, April 2017.
- Evidence Based Exercise Prescription Workshop. TotalCardiology Cardiac Rehabilitation, Calgary, Canada, April 2017.
- Why Measure Gas Exchange during Exertion? Cardiopulmonary Stress Test CME. Goshen Hospital, Goshen, IN, March 2017.
- Key Measures during CPX and their Clinical Significance. Cardiopulmonary Stress Test CME. Goshen Hospital, Goshen, IN, March 2017.
- Introducing the Healthy Living Practitioner Discipline. Grant Park Advisory Council and Grant Park Conservancy Public Meeting. Chicago, IL, March 2017.
- Creating the Healthy Living Healthcare System to Combat Chronic Disease. Department of Physical Medicine and Rehabilitation Quarterly Faculty Meeting, Northwestern University. Chicago, IL, February 2017.
- HealthPark@GrantPark Public Presentation. Grant Park Advisory Council and Grant Park Conservancy Public Meeting. Chicago, IL, December 2016.
- Creating the preventive medicine healthcare system to combat chronic disease. ICAN Series – Precision Medicine in Cardiometabolic Diseases. Paris, France, December 2016.
- Revisiting CPX Applications: Aligning Evidence with Clinical Practice. UIC – Advocate Cardiology Fellow Rounds. Chicago, IL, November 2016.

- Workplace Health Achievement Index. Superintendent's Roundtable 2016. AHA Scientific Sessions 2016, New Orleans, LA, November 2016.
- AHA's commitment to the healthspan. Go Big – Ideas in Action. AHA Midwest Affiliate All Staff Conference. Lombard, IL, November 2016.
- Revisiting CPX Applications: Aligning Evidence with Clinical Practice. Boston Medical Center Cardiology Grand Rounds. Boston, MA, October 2016.
- Creating the Preventive Medicine Healthcare System to Combat Chronic Disease. Constitutional Symposium of the Serbian Preventive Medicine Society – Heart at the End. Belgrade, Serbia, October 2016.
- Creating the Preventive Medicine Healthcare System to Combat Chronic Disease. TotalCardiology Seminar. Calgary, Canada, September 2016.
- Creating the Preventive Medicine Healthcare System to Combat Chronic Disease. Cardiology for the Non-cardiologist. Banff, Canada, September 2016.
- Life's Simple 7: The ultimate vital sign and polypill. AHA Corporate health directors meeting, Dallas, TX, September 2016.
- Promoting the healthspan in Grant Park. Grant Park Advisory Council & Grant Park Conservancy Public Meeting. Chicago, IL, June 2016.
- Creating the preventive medicine healthcare system to combat chronic disease. National Coalition for Promoting Physical Activity Policy Meeting, Washington, DC, July 2016.
- AHA Worksite Wellness Solutions Webinar, American Heart Association, Dallas, TX, June 2016.
- Creating the preventive medicine healthcare system to combat chronic disease. World Congress of Cardiology & Cardiovascular Health 2016, Mexico City, Mexico, June 2016.

- HealthPark@Grant Park Panel Discussion. Grant Park Advisory Council & Grant Park Conservancy Public Meeting. Chicago, IL, June 2016.
- The Future of Noncommunicable Disease Prevention and Treatment: Creating the Healthy Lifestyle Healthcare System. Brazilian Society of Cardiology Annual Meeting, Sao Paulo, Brazil, May 2016.
- Revisiting CPX Applications: Aligning Evidence with Clinical Practice. Brazilian Society of Cardiology Annual Meeting, Sao Paulo, Brazil, May 2016.
- The Future of Noncommunicable Disease Prevention and Treatment: Creating the Healthy Lifestyle Healthcare System. Exercise is Medicine 2016: From Research to Prescription. University of Kansas, Lawrence, KN, May 2016.
- AHA Worksite Wellness Solutions Webinar, American Heart Association, Dallas, TX, April 2016.
- Revisiting CPX Applications: Aligning Evidence with Clinical Practice. Federal University of Sao Carlos, Sao Carlos, Brazil, April 2016.
- Transforming Cardiac Rehabilitation into Broad-Based Healthy Lifestyle Programs to Combat Non-Communicable Disease. Departments of Physical Therapy and Kinesiology and Applied Physiology, College of Health Sciences, University of Delaware. Newark, DE, March 2016.
- The Future of Noncommunicable Disease Prevention and Treatment: Creating the Healthy Lifestyle Healthcare System. Kirkpatrick Conference Series of Ball State University's Fisher Institute of Health and Well-Being, Ball State University, Muncie, Indiana, February 2016.
- Grant Park Healthy Lifestyle Space. Grant Park Advisory Council & Grant Park Conservancy Public Meeting. Chicago, IL, February 2016.
- The Future of Noncommunicable Disease Prevention and Treatment: Creating the Healthy Lifestyle Healthcare System. National Coalition for Promoting Physical Activity Board Meeting. Washington, DC, February 2016.

- Using No-Cost Tools & Resources to Enhance Your Health Improvement Efforts. 4th Annual Employee Wellness Forum: Midwest Business Group on Health. Chicago, IL, January 2016.
- The Future of Noncommunicable Disease Prevention and Treatment: Creating the Healthy Lifestyle Healthcare System. Grand Rounds, Department of Preventative Medicine, Rush University Medical Center, Chicago, IL, January 2016.
- Exercise is Medicine. Second International Congress of Cardiorespiratory Kinesiology – Argentina Society of Cardiorespiratory Kinesiology, Buenos Aries, Argentina, December 2015.
- Assessment of Exercise as a Vital Sign. Second International Congress of Cardiorespiratory Kinesiology – Argentina Society of Cardiorespiratory Kinesiology, Buenos Aries, Argentina, December 2015.
- Second International Congress of Cardiorespiratory Kinesiology – Argentina Society of Cardiorespiratory Kinesiology, Buenos Aries, Argentina, December 2015.
- Cardiac Rehabilitation: Current Applications and Future Considerations. Second International Congress of Cardiorespiratory Kinesiology – Argentina Society of Cardiorespiratory Kinesiology, Buenos Aries, Argentina, December 2015.
- Making the most of your physical therapy education: taking advantage of the opportunities around you. 13th Annual UC Davis Pre-Medical and Pre-Health Professions National Conference. Sacramento, CA, October 2015.
- Addressing the NCD Crisis in China. International Research Advisory Committee Meeting, Guangdong Work Injury Rehabilitation Center, Guangzhou, China, September 2015.
- Transforming Cardiac Rehabilitation into Broad-Based Healthy Lifestyle Programs to Combat Non-Communicable Disease. UIC College of Medicine, Division of Cardiology Fellows Conference, September 2015.
- Assessing Cardiopulmonary Fitness in Chronic Disease Populations. 9th International Conference on Diet and Activity Methods, Brisbane, Australia, September 2015.

- Emerging Assessments of Cardiopulmonary Fitness: Respiratory Muscle Performance. 9th International Conference on Diet and Activity Methods, Brisbane, Australia, September 2015.
- Revisiting CPX Applications: Aligning Evidence with Clinical Practice. School of Human Movement and Nutrition Sciences, University of Queensland, Brisbane, Australia, August 2015.
- Transforming Cardiac Rehabilitation into Broad-Based Healthy Lifestyle Programs to Combat Non-Communicable Disease. School of Human Movement and Nutrition Sciences, University of Queensland, Brisbane, Australia, August 2015.
- Host: Physical Education in Schools. AHA Webinar Series. Chicago, IL, July 2015.
- Cardiac Rehabilitation: State of Evidence, Current Practice Patterns and the Future. Cardiology Grand Rounds. John H Stroger Jr. Hospital of Cook County, Chicago, IL, July 2015.
- Addressing the non-communicable disease Epidemic through worksite health and wellness programs. XXXVI Congress of the Sao Paulo State Society of Cardiology, XXI Physical Therapy Symposium, Sao Paulo, Brazil, June 2015.
- Revisiting CPX Applications: Aligning Evidence with Clinical Practice. XXXVI Congress of the Sao Paulo State Society of Cardiology, XXI Physical Therapy Symposium, Sao Paulo, Brazil, June 2015.
- ACSM President's Lecture: Revisiting CPX Applications: Aligning Evidence with Clinical Practice. ACSM Annual Conference, San Diego, CA, May 2015.
- Cardiac Rehabilitation: State of Evidence, Current Practice Patterns and the Future. Internal Medicine Grand Rounds. John Ochsner Heart and Vascular Institute, New Orleans, LA, April 2015.
- Cardiopulmonary Exercise Testing in Heart Failure and Pulmonary Hypertension: Reinventing Clinical and Research Applications. Cardiology Grand Rounds. John Ochsner Heart and Vascular Institute, New Orleans, LA, April 2015.

- Creating the Ideal Exercise Training Program for the Patient with Heart Failure: Aerobic, Resistance and Beyond. 30th Uruguayan Cardiology Congress, Montevideo, Uruguay, December 2014.
- New Indications for Cardiac Rehabilitation Programs. 30th Uruguayan Cardiology Congress, Montevideo, Uruguay, December 2014.
- Worksite Health and Wellness Programs as a Model for Primary Prevention Cardiac Rehabilitation. 30th Uruguayan Cardiology Congress, Montevideo, Uruguay, December 2014.
- The Impact of Women and the Elderly and Exercise Testing/Exercise Prescription. AHA Scientific Sessions, Chicago, IL, November 2014.
- Age, Gender, Frailty and Physical Limitations. AHA Scientific Sessions, Chicago, IL, November 2014.
- A Fresh Look at Exercise is Medicine. UIC Department of Medicine Grand Rounds, Chicago, IL October 2014.
- Cardiopulmonary Exercise Testing: Reinventing Clinical and Research Applications. Distinguished Lecture Series, University of Alabama Birmingham Center for Exercise Medicine, Birmingham, AL, October 2014.
- American Heart Association: Physical Activity/Physical Fitness Assessment in Screening and Health Promotion. HERO Forum, San Diego, California, October 2014.
- A Fresh Look at Exercise is Medicine. Cardiology for the Non-cardiologist, Banff, Canada, September 2014.
- Cardiac Rehabilitation: State of Evidence, Current Practice Patterns and the Future. TotalCardiology Cardiac Rehabilitation Seminar, Calgary, Canada, September 2014.
- Cardiopulmonary Rehabilitation: Ergospirometry. XVII International Symposium of Cardiopulmonary Physiotherapy and Intensive Care Physiotherapy – SIFR. Salvador, Brazil, September 2014.
- Exercise in Pulmonary Arterial Hypertension: Physiology, Outcomes, and Clinical Considerations. XVII International Symposium of Cardiopulmonary Physiotherapy and Intensive Care Physiotherapy – SIFR. Salvador, Brazil, September 2014.

- Promoting Health and Wellness in the Workplace: A Unique Opportunity to Establish Primary and Extended Secondary Cardiovascular Risk Reduction Programs. XVII International Symposium of Cardiopulmonary Physiotherapy and Intensive Care Physiotherapy – SIFR. Salvador, Brazil, September 2014.
- Cardiopulmonary Exercise Testing as a Diagnostic Tool for the Detection of Left-Sided Pulmonary Hypertension. XVII International Symposium of Cardiopulmonary Physiotherapy and Intensive Care Physiotherapy – SIFR. Salvador, Brazil, September 2014.
- Cardiac Rehabilitation: State of Evidence, Current Practice Patterns and the Future. XVII International Symposium of Cardiopulmonary Physiotherapy and Intensive Care Physiotherapy – SIFR. Salvador, Brazil, September 2014.
- Opening Remarks: Fitness and Exercise: Vital Aspects of Global Healthcare. China Heart Conference. Beijing, China, August 2014.
- CPX: Reinventing Clinical and Research Applications. China Heart Conference. Beijing, China, August 2014.
- Cardiac Rehabilitation: State of Evidence, Current Practice Patterns and the Future. China Heart Conference. Beijing, China, August 2014.
- CPX: Reinventing Clinical and Research Applications. UIC Division of Pulmonary, Critical Care, Sleep and Allergy Grand Rounds, Chicago, IL, May 2014.
- Cardiac Rehabilitation: State of Evidence, Current Practice Patterns and the Future. UIC Division of Cardiology Grand Rounds, Chicago, IL, May 2014.
- Optimal Utilization of CPX in Patients with Heart Failure. 41st Congress of the Brazilian Society of Cardiovascular Surgery, Porto De Galinhas, Brazil, April 2014.
- CPX: Reinventing Clinical and Research Applications. Congress of the Brazilian Society of Cardiovascular Surgery, Porto De Galinhas, Brazil, April 2014.
- Cardiac Rehabilitation: State of Evidence, Current Practice Patterns and the Future. Congress of the Brazilian Society of Cardiovascular Surgery, Porto De Galinhas, Brazil, April 2014.

- The Implications of Megatrends in Information and Communication Technology and Transportation for Changes in Global Physical Activity. Congress of the Brazilian Society of Cardiovascular Surgery, Porto De Galinhas, Brazil, April 2014.
- CPX: Reinventing Clinical and Research Applications. Rehabilitation Institute of Chicago Seminar, Chicago, IL, March 2014.
- Cardiac Rehabilitation: State of Evidence, Current Practice Patterns and the Future. Department of Medicine Grand Rounds, Advocate Christ Medical Center, Chicago, IL, February 2014.
- CPX: Reinventing Clinical and Research Applications. UIC Division of Cardiology Grand Rounds, Chicago, IL, December 2013.
- Physical Activity Research: Is Funding Available? The International Funding Perspective: South America. Global Congress on Physical Activity, American Heart Association Scientific Sessions, Dallas, TX, November 2013.
- The Implications of Megatrends in Information and Communication Technology and Transportation for Changes in Global Physical Activity. Global Congress on Physical Activity, American Heart Association Scientific Sessions, Dallas, TX, November 2013.
- Current State of Worksite Wellness Programs: Are they Ready for Prime Time? Global Congress on Physical Activity, American Heart Association Scientific Sessions, Dallas, TX, November 2013.
- ECG Workshop. Federal University of Sao Carlos, Sao Carlos Brazil, November 2013.
- Concepts of Standard Exercise Testing. Federal University of Sao Carlos, Sao Carlos Brazil, November 2013.
- Cardiopulmonary Exercise Testing Seminar. Federal University of Sao Carlos, Sao Carlos Brazil, November 2013.
- Scientific Publication Workshop. University of Brasilia, Brasilia, Brazil, November 2013.
- CPX: State of the Art. University of Brasilia, Brasilia, Brazil, November 2013.

- Panelist: Drivers of Change: Opportunities and Barriers to Systemic Change. Public Forum: Teaching nutrition and physical activity in medical school: training doctors for prevention-oriented medicine. The Alliance for a Healthier Generation, The American College of Sports Medicine, and the Bipartisan Policy Center. Washington, DC, October 2013.
- Cardiopulmonary exercise testing – variables and interpretation. Post-colloquium workshop on evaluating exercise capacity, physical activity and energy expenditure. Manipal University, Manipal, India, September 2013.
- Cardiopulmonary exercise testing demonstration. Post-colloquium workshop. Manipal University, Manipal, India, September 2013.
- Identifying and evaluating exercise intolerance. The colloquium on exercise science and health promotion (ExPro) 2013. Manipal University, Manipal, India, September 2013.
- Optimal timing for initiating exercise training in HF and PAH. The colloquium on exercise science and health promotion (ExPro) 2013. Manipal University, Manipal, India, September 2013.
- Physical inactivity – a global epidemic. The colloquium on exercise science and health promotion (ExPro) 2013. Manipal University, Manipal, India, September 2013.
- Combating obesity: role of physical activity in energy balance. The colloquium on exercise science and health promotion (ExPro) 2013. Manipal University, Manipal, India, September 2013.
- Models for physical activity promotion II: Considerations for physical activity promotion in educational institutions. The colloquium on exercise science and health promotion (ExPro) 2013. Manipal University, Manipal, India, September 2013.
- Barriers and challenges to increasing physical activity. The colloquium on exercise science and health promotion (ExPro) 2013. Manipal University, Manipal, India, September 2013.
- Choosing the right journal and submission category. Pre-colloquium workshop on publishing in medical journals. Manipal University, Manipal, India, September 2013.

- Need for worksite wellness programs. Pre-colloquium workshop on developing worksite wellness programs. Manipal University, Manipal, India, September 2013.
- The importance of grass roots initiatives and messaging for worksite wellness. Pre-colloquium workshop on developing worksite wellness programs. Manipal University, Manipal, India, September 2013.
- Role of cardiopulmonary exercise testing in differentiating between unexplained exertional dyspnea and pulmonary hypertension. European Society of Cardiology Congress 2013, Amsterdam, Netherlands, September 2013.
- Analysis of gas exchange data: the role of cardiopulmonary exercise testing in cardiopulmonary rehabilitation. 7th Cardiopulmonary Rehabilitation Workshop in conjunction with 18th Angioplasty Summit – TCTAP 2013. Seoul, Korea, April 2013.
- Exercise training for the overweight and obese. ACC Scientific Sessions, San Francisco, CA, March 2013.
- A Proposed Vision for Academic Physical Therapy. Department of Physical Therapy, University of Illinois Chicago, Chicago, IL, December 2012.
- The Clinical Importance of Cardiopulmonary Fitness: Translating Research to Policy. Program in Physical Therapy, University of Minnesota, Minneapolis, MN, December 2012.
- A Proposed Vision for Academic Physical Therapy. Program in Physical Therapy, University of Minnesota, Minneapolis, MN, December 2012.
- The importance of improving physical fitness for your health. UNM Medical Group Health and Wellness Committee, Albuquerque, NM, December, 2012.
- Exercise truly is medicine: Key points for health practitioners. UNM Resident School. Albuquerque, NM, November, 2012.
- Physical fitness and activity are key indicators for health and longevity. UNM Arts-in-Medicine/HSC Wellness Program Lecture Series. Albuquerque, NM, November, 2012.

- The future of aerobic exercise testing in clinical practice. New Mexico Association for Health, Physical Education, Recreation and Dance Annual Conference, Albuquerque, NM, October 2012.
- Understanding research and applying it to clinical practice. Cardiac Health and Wellness 2012: Current and emerging trends in cardiovascular disease prevention and rehabilitation. Cochrane, Alberta, Canada, September 2012.
- Exercise is truly medicine: key points for the general practitioner. Cardiac Health and Wellness 2012: Current and emerging trends in cardiovascular disease prevention and rehabilitation. Cochrane, Alberta, Canada, September 2012.
- Exercise is truly medicine: key points for the general practitioner. Cardiology for the non-cardiologist. Banff, Alberta, Canada, September 2012.
- Creating the ideal exercise training program for the patient with heart failure: Aerobic, resistance and beyond. Target Meeting 2nd world cardiovascular, diabetes, and obesity online conference, September 2012.
- Exercise guidelines for heart failure in nursing homes. Heart Failure Society of American 16th Annual Scientific Meeting. Seattle, WA, September 2012.
- The Future of Aerobic Exercise Testing in Clinical Practice: Should it become the 5th vital sign? UNM Project ECHO™, Albuquerque, NM, August 2012.
- Perspectives of international collaboration. 1st international colloquium of the post-graduate science and technology program, University of Brasilia, Brasilia, Brasil, May 2012.
- Creating the ideal exercise training program for the patient with heart failure: aerobic, resistance and beyond. Department of Physical Therapy, Federal University of Sao Carlo, Sao Carlo, Brasil, May 2012
- Is cardiopulmonary exercise testing an indispensable clinical assessment? 16th International Symposium of Respiratory and Intensive Care Physical Therapy, Rio De Janeiro, Brasil, May 2012

- Clinical indications and utility of cardiopulmonary exercise testing. 16th International Symposium of Respiratory and Intensive Care Physical Therapy, Rio De Janeiro, Brasil, May 2012
- Clinical indications for cardiopulmonary exercise testing in patient populations other than heart failure. 16th International Symposium of Respiratory and Intensive Care Physical Therapy, Rio De Janeiro, Brasil, May 2012
- Cardiopulmonary exercise testing in patients with left ventricular dysfunction. 16th International Symposium of Respiratory and Intensive Care Physical Therapy, Rio De Janeiro, May 2012
- International colloquium session. 16th International Symposium of Respiratory and Intensive Care Physical Therapy, Rio De Janeiro, Brasil, May 2012
- Statistical considerations in planning a survival analysis. UNM Department of Health, Exercise & Sports Sciences, Albuquerque, NM, April 2012
- Cardiopulmonary exercise testing, indications and utility. ACC Scientific Sessions, Chicago, IL, March 2012
- Assessment of Aerobic Capacity in Clinical Practice Present and Future Applications. Target Meeting 1st world cardiovascular, diabetes, and obesity online conference, September 2011
- The Future of Aerobic Exercise Testing in Clinical Practice: Is it the Ultimate Vital Sign. Getchell Lecture, Ball State University, School of Physical Education, Sport, & Exercise Science, Muncie, IN, April 2011
- Cardiopulmonary exercise testing in the heart failure population. Student Seminar, Ball State University, School of Physical Education, Sport, & Exercise Science, Muncie, IN, April 2011
- The Future of Aerobic Exercise Testing in Clinical Practice: Is it the Ultimate Vital Sign. The University of Toledo, Department of Medicine Grand Round Series, Toledo, OH, April 2011
- Cardiopulmonary exercise testing in the heart failure population. The University of Toledo, Department of Medicine, Division of Cardiovascular Medicine, M&M Series, Toledo, OH, April 2011

- The Future of Aerobic Exercise Testing in Clinical Practice: Is it the Ultimate Vital Sign. VCU Rehabilitation and Movement Science Seminar, Richmond, VA, March 2011
- Using measures of physical function in the clinical and research setting: clinical exercise testing. AHA Scientific Sessions, Chicago, IL, November 2010
- Creating the ideal exercise training program for the patient with heart failure: Aerobic, resistance and beyond. Climbing to new heights in the prevention of heart disease. Banff, Alberta, Canada, October 2010
- Is it the ultimate vital sign? The future of aerobic exercise testing in clinical practice. Cardiology for the Non-Cardiologist. Banff, Alberta, Canada, October 2010
- The next new edition of the guidelines for exercise testing and prescription (9th edition). ACSM National Meeting, Baltimore, MD, May 2010
- Webcast: 2009 update on the clinical applications of cardiopulmonary exercise testing. Department of Physical Therapy, University of Brasilia, Brasilia, Brazil, October 2009
- Exercise training and heart failure. Cardiology for the Non-Cardiologist. Banff, Canada, September 2008
- Exercise testing and training in patients with diabetes – what's new? Journey through Cardiac Diagnosis, Treatment and Rehabilitation. Calgary, Canada, September 2008
- Prognostic applications of cardiopulmonary exercise testing in patients with heart failure. Human Performance Laboratory, University of Calgary, Calgary, Canada, September 2008
- Assessment of functional capacity in clinical and research setting. Preconference symposium: 14^o International symposium of respiratory physiotherapy and physiotherapy intensive care. Recife, Brazil, September 2008
- Measurement of ventilatory efficiency during exercise. Preconference symposium: 14^o International symposium of respiratory physiotherapy and physiotherapy intensive care. Recife, Brazil, September 2008

- The prognostic value of cardiopulmonary exercise testing. Preconference symposium: 14^o International symposium of respiratory physiotherapy and physiotherapy intensive care. Recife, Brazil, September 2008
- Functional capacity assessment in the clinical setting. 14^o International symposium of respiratory physiotherapy and physiotherapy intensive care. Recife, Brazil, September 2008
- The prognostic value of cardiopulmonary exercise testing. 14^o International symposium of respiratory physiotherapy and physiotherapy intensive care. Recife, Brazil, September 2008
- International Colloquium: International perspectives of cardiopulmonary physical therapy. 14^o International symposium of respiratory physiotherapy and physiotherapy intensive care. Recife, Brazil, September 2008
- The Clinical Value of Cardiopulmonary Exercise Testing. University of Cincinnati, Division of Cardiovascular Diseases, Cincinnati, Ohio, May 2008
- The Clinical Value of Cardiopulmonary Exercise Testing. West Virginia Association of Cardiovascular and Pulmonary Rehabilitation, Sutton, West Virginia, May 2008
- Mechanism of Exercise Limitation in Heart Failure and Response to Training. West Virginia Association of Cardiovascular and Pulmonary Rehabilitation, Sutton, West Virginia, May 2008
- The Clinical Value of Cardiopulmonary Exercise Testing in Heart Failure. CHF and Heart Transplant Team, Virginia Commonwealth University Health System, Richmond, Virginia, May 2008
- What Limits Exercise Capacity in Patients with Heart Failure? VACVPR Annual Meeting, Williamsburg, Virginia, May 2008
- Basic Concepts of Aerobic Exercise Testing and Training. VACVPR Annual Meeting, Williamsburg, Virginia, May 2008

- Assessment of Functional Capacity in Clinical and Research Settings: A Scientific Statement from the American Heart Association Committee on Exercise, Rehabilitation and Prevention of the Council on Clinical Cardiology and the Council on Cardiovascular Nursing. Department of Health and Exercise Science, Wake Forrest University, Winston-Salem, North Carolina, November, 2007
- Exercise Physiology: Optimizing the Exercise Component: Aerobic Exercise Training. AACVPR Annual Meeting, Salt Lake City, Utah, October 2007
- What Limits Exercise Capacity in Heart Failure: The Role of Skeletal Muscle. AACVPR Annual Meeting, Salt Lake City, Utah, October 2007
- The Clinical Value of Cardiopulmonary Exercise Testing in Patients with Heart Failure. Federal University of Sao Paulo, Pulmonary Function and Clinical Exercise Physiology Unit, Department of Medicine, Respiratory Division, Sao Paulo, Brazil, October 2007
- General Concepts of Aerobic Exercise Training and Prescription. 17th Brazilian Physical Therapy Conference, Sao Paulo, Brazil, October 2007
- The Clinical Importance of Cardiopulmonary Exercise Testing and Exercise Training in Patients with Heart Failure. 17th Brazilian Physical Therapy Conference, Sao Paulo, Brazil, October 2007
- The Clinical Value of Cardiopulmonary Exercise Testing in Patients with Heart Failure. Federal University of Sao Paulo, Surgical Cardiology, Department of Cardiology, Sao Paulo, Brazil, October 2007
- Cardiopulmonary Exercise Testing Lecture/Lab. The Cardiac Wellness Institute of Calgary. Calgary, Canada, August 2007.
- Development of a Research Project and the Statistical Analysis of Data: Not as Scary as You May Think. The Cardiac Wellness Institute of Calgary. Calgary, Canada, August 2007.
- Mechanisms of Exercise Limitation in Heart Failure and Response to Training. The Cardiac Wellness Institute of Calgary. Calgary, Canada, August 2007.

- The Clinical Value of Cardiopulmonary Exercise Testing. The Cardiac Wellness Institute of Calgary. Calgary, Canada, August 2007.
- Follow-up Management of Patients with Known Cardiovascular Disease. Virginia Commonwealth University, Grand Rounds, Department Physical Medicine and Rehabilitation. Richmond, VA, April 2007.
- Couch Potatoes. The Game of Health Weekly Teleconference. Las Colinas, TX, March 2007.
- Utilization of CPX in Mitochondrial Respiratory Chain Diseases. Biomarkers for Mitochondrial Respiratory Chain Diseases Conference, NIH, Bethesda, MD, November 2006.
- Exercise Training Considerations in the Diabetic Population. Diabetes/Cardiology Symposium 2006: Taking Action, Overland Park, KS, October 2006.
- Operation of the Metabolic Cart. VCU General Clinical Research Center, Richmond, VA, October 2006.
- Exercise Testing and Training in Heart Failure – State of the Art. AACVPR National Conference, Charleston, WV, September 2006.
- Clinical and Research Applications of CPX: A Case Study Approach. NHLBI Cardiology Rounds, Bethesda MD, June 2006. (S)
- Cardiopulmonary Exercise Testing in the Heart Failure Population: A Review of Current Evidence and Clinical Guidelines. ACSM National Meeting, Denver CO, June 2006. (S)
- Exercise Physiology for Health Professionals. VACVPR Annual Meeting, Reston, VA 2006. (S)
- Exercise Physiology for Nurses. AACVPR National Meeting, Milwaukee, WI, October 2005. (S)
- Physical Therapy for Patients with Cardiovascular Disease: From the ICU to Cardiac Rehabilitation. Shore Memorial Hospital, Nassawadox, VA, August, 2005.

- Follow-up Management of Patients with Known Cardiovascular Disease. University of Virginia Cardiac Rehabilitation, Charlottesville, VA, April, 2005.
- Evaluation and Treatment of the Heart Failure Patient. Bon Secours Home Health, Richmond, VA, December, 2004.
- Pulmonary Auscultation. Bon Secours Home Health, Richmond, VA, November, 2004.
- Improving Cardiovascular Health. Church of God, Ashland, VA, October, 2004.
- Web Based ECG Course. Wellness First, Powhatan, VA, Distributed September, 2004.
- Web Based ECG Course. VCU, General Clinical Research Center, Richmond, VA, Distributed September, 2004.
- Knowledge Networks: Heart Failure. APTA National Conference, Chicago, IL, June, 2004.
- Cardiovascular/Pulmonary Exercise Testing in the Heart Failure Population. APTA National Conference, Chicago, IL, June, 2004.
- Clinical Value of Cardiopulmonary Exercise Testing. Clinical Rounds for Cardiovascular Disease, NIH/NHLBI, Bethesda, MD, April, 2004.
- New Protocols for Metabolic Stress Testing. Area National Heart Failure Collaborative Meeting, Bethesda, MD, March, 2004.
- Introduction to Research Based Outcomes: Not as Scary as You May Think. AACVPR National Conference, Kansas City MO, October, 2003.
- Procedures for Submaximal Exercise Testing. Easterling-Zacharias Wellness Institute, Richmond, VA, October, 2003.
- Diagnostic and Prognostic Value of Cardiopulmonary Exercise Testing: Uniformed Services University of Health Sciences (USUHS) and NNMC-NIH/NHLBI Heart Failure program. National Naval Medical Center, Bethesda, MD, September, 2003.
- Pulmonary Rehabilitation. Department of Internal Medicine: Pulmonary-Critical Care Fellowship Program. VCU/MCV Campus, March, 2003.

- Metabolic Exercise Testing in the Heart Failure Population: Present and Future Clinical Applications. Department of Physiology Seminar, VCU/MCV Campus, February, 2003.
- Assessment of Functional Status in Patients with Heart Failure. AACVPR National Conference, September, 2001.
- Contemporary Approaches to Exercise Management in Patients with Cardiopulmonary Disease. MCVH, October, 1999, Richmond, VA.
- Benefits of Aerobic Exercise Training. MCVH Employee Wellness Program. September, 1998, Richmond, VA.

Scientific (S) and Professional (P) Presentations

- Prognostic value of the systolic blood pressure response during cardiopulmonary exercise testing in patients with heart failure. Heart Failure Society of America Annual Meeting, Grapevine, TX, September 2017 (S).
- Maximal fat oxidation: Optimal exercise intensity for weight management and its dissociation from anaerobic threshold. ACSM Annual Conference, Denver, CO, June 2017 (S).
- Facility- and home-based cardiac rehabilitation achieve similar magnitude of functional improvements. ACSM Annual Conference, Denver, CO, June 2017 (S).
- Stratification of patients in cardiac rehabilitation as novel programs develop. ACSM Annual Conference, Denver, CO, June 2017 (S).
- The use of prediction equations in hypertrophic cardiomyopathy. ACSM Annual Conference, Denver, CO, June 2017 (S).
- Contribution of muscle wasting to muscle weakness in patients requiring prolonged mechanical ventilation. American Thoracic Society International Conference, Washington, DC, May 2017 (S).
- Limitation to expiratory flow in patients with coronary artery disease during moderate and high intensity exercise. 44th Congress of the Brazilian Society of Cardiovascular Surgery, Rio De Janeiro, Brazil, April 2017 (S).
- Arterial elastance drives ventilatory inefficiency in systolic heart failure. ACC Scientific Sessions, Washington, DC, March 2017 (S).

- Search for the super-responder: progressive increases in fitness and an association with lower mortality. ACC Scientific Sessions, Washington, DC, March 2017 (S).
- Fitness and the obesity paradox in cardiac rehabilitation: how does weight loss factor in? ACC Scientific Sessions, Washington, DC, March 2017 (S).
- Early diastolic annular velocity at peak exercise determines peak aerobic exercise capacity in heart failure with preserved ejection fraction. ACC Scientific Sessions, Washington, DC, March 2017 (S).
- Improving Heart Health in the Workplace: Results from the First Year of the American Heart Association's Workplace Health Achievement Index. 2017 Scientific Sessions: AHA Epidemiology and Prevention and Lifestyle and Cardiometabolic Health. Portland, OR, March 2017. (S)
- Cardiac rehabilitation in subjects with peripheral arterial disease: A higher risk patient population who benefit from attendance. AHA Scientific Sessions, New Orleans, LA, November 2016. (S)
- Cardiac rehabilitation in subjects with peripheral arterial disease: a higher risk patient population who benefit from attendance. Canadian Cardiovascular Congress, Ontario, CA, October 2016. (S)
- Comparison of three walking tests to cardiopulmonary exercise tests in the assessment of exercise tolerance in individuals with pulmonary arterial hypertension. European Respiratory Society International Congress, London, England, September 2016. (S)
- Acute effects using light-emitting diode therapy (LEDT) for muscle function during isometric exercise in asthma patients: Preliminary results. European Respiratory Society International Congress, London, England, September 2016. (S)
- Reproducibility and relationships of the 6-minute walk test and shuttle walk test in children with cerebral palsy. European Respiratory Society International Congress, London, England, September 2016. (S)

- The effects of inspiratory resistive loading on respiratory and locomotors muscle oxygenation during high intensity exercise in female soccer players. European Respiratory Society International Congress, London, England, September 2016. (S)
- Circulatory and ventilatory power: New indices to assess cardiorespiratory responses in diabetics. European Respiratory Society International Congress, London, England, September 2016. (S)
- Effects of neuromuscular stimulation on functional status and quality of life in heart failure. European Society of Cardiology Annual Meeting, Rome, Italy, August 2016. (S)
- Cardiopulmonary and cardiocirculatory responses in the coexistence of hypertension in diabetes type II patients. ACSM Annual Meeting, Boston, MA, June 2016. (S)
- Does HRV during submaximal exercise transitions from rest relate to maximal cardiorespiratory responses in COPD? ACSM Annual Meeting, Boston, MA, June 2016. (S)
- The oxygen uptake efficiency slope is not influenced by beta-blockade In end-stage liver disease patients. ACSM Annual Meeting, Boston, MA, June 2016. (S)
- The oxygen uptake efficiency slope reflects exercise-training induced changes in $\text{VO}_{2\text{max}}$ in obese children. ACSM Annual Meeting, Boston, MA, June 2016. (S)
- Validity of six-minute oxygen uptake efficiency slope in obese children to determine cardiorespiratory fitness. ACSM Annual Meeting, Boston, MA, June 2016. (S)
- The role of body habitus in predicting cardiorespiratory fitness: findings from the FRIEND registry. Experimental Biology, San Diego, CA, April, 2016. (S)
- Impact of neuromuscular electrical stimulation on quadriceps size and functional activity in patients weaning from prolonged ventilation. American Thoracic Society Conference, San Francisco, CA, 2016. (S)
- Autonomic modulation in supine and standing positions in patients with difficult-to-control asthma. American Thoracic Society Conference, San Francisco, CA, 2016. (S)

- Functional performance tests elicit a maximal cardiovascular response in patients with pulmonary hypertension. American Thoracic Society Conference, San Francisco, CA, 2016. (S)
- Is heart rate variability altered during different parts of the sleep cycle in mild and moderate OSA? American Thoracic Society Conference, San Francisco, CA, 2016. (S)
- Functional capacity tests: 6MWT and SWT in children with cerebral palsy. American Thoracic Society Conference, San Francisco, CA, 2016. (S)
- Identifying APACHE II and SOFA threshold values that predict successful weaning and extubation from mechanical ventilation. American Thoracic Society Conference, San Francisco, CA, 2016. (S)
- Cardiopulmonary exercise test differences in healthy adults with and without anxiety disorders - does activity level and fitness have an influence? American Thoracic Society Conference, San Francisco, CA, 2016. (S)
- Relationship between physical activity patterns and key exercise testing variables in patients with heart failure. American Thoracic Society Conference, San Francisco, CA, 2016. (S)
- Non-invasive ventilation improves cardiovascular adjustments and fatigability in patients with heart failure. American Thoracic Society Conference, San Francisco, CA, 2016. (S)
- Glycemic control affecting the autonomic modulation in type 2 diabetes. 20th Brazilian Diabetes Society Congress, Porto Alegre, Brazil, November, 2015. (S)
- Effects of a concurrent strength and endurance training program in diabetes patients: A randomized controlled trial. AHA Scientific Sessions, Orlando, FL, November, 2015. (S)
- Nonresponders to cardiac rehabilitation and outcomes. AHA Scientific Sessions, Orlando, FL, November, 2015. (S)
- Post-exercise flow mediated dilation is augmented in highly trained female athletes. AHA Scientific Sessions, Orlando, FL, November, 2015. (S)

- Daily sedentary behavior in center-based cardiac rehabilitation participants. Canadian Association of Cardiovascular Prevention and Rehabilitation Annual Meeting, Toronto, Canada, October 2015. (S)
- A qualitative investigation of decisions about cardiac rehabilitation enrolment in patients with acute coronary syndrome. Canadian Association of Cardiovascular Prevention and Rehabilitation Annual Meeting, Toronto, Canada, October 2015. (S)
- A synopsis of the professional recommendations for exercise and hypertension and their clinical and research implications. Euro Health Care and Fitness Summit, Valencia, Spain, September 2015. (S)
- Evaluation of the expiratory flow limitation during exercise of moderate and high intensity in patients with coronary artery disease. XXXVI Congress of the Sao Paulo State Society of Cardiology, XXI Physical Therapy Symposium, Sao Paolo, Brazil, June 2015. (S)
- Diminished muscular endurance in heart failure without differences in body composition. ACSM Annual Meeting, San Diego, California, May 2015. (S)
- Influence of adiposity on walking speed in heart failure – the functional paradox. ACSM Annual Meeting, San Diego, California, May 2015. (S)
- Impact of neuromuscular electrical stimulation on quadriceps size and function in patients weaning from prolonged mechanical ventilation. American Thoracic Society International Conference, Denver, Colorado, May 2015. (S)
- Comparative effects of inspiratory muscle training and resistance training on respiratory and skeletal muscle strength in COPD: Responses of a pulmonary rehabilitation program. European Respiratory Society Annual Congress, Munich, Germany, September 2014. (S)
- Ventilatory parameters on cardiopulmonary exercise testing in advanced heart failure: Chagas versus ischemic etiology. Respiratory Society Annual Congress, Munich, Germany, September 2014. (S)

- Neuromuscular electrical stimulation improves clinical and physiologic function in COPD patients. European Respiratory Society Annual Congress, Munich, Germany, September 2014. (S)
- A maximal bout of aerobic exercise changes vascular function in patients with Chagasic heart failure, but not in patients with ischemic heart disease. XVII International Symposium of Cardiopulmonary Physiotherapy and Intensive Care Physiotherapy – SIFR. Salvador, Brazil, September 2014.
- Ventilatory efficiency for oxygen consumption and for pro production of carbon dioxide of patients in different states of myocardial infarction. XVII International Symposium of Cardiopulmonary Physiotherapy and Intensive Care Physiotherapy – SIFR. Salvador, Brazil, September 2014.
- Relationship between physical activity patterns and key cardiopulmonary exercise testing variables in patients with heart failure. American Thoracic Society International Congress, San Diego, CA, May 2014. (S)
- Non-invasive ventilation during exercise during the CABG postoperative period. 41st Congress of the Brazilian Society of Cardiovascular Surgery, Porto De Galinhas, Brazil, April 2014. (S)
- Evaluation of ventilatory efficiency in patients at different stages of myocardial. 35th Congress of Cardiology Society of the State of Sao Paulo, Sao Paulo, Brazil, March, 2014. (S)
- Powerful prognostic insights combining tricuspid annular systolic excursion and pulmonary arterial systolic pressure in heart failure: correlation and additive value with CPET. Italian Society of Cardiology 74th National Congress, Rome. Italy, December 2013. (S)
- Cardiac rehabilitation characteristics of those who drop out after initiating a program. American Heart Association Scientific Sessions, Dallas, Texas, November 2013. (S)
- Interleukin-1 blockate improves exercise capacity in heart failure with preserved ejection fraction (HFpEF): Results of the D-HART Study. American Heart Association Scientific Sessions, Dallas, Texas, November 2013. (S)

- Evaluating exercise capacity sustainability in home versus center-based cardiac rehabilitation. Canadian Association of Cardiac Rehabilitation Annual Meeting, Montreal, Quebec, Canada, October 2013. (S)
- Insomnia symptoms are not associated with adherence to a phase-II cardiac rehabilitation program. Canadian Association of Cardiac Rehabilitation Annual Meeting, Montreal, Quebec, Canada, October 2013. (S)
- Differences in applanation tonometry in patients with heart failure and ischemic or Chagas etiology. 12th Brazilian Heart Failure Congress, Porto de Galinhas, Brazil, June 2013. (S)
- Effect of transcutaneous electrical nerve stimulation on cardiopulmonary responses during endurance exercise in healthy subjects. ACSM Annual Meeting, Indianapolis, IN, June 2013. (S)
- Pulmonary oxygen uptake off-kinetics and fitness in obese adolescents. ACSM Annual Meeting, Indianapolis, IN, June 2013. (S)
- Relationship between physical activity patterns and key cardiopulmonary exercise testing variables in patients with heart failure. ACSM Annual Meeting, Indianapolis, IN, June 2013. (S)
- The oxygen uptake efficiency slope identifies submaximal exercise test in patients with heart failure and low oxygen consumption. ACSM Annual Meeting, Indianapolis, IN, June 2013. (S)
- Is heart rate variability altered during different parts of the sleep cycle in mild and moderate OSA? American Thoracic Society International Conference, Philadelphia, PA, May 2013. (S)
- Non-invasive ventilation improves cardiovascular adjustments and fatigability in patients with heart failure. American Thoracic Society International Conference, Philadelphia, PA, May 2013. (S)
- The relationship between tricuspid annular systolic excursion and pulmonary arterial systolic pressure in heart failure: an indicator of cardiac length versus force relationship that discloses disease severity and prognosis. ACC Scientific Sessions, San Francisco, CA, March 2013. (S)
- Adiponectin resistance in non-cachectic heart failure patients. ACC Scientific Sessions, San Francisco, CA, March 2013. (S)

- Cardiac rehabilitation referral and attendance in women: a high-risk population with two strikes against it. ACC Scientific Sessions, San Francisco, CA, March 2013. (S)
- A neural network approach to predicting outcomes in heart failure using cardiopulmonary exercise testing. ACC Scientific Sessions, San Francisco, CA, March 2013. (S)
- Heart rate recovery during the 6-MWT rather than distance ambulated is a powerful prognostic indicator in heart failure reduced and preserved EF: a comparison with cardiopulmonary exercise testing. Italian Society of Cardiology 73rd National Congress, Rome. Italy, December 2012. (S)
- The relationship between TAPSE and PASP in heart failure: an indicator of cardiac velocity/force relationship that discloses disease severity and prognosis. EUROECHO 2012, Athens, Greece, December 2012. (S)
- Cardiac rehabilitation is associated with reduced mortality and hospitalization in subjects with congestive heart failure. AHA Scientific Sessions, Los Angeles, CA, November 2012. (S)
- Impact of cardiorespiratory fitness on the obesity paradox in patients with heart failure. AHA Scientific Sessions, Los Angeles, CA, November 2012. (S)
- Cardiac rehabilitation completion is associated with reduced mortality in diabetic subjects with coronary artery disease. AHA Scientific Sessions, Los Angeles, CA, November 2012. (S)
- Cardiac rehabilitation in the elderly: an under referred population that does not attend. AHA Scientific Sessions, Los Angeles, CA, November 2012. (S)
- Referral to cardiac rehabilitation: a quality indicator associated with reduced mortality. AHA Scientific Sessions, Los Angeles, CA, November 2012. (S)
- Lack of impact of automated referral on attendance at cardiac rehabilitation among coronary artery bypass grafting patients. AHA Scientific Sessions, Los Angeles, CA, November 2012. (S)

- Lack of automated referral on attendance at cardiac rehabilitation among coronary artery bypass grafting patients: the Calgary experience. Canadian Cardiovascular Congress: 65th Annual Meeting of the Canadian Cardiovascular Society, Toronto, Canada, October 2012. (S)
- South Asian ethnicity is associated with reduced rates of referral to cardiac rehabilitation. Canadian Cardiovascular Congress: 65th Annual Meeting of the Canadian Cardiovascular Society, Toronto, Canada, October 2012. (S)
- Obesity and cardiac rehabilitation: a differential association with referral and attendance in women vs. men. Canadian Cardiovascular Congress: 65th Annual Meeting of the Canadian Cardiovascular Society, Toronto, Canada, October 2012. (S)
- Referral to cardiac rehabilitation: a quality indicator associated with reduced mortality. Canadian Cardiovascular Congress: 65th Annual Meeting of the Canadian Cardiovascular Society, Toronto, Canada, October 2012. (S)
- The effect of cardiac rehabilitation on heart rate recovery differs according to sex. Canadian Association of Cardiac Rehabilitation Annual Meeting, Toronto, Canada 2012. (S)
- Change in blood lipid profile immediately following cardiac rehabilitation and at one year follow-up. Canadian Association of Cardiac Rehabilitation Annual Meeting, Toronto, Canada 2012. (S)
- Cardiac rehabilitation is associated with reduced mortality and hospitalization in subjects with congestive heart failure. Canadian Cardiovascular Congress: 65th Annual Meeting of the Canadian Cardiovascular Society, Toronto, Canada, October 2012. (S)
- Cardiac rehabilitation in the elderly: an under referred population that does not attend. Canadian Cardiovascular Congress: 65th Annual Meeting of the Canadian Cardiovascular Society, Toronto, Canada, October 2012. (S)
- Adiponectin is associated with reduced muscular strength in elderly heart failure patients. Heart Failure Society of American 16th Annual Scientific Meeting. Seattle, WA, September 2012. (S)

- Cardiac autonomic responses induced by physical exercise during rehabilitation in patients undergoing cardiac surgery with differences in ventricular function. 16th International Symposium of Respiratory and Intensive Care Physical Therapy, Rio De Janeiro, May 2012. (S)
- Sex differences in the oxygen uptake kinetic response to moderate intensity exercise in obese adolescents. ACSM Annual Meeting, San Francisco, CA, May 2012. (S)
- Relationship between body composition and the oxygen uptake efficiency slope in heart failure patients. ACSM Annual Meeting, San Francisco, CA, May 2012. (S)
- Long-term retention of aerobic fitness improvements following participation in cardiac rehabilitation. 35th Annual Meeting of the Society of General Medicine, Orlando, FL, May 2012. (S)
- Gene expression of the Ubiquitin-proteasome pathway is reflected by ventilatory expired gas analysis indices at peak exercise in heart failure. ACC Scientific Sessions, Chicago, IL, March 2012. (S)
- PGC-1 α and IGFBP-5 expression in skeletal muscle of HF patients. ACC Scientific Sessions, Chicago, IL, March 2012. (S)
- Correlation between recovery kinetics and skeletal muscle gene expression in systolic heart failure. ACC Scientific Sessions, Chicago, IL, March 2012. (S)
- The six minute walk distance as an indicator of frailty and functional incapacity in elderly heart failure patients. ACC Scientific Sessions, Chicago, IL, March 2012. (S)
- Validation of a cardiopulmonary exercise test score in heart failure. ACC Scientific Sessions, Chicago, IL, March 2012. (S)
- Handgrip strength reflects decreased lean tissue and function in elderly heart failure patients. Gerontological Society of America's Annual Meeting, Boston, MA, November 2011. (S)
- Interleukin-1 blockade improves cardiopulmonary exercise performance in patients with systolic heart failure. AHA Scientific Sessions, Orlando, FL, November, 2011. (S)

- Cardiovascular fitness and mortality following contemporary cardiac rehabilitation. AHA Scientific Sessions, Orlando, FL, November, 2011. (S)
- The prognostic importance of metabolic syndrome in a large cardiac rehabilitation cohort. AHA Scientific Sessions, Orlando, FL, November, 2011. (S)
- Exercise oscillatory breathing and NT-pro-BNP levels in stable heart failure provide the strongest prediction of cardiac outcome when combining biomarkers with cardiopulmonary exercise testing. The prognostic importance of metabolic syndrome in a large cardiac rehabilitation cohort. AHA Scientific Sessions, Orlando, FL, November, 2011. (S)
- A long term follow-up study of patients with mild to moderate group 2 pulmonary hypertension treated with PDE5-inhibition: A comparison between heart failure with reduced and preserved ejection fraction. The prognostic importance of metabolic syndrome in a large cardiac rehabilitation cohort. AHA Scientific Sessions, Orlando, FL, November, 2011. (S)
- Cardiac rehabilitation following cardiac surgery: patient characteristics, participation rate and outcomes. The prognostic importance of metabolic syndrome in a large cardiac rehabilitation cohort. AHA Scientific Sessions, Orlando, FL, November, 2011. (S)
- Cardiac rehabilitation following surgery: patient characteristics, participation rate and outcomes. Annual Meeting of the Canadian Cardiovascular Society, Vancouver, British Columbia, Canada, October 2011. (S)
- Higher body mass index is negatively associated with higher aerobic capacity improvements one year following participation in cardiac rehabilitation. 64th Annual Meeting of the Canadian Cardiovascular Society, Vancouver, British Columbia, Canada, October 2011. (S)
- Cardiovascular fitness and mortality following contemporary cardiac rehabilitation. 64th Annual Meeting of the Canadian Cardiovascular Society, Vancouver, British Columbia, Canada, October 2011. (S)

- Prognostic Comparison of estimated aerobic capacity and percent-predicted values in men and women completing cardiac rehabilitation. Canadian Association of Cardiac Rehabilitation 20th Annual Meeting, Vancouver, British Columbia, Canada, October 2011. (S)
- The prognostic importance of metabolic syndrome in a large cardiac rehabilitation cohort. Canadian Association of Cardiac Rehabilitation 20th Annual Meeting, Vancouver, British Columbia, Canada, October 2011. (S)
- Determination of anaerobic threshold through different methodologies during ramp protocol in elderly healthy men. European Respiratory Society Annual Meeting. Amsterdam, Netherlands, September 2011. (S)
- Strength and aerobic capacities both contribute to functional decline in heart failure. Heart Failure Society of America Annual Meeting, Boston, MA, September 2011. (S)
- Lean mass as an indicator of muscle strength in patients with heart failure. Heart Failure Society of America Annual Meeting, Boston, MA, September 2011. (S)
- Fat mass and functional characteristics in heart failure patients. Heart Failure Society of America Annual Meeting, Boston, MA, September 2011. (S)
- Inspiratory muscle training reduces blood pressure and sympathetic activity in hypertensive patients: a randomized controlled trial. European Society of Cardiology Conference, Paris, France, August 2011. (S)
- The independent effect of traditional cardiac rehabilitation and the LEARN program on weight loss: a comparative analysis. ACSM Annual Meeting, Denver, CO, May 2011. (S)
- Low heart rate reserve identifies patients with heart failure who may benefit from device optimization. ACSM Annual Meeting, Denver, CO, May 2011. (S)
- Long-term retention of aerobic fitness improvements following participation in cardiac rehabilitation. ACSM Annual Meeting, Denver, CO, May 2011. (S)

- Changes in exercise capacity of asymptomatic Hereditary Hemochromatosis subjects over 5-year follow up. ACSM Annual Meeting, Denver, CO, May 2011. (S)
- Women display greater benefit from cardiac rehabilitation on symptoms of anxiety and depressed mood. EuroPREvent, Geneva, Switzerland, April 2011. (S)
- Flat blood pressure response to exercise in patients with the total artificial heart. The International Society for Heart and Lung Transplantation 31st Annual Meeting and Scientific Sessions, San Diego, CA, April 2011. (S)
- Cardiopulmonary exercise testing characteristics in heart failure patients with and without concomitant chronic obstructive pulmonary disease. Italian Society of Cardiology 71st National Congress, Rome. Italy, December 2010. (S)
- PDE5-inhibition with Sildenafil reverses exercise oscillatory breathing in chronic heart failure: a 1-year cardiopulmonary exercise testing placebo-controlled study. AHA Scientific Sessions, Chicago, IL, November 2010. (S)
- Cardiac rehabilitation is associated with especially improved outcomes in women and the elderly: results from a large cohort study of coronary artery disease patients. AHA Scientific Sessions, Chicago, IL, November 2010. (S)
- Respiratory muscle strength as a predictor of bone mineral density in individuals with Down Syndrome. 15th International Symposium of Respiratory and Intensive Care Physical Therapy, Porto Alegre, Brasil, September 2010.
- Relationship between isokinetic muscle strength and exercise capacity in patients with Down Syndrome. 15th International Symposium of Respiratory and Intensive Care Physical Therapy, Porto Alegre, Brasil, September 2010.
- The impact of cardiac rehabilitation on outcomes in patients with coronary artery disease: focus on women and elderly. 63rd Annual Meeting of the Canadian Cardiovascular Society, Montreal, Canada, October 2010. (S)
- Cardiopulmonary exercise testing is equally prognostic in young, middle-aged and older individuals diagnosed with heart failure. ACSM Annual Meeting, Baltimore, MD, May 2010. (S)

- Prognostic usefulness of the functional aerobic reserve in patients with heart failure. ACSM Annual Meeting, Baltimore, MD, May 2010. (S)
- Interleukin-1 blockade ameliorates left ventricular remodeling following ST-segment elevation acute myocardial infarction - The VCU-ART Pilot Study. ACC Scientific Sessions, Atlanta, GA, March 2010. (S)
- Development of a cardiopulmonary exercise prognostic score for optimizing risk stratification in heart failure: The (P)e(R)i(O)dic (B)reathing during (E)xercise (PROBE) study. Italian Society of Cardiology 70th National Congress, Rome. Italy, December 2009. (S)
- 6 minute walk test and cardiopulmonary exercise testing in chronic heart failure: A comparative analysis and prognostic insights. Italian Society of Cardiology 70th National Congress, Rome. Italy, December 2009. (S)
- Prognostic characteristics of heart rate recovery according to gender in patients with heart failure. Italian Society of Cardiology 70th National Congress, Rome. Italy, December 2009. (S)
- Percent-predicted oxygen uptake efficiency slope prognostically outperforms the actual value in patients with heart failure. Italian Society of Cardiology 70th National Congress, Rome. Italy, December 2009. (S)
- Development of a cardiopulmonary exercise prognostic score for optimizing risk stratification in heart failure: The (P)e(R)i(O)dic (B)reathing during (E)xercise (PROBE) study. AHA Scientific Sessions, Orlando, FL, November 2009. (S)
- Percent-predicted oxygen uptake efficiency slope prognostically outperforms the actual value in patients with heart failure. AHA Scientific Sessions, Orlando, FL, November 2009. (S)
- Chronic PDE5-Inhibition With Sildenafil Improves Diastolic Function and Clinical Status in Patients With Stable HF. AHA Scientific Sessions, Orlando, FL, November 2009. (S)
- Prognostic characteristics of heart rate recovery according to sex in patients with heart failure. AHA Scientific Sessions, Orlando, FL, November 2009. (S)

- The effect of participation in an early discharge clinic in cardiac rehabilitation attendance and outcome in current cigarette smokers suffering a STEMI. 62nd Annual Meeting of the Canadian Cardiovascular Society. Edmonton, Alberta, October 2009. (S)
- Functional differentiation of CRT responders vs. non-responders. 13th Annual Scientific Meeting Heart Failure Society of America. Boston, MA, September 2009. (S)
- Aerobic exercise training improves autonomic nervous control in patients with COPD. European Respiratory Society Annual Congress. Vienna, Austria, September 2009. (S)
- An early discharge clinic further improves aerobic capacity following cardiac rehabilitation among myocardial infarction patients. ACSM National Meeting. Seattle, WA, May, 2009. (S)
- Echocardiography with tissue Doppler imaging and cardiopulmonary exercise testing correlates in patients with diastolic heart failure. ACSM National Meeting. Seattle, WA, May, 2009. (S)
- Exercise dyspnea sensation by Borg scale is a powerful independent predictor of cardiac mortality in heart failure. ACSM National Meeting. Seattle, WA, May, 2009. (S)
- Attendance in an early discharge clinic with symptom limited maximal exercise testing is safe and improves cardiac rehabilitation participation among low-risk stemi patients. EuroPREvent, Stockholm, Sweden, May 2009. (S)
- A new clinical care paradigm improves cardiac rehabilitation enrollment in post myocardial infarction patients: Targeting the care gap following hospital discharge. Ninth Annual Meeting on Cardiovascular Nursing, Dublin, Ireland, April 2009. (S)
- Which equation for percent predicted oxygen consumption provides the best prognostic assessment in patients with heart failure? ACC Scientific Sessions, Orlando, FL, March 2009. (S)
- Heart failure patients in the intermediate range of peak $\dot{V}O_2$: Additive value of heart rate recovery and the $\dot{V}E/\dot{V}CO_2$ slope in predicting mortality. ACC Scientific Sessions, Orlando, FL, March 2009. (S)

- Defining the optimal prognostic window for cardiopulmonary exercise testing in patients with heart failure. ACC Scientific Sessions, Orlando, FL, March 2009. (S)
- Validation of a subjective scoring questionnaire used to predict academic performance in DPT students. APTA Combined Sections Meeting, Las Vegas, NV, February 2009. (S)
- Heart rate recovery predicts sudden cardiac death in heart failure. Society of Cardiology 69th National Congress, Rome. Italy, December 2008. (S)
- Exercise oscillatory breathing in diastolic heart failure: prevalence and prognostic insights. Society of Cardiology 69th National Congress, Rome. Italy, December 2008. (S)
- Exercise dyspnea sensation by Borg scale is a powerful independent predictor of cardiac mortality in heart failure. Italian Society of Cardiology 69th National Congress, Rome. Italy, December 2008. (S)
- Prognostic comparison of normalized and absolute left ventricular mass and volume in patients with heart failure. Italian Society of Cardiology 69th National Congress, Rome. Italy, December 2008. (S)
- The prognostic value of the increase in heart rate during the first minute of progressive exercise testing in patients with heart failure. Italian Society of Cardiology 69th National Congress, Rome. Italy, December 2008. (S)
- Echocardiography with tissue Doppler imaging and cardiopulmonary exercise testing in patients with heart failure: a correlative and prognostic analysis. Italian Society of Cardiology 69th National Congress, Rome. Italy, December 2008. (S)
- Prognostic value of the initial heart Rate increase during progressive exercise testing in heart failure. AHA Scientific Sessions, New Orleans, LA, November 2008. (S)
- The oxygen uptake efficiency slope is reduced in older patients with heart failure and a normal ejection fraction. AHA Scientific Sessions, New Orleans, LA, November 2008. (S)

- Improvement in ventilatory efficiency and dyspnea on exertion are related to reduced pulmonary pressure in heart failure patients undergoing chronic phosphodiesterase-5 inhibition. AHA Scientific Sessions, New Orleans, LA, November 2008. (S)
- Retention of gains in exercise capacity one year following completion of cardiac rehabilitation. Canadian Association of Cardiac Rehabilitation Annual Meeting, Toronto, Canada, October 2008. (S)
- Left atrial volume predicts ventilatory efficiency in heart transplant recipients. Heart Failure Society of American Annual Scientific Meeting, Toronto, Canada, September 2008. (S)
- The impact of oscillatory ventilation on the prognostic value of aerobic capacity and ventilatory efficiency in patients with heart failure. Heart Failure Society of American Annual Scientific Meeting, Toronto, Canada, September 2008. (S)
- Prognostic comparison of normalized and absolute left ventricular mass and volume in patients with heart failure. Heart Failure Society of American Annual Scientific Meeting, Toronto, Canada, September 2008. (S)
- The ability of heart rate recovery to predict arrhythmic and non-arrhythmic mortality in patients with heart failure. Heart Failure Society of American Annual Scientific Meeting, Toronto, Canada, September 2008. (S)
- Acute and chronic improvement in breathing efficiency with exercise based AV/VV CRT optimization. Heart Failure Society of American Annual Scientific Meeting, Toronto, Canada, September 2008. (S)
- The lowest VE/VCO₂ ratio during exercise as a predictor of outcome in patients with heart failure. Heart Failure Society of American Annual Scientific Meeting, Toronto, Canada, September 2008. (S)
- Metabolic energy and muscle activity differences when using a modified elliptical trainer for gate training. ACSM National Meeting, Indianapolis, IN, May 2008. (S)
- Relationship between pelvic motion and metabolic energy in running. ACSM National Meeting, Indianapolis, IN, May 2008. (S)

- Impact of gender on the relationship between heart rate recovery and other makers of cardiovascular health. ACSM National Meeting, Indianapolis, IN, May 2008. (S)
- Phlebotomy improves the oxygen uptake efficiency slope in asymptomatic hereditary hemochromatosis subjects. ACSM National Meeting, Indianapolis, IN, May 2008. (S)
- Defining an optimal LDL threshold indicating a high likelihood of normal apolipoprotein B levels in patients with coronary artery disease. Europrevent, Paris, France, May 2008. (S)
- Heart rate recovery and Doppler echocardiography in patients with heart failure: A correlative and prognostic analysis. ACC Scientific Sessions, Chicago, IL, March 2008. (S)
- Evaluation of a modified elliptical trainer for gait training: Kinematics and energy. Gait and Clinical Movement Analysis Society 13th annual meeting, Richmond, VA, March 2008. (S)
- Does Peak Oxygen Pulse Complement Peak VO₂ in Risk Stratifying Patients with Heart Failure? 6th Stanford Cardiovascular Institute Retreat, Palo Alto, CA. September 2008. (S)
- Ventilatory abnormalities during exercise are associated with Doppler-estimated left ventricular filling pressure and ejection fraction in patients with heart failure. Italian Society of Cardiology 68th National Congress, Rome. Italy, December 2007. (S)
- Heart rate increase from rest to maximal exercise is prognostically significant in beta-blocked patients with heart failure. Italian Society of Cardiology 68th National Congress, Rome. Italy, December 2007. (S)
- Long term treatment with a phosphodiesterase 5 inhibitor (Sildenafil) in compensated heart failure. Italian Society of Cardiology 68th National Congress, Rome. Italy, December 2007. (S)
- The minute ventilation/carbon dioxide production slope prognostically outperforms the oxygen uptake efficiency slope. Italian Society of Cardiology 68th National Congress, Rome. Italy, December 2007. (S)

- Exercise oscillatory ventilation predicts cardiac mortality in heart failure patients with preserved systolic function. Italian Society of Cardiology 68th National Congress, Rome. Italy, December 2007. (S)
- The prognostic characteristics of cardiopulmonary exercise testing in Caucasian and African-American patients with heart failure. AHA Scientific Sessions, Orlando, FL, November 2007. (S)
- Heart rate recovery predicts major cardiac events in patients with heart failure receiving a beta-blocking agent. AHA Scientific Sessions, Orlando, FL, November 2007. (S)
- A cardiopulmonary exercise testing score for predicting risk in patients with heart failure. AHA Scientific Sessions, Orlando, FL, November 2007. (S)
- Exercise oscillatory ventilation predicts cardiac mortality in heart failure patients with preserved systolic function. AHA Scientific Sessions, Orlando, FL, November 2007. (S)
- Heart rate recovery following exercise training in elderly patients with COPD. AACVPR Annual Meeting, Salt Lake City, UT, October 2007. (S)
- General fatigue vs. Dyspnea: differences in exercise variables and prognosis according to reason for test termination in patients with heart failure. AACVPR Annual Meeting, Salt Lake City, UT, October 2007. (S)
- A hypertensive diastolic blood pressure during exercise is associated with dyslipidemia in apparently healthy subjects. AACVPR Annual Meeting, Salt Lake City, UT, October 2007. (S)
- Cardiac rehabilitation significantly improves aerobic exercise capacity in patients of advanced age. AACVPR Annual Meeting, Salt Lake City, UT, October 2007. (S)
- Change in SF-12 subscores following cardiac rehabilitation. AACVPR Annual Meeting, Salt Lake City, UT, October 2007. (S)
- Reduction in b-type natriuretic peptide using telemanagement in patients with heart failure. Heart Failure Society of American Annual Scientific Meeting, Washington, DC, September 2007. (S)

- Cardiopulmonary exercise testing maintains prognostic value in obese patients with heart failure. Heart Failure Society of American Annual Scientific Meeting, Washington, DC, September 2007. (S)
- A prognostic comparison of echocardiography vs. cardiopulmonary derived variables in patients with heart failure. Heart Failure Society of American Annual Scientific Meeting, Washington, DC, September 2007. (S)
- Large oscillatory ventilation amplitude at low intensity exercise indicates poor prognosis in heart failure. Heart Failure Society of American Annual Scientific Meeting, Washington, DC, September 2007. (S)
- Heart rate increase from rest to maximal exercise is prognostically significant in beta-blocked patients with heart failure. Heart Failure Society of American Annual Scientific Meeting, Washington, DC, September 2007.(S)
- Ventilatory abnormalities during exercise are associated with Doppler-estimated left ventricular filling pressure and ejection fraction in patients with heart failure. Heart Failure Society of American Annual Scientific Meeting, Washington, DC, September 2007. (S)
- Relationship between Transferrin and exercise capacity in asymptomatic hereditary hemochromatosis subjects. ACSM National Meeting, New Orleans, LA, June 2007. (S)
- Aerobic capacity and disease severity in subjects with Friedreich's ataxia. ACSM National Meeting, New Orleans, LA, June 2007. (S)
- Exercise oscillatory ventilation and increased ventilation to CO₂ production slope in patients with heart failure: An unfavorable combination with high prognostic value. ACSM National Meeting, New Orleans, LA, June 2007. (S)
- Influence of gender on the improvement in exercise capacity following cardiac rehabilitation. ACSM National Meeting, New Orleans, LA, May 2007. (S)
- Mechanical and metabolic energy differences when using a modified NordicTrack elliptical trainer for gait training. ACSM National Meeting, New Orleans, LA, May 2007. (S)

- Short and long term prognostic value of resting end-tidal carbon dioxide in heart failure. Europrevent, Madrid, Spain, April 2007. (S)
- Prognostic value of change in ventilatory efficiency from rest to exercise in patients with heart failure. Europrevent, Madrid, Spain, April 2007. (S)
- Exercise oscillatory ventilation is a strong predictor of sudden death in heart failure patients. ACC Scientific Sessions, New Orleans, LA, March 2007. (S)
- The minute ventilation/carbon dioxide production slope prognostically outperforms the oxygen uptake efficiency slope. ACC Scientific Sessions, New Orleans, LA, March 2007. (S)
- The prognostic value of ventilatory efficiency in heart failure patients with preserved aerobic capacity. Italian Society of Cardiology 67th National Congress, Rome. Italy, December 2006. (S)
- The added prognostic value of ventilatory efficiency to the Weber classification system in patients with heart failure. Italian Society of Cardiology 67th National Congress, Rome. Italy, December 2006. (S)
- Prognostic value of end-tidal carbon in patients with heart failure. Italian Society of Cardiology 67th National Congress, Rome. Italy, December 2006. (S)
- Development of a ventilatory classification system in patients with heart failure. Italian Society of Cardiology 67th National Congress, Rome. Italy, December 2006. (S)
- Awareness of disease management by cardiac and pulmonary rehabilitation programs. Disease Management Leadership Forum, Denver, CO, December 2006. (S)
- Chronic Sildenafil therapy improves quality of life, exercise oxygen uptake and ventilation efficiency in stable heart failure patients. AHA Scientific Sessions, Chicago, IL, November 2006. (S)
- Development of a ventilatory classification system for patients with heart failure. AHA Scientific Sessions, Chicago, IL, November 2006. (S)

- Aerobic capacity is reduced in subjects with Friedreich's Ataxia and is correlated with clinical rating scales and GAA repeat length. 3rd International Friedreich's Ataxia Scientific Conference. November 2006. (S)
- Aerobic exercise and strength training in elderly patients with chronic obstructive pulmonary disease. Chest Annual Meeting, Salt Lake City, UT, October 2006. (S)
- The impact of feeder school rigor on the ability to predict academic success in a physical therapy program. Association for Allied Health Professions Annual Conference, Chicago, IL, October 2006. (S)
- Chronic Sildenafil therapy improves quality of life, exercise oxygen uptake and ventilation efficiency in stable heart failure patients. Heart Failure Society of American Annual Scientific Meeting, Seattle, WA, September 2006. (S)
- Impact of a heart failure disease management program on hospitalization. Heart Failure Society of American Annual Scientific Meeting, Seattle, WA, September 2006. (S)
- Change in brain natriuretic peptide predicts risk for hospitalization in patients with Heart Failure. Heart Failure Society of American Annual Scientific Meeting, Seattle, WA, September 2006. (S)
- Relationship between brain Natriuretic peptide and heart failure symptoms. Heart Failure Society of American Annual Scientific Meeting, Seattle, WA, September 2006. (S)
- Awareness of Disease Management by Cardiac and Pulmonary Rehabilitation Programs. AACVPR National Conference, Charleston, WV, September 2006. (S)
- The added prognostic value of ventilatory efficiency to the Weber classification system in patients with heart failure. AACVPR National Conference, Charleston, WV, September 2006. (S)
- Influence on self-reported physical activity on arterial stiffness in apparently healthy subjects. AACVPR National Conference, Charleston, WV, September 2006. (S)
- Relationship between pulmonary auscultation and brain natriuretic peptide in patients with heart failure. AACVPR National Conference, Charleston, WV, September 2006. (S)

- The added prognostic value of endothelial brachial artery flow-mediated dilatation in patients with uncomplicated myocardial infarction. AACVPR National Conference, Charleston, WV, September 2006. (S)
- Prognostic comparison of B-type natriuretic peptide and n-terminal-proB-type natriuretic peptide in patients with heart failure. AACVPR National Conference, Charleston, WV, September 2006. (S)
- The prevalence of cardiovascular risk factors among cardiac and non-cardiac hospital Admissions. ACSM National Meeting, Denver CO, June 2006. (S)
- Older adults exhibit lower peak muscle power during single step balance recovery. ACSM National Meeting, Denver CO, June 2006. (S)
- The relationship between arterial stiffness and age and aerobic capacity across the lifespan. ACSM National Meeting, Denver CO, June 2006. (S)
- Influence of aerobic fitness and hypertension on aortic stiffness throughout the adult age span. 14th annual meeting of the International Society of Magnetic Resonance in Medicine, Seattle, WA, May 2006. (S)
- Relationship between cardiopulmonary exercise testing and pulmonary pressures in hypertrophic cardiomyopathy. ACC Scientific Sessions, Atlanta, GA, March 2006. (S)
- Impact of age on the prognostic value of cardiopulmonary exercise testing in subjects with heart failure. ACC Scientific Sessions, Atlanta, GA, March 2006. (S)
- Validation of a subjective scoring system used to rate prospective DPT students. APTA Combined Sections Meeting, San Diego, CA, February 2006. (S)
- Prognostic value of heart rate recovery in patients with heart failure. Italian Society of Cardiology 66th National Congress, Rome. Italy, December 2005. (S)
- Prognostic value of cardiopulmonary exercise testing in patients with heart failure: comparing American and European models. Italian Society of Cardiology 66th National Congress, Rome. Italy, December 2005. (S)

- The prognostic value of cardiopulmonary exercise testing in patients with diastolic heart failure. Italian Society of Cardiology 66th National Congress, Rome. Italy, December 2005. (S)
- Indices of ventricular relaxation are not related to objective measures of exercise capacity in non-obstructive hypertrophic cardiomyopathy. AHA Scientific Sessions, Dallas, TX, November 2005. (S)
- Influence of heart failure etiology on the prognostic value of body mass index. AHA Scientific Sessions, Dallas, TX, November 2005. (S)
- Short-term reliability of oxygen uptake on-kinetics in apparently healthy subjects. AACVPR National Meeting, Milwaukee, WI, October 2005. (S)
- Correlation between c-reactive protein and cholesterol in apparently healthy adults: the influence of gender. AACVPR National Meeting, Milwaukee, WI, October 2005. (S)
- Effect of a comprehensive cardiac rehabilitation program on cardiac related events in subjects of advanced age. AACVPR National Meeting, Milwaukee, WI, October 2005. (S)
- Effect of a comprehensive cardiac rehabilitation program on cardiac-related events in a female cohort. AACVPR National Meeting, Milwaukee, WI, October 2005. (S)
- Characteristics of cardiopulmonary exercise testing in heart failure: comparing American and European models. AACVPR National Meeting, Milwaukee, WI, October 2005. (S)
- Brain natriuretic peptide is a predictor of thirty day hospital admission in patients enrolled in a collaborative care heart failure treatment program. Ninth Annual Scientific Meeting of the Heart Failure Society of America, Boca Raton, FL, September, 2005. (S)
- Prognostic value of heart rate recovery in patients with heart failure. Ninth Annual Scientific Meeting of the Heart Failure Society of America, Boca Raton, FL, September, 2005. (S)
- Relationship between body mass index and exercise test variables in patients with heart failure. Ninth Annual Scientific Meeting of the Heart Failure Society of America, Boca Raton, FL, September, 2005. (S)

- Prognostic value of resting end-tidal carbon dioxide in patients with heart failure. ACSM National Meeting. Nashville, TN, June, 2005. (S)
- Test-retest repeatability of a rapid aortic wave velocity technique. International Society for Magnetic Resonance in Medicine: 13th Scientific Meeting and Exhibition, Miami Beach, FL, May 2005. (S)
- Improved aortic stiffness assessment in the elderly using multi-site flow displacement. International Society for Magnetic Resonance in Medicine: 13th Scientific Meeting and Exhibition, Miami Beach, FL, May 2005. (S)
- Relationship between arterial stiffness and heart rate recovery in apparently healthy adults. American Heart Association: 6th Scientific Forum on Quality of Care and Outcomes Research in Cardiovascular Disease and Stroke, Washington, DC, May 2005. (S)
- Prognostic value of end-tidal carbon dioxide during exercise in heart failure. American Heart Association: 6th Scientific Forum on Quality of Care and Outcomes Research in Cardiovascular Disease and Stroke, Washington, DC, May 2005. (S)
- Relationship between resting heart rate and aortic wave velocity in apparently healthy individuals. Scientific Session, American College of Cardiology, Orlando, FL, March 2005. (S)
- Prognostic value of cardiopulmonary exercise testing in a group of female patients with heart failure. Scientific Session, American College of Cardiology, Orlando, FL, March 2005. (S)
- Prognostic value of cardiopulmonary exercise testing in patients with heart failure and preserved systolic function. Italian Society of Cardiology 65th National Congress, Rome. Italy, December 2004. (S)
- Prognostic value of cardiopulmonary exercise testing in heart failure patients with preserved systolic function. AHA Scientific Sessions, New Orleans, LA, November 2004. (S)
- Baseline predictors of maximal oxygen consumption in apparently healthy individuals. AACVPR National Meeting, Long Beach, CA, October 2004. (S)

- Effect of Aerobic Exercise Training on Aortic Wave Velocity in Obese Subjects. AACVPR National Meeting, Long Beach, CA, October 2004. (S)
- Impact of beta-blockade use on the prognostic value of cardiopulmonary exercise testing in patients with heart failure. AACVPR National Meeting, Long Beach, CA, October 2004. (S)
- VE/VCO₂ at Ventilatory Threshold and Peak Exercise: A Prognostic Comparison. ACSM National Meeting. Indianapolis, IN, June, 2004. (S)
- Impact of time past exercise testing on prognostic variables in patients with heart failure. 8th World Congress of Cardiac Rehabilitation. Dublin, Ireland, May 2004. (S)
- Influence of heart failure etiology on the prognostic value of peak oxygen consumption and the minute ventilation-carbon dioxide production slope. Scientific Session, American College of Cardiology, New Orleans, LA, March 2004. (S)
- Prognostic comparison of the VE/VCO₂ ratio and slope in patients with heart failure. AACVPR National Meeting, Kansas City, MO, October 2003. (S)
- Influence of subject effort on the prognostic ability of peak VO₂ and VE/VCO₂ slope in patients with heart failure. AACVPR National Meeting, Kansas City, MO, October 2003. (S)
- Technical Considerations Related to the VE/VCO₂ Slope in Patients with Heart Failure. ACSM National Meeting, San Francisco, CA, June 2003. (S)
- Prognostic value of phase one oxygen consumption on-kinetics in the heart failure population. ACSM National Meeting, San Francisco, CA, June 2003. (S)
- Peak VO₂ and VE/VCO₂ slope in patients with heart failure: A prognostic comparison. ACC Scientific Session. Chicago, Illinois, April 2003. (S)
- Comparison of Pulmonary Function Test Parameters in Predicting Treadmill and 6 Minute Walk Test Performance. APTA Combined Sections Meeting. Tampa, Florida, February 2003. (S)

- Test-retest reliability of resting end-tidal carbon dioxide in patients with heart failure. APTA Combined Sections Meeting. Tampa, Florida, February 2003. (S)
- Relationship between Rating of Perceived Exertion and Quality of Life in Heart Failure. AACVPR National Meeting. Charlotte, North Carolina, September 2002. (S)
- Safety and Efficacy of Pulmonary Rehabilitation in Elderly Females with Chronic Obstructive Pulmonary Disease. AACVPR National Meeting. Charlotte, North Carolina, September 2002. (S)
- Difference between ventilatory expired gas measures during maximal and sub-maximal exercise in heart failure. International Academy of Cardiology: 8th World Congress on Heart Failure – Mechanisms and Management. Washington, DC, July 2002. (S)
- Influence of etiology on ventilatory expired gas measures and prognosis in heart failure. ACSM National Meeting, St. Louis, Missouri, June 2002. (S)
- Partial pressure of end-tidal carbon dioxide production as a predictor of hospitalization in heart failure. AHA Scientific Sessions, Anaheim, CA, November 2001. (S)
- The minute ventilation-carbon dioxide production relationship in congestive heart failure: determination of appropriate expression. Second Quebec International Symposium on Cardiopulmonary Rehabilitation, Quebec, Canada, June 2001. (S)
- Comparison of peak VO_2 to VE/VCO_2 slope in assessing prognosis in chronic heart failure. ACSM National Meeting, Baltimore, MD, June 2001. (S)
- Relationship between the VE/VCO_2 slope and subjective dyspnea rating in subjects with congestive heart failure during symptom-limited exercise testing. AACVPR National Meeting, Tampa, FL, September 2000. (S)
- Relationship between VE/VCO_2 slope and percentage of age predicted maximal heart rate achieved in subjects with heart failure. ACSM National Meeting, Indianapolis, IN, June 2000. (S)
- Exercise training during intravenous inotrope infusion in heart failure patients awaiting heart transplantation. ACSM National Meeting, Indianapolis, IN, June 2000. (S)

- Safety and efficacy of exercise training in a heart failure patient awaiting heart transplantation while on positive intravenous inotropic support. VACVPR Annual Meeting, Roanoke, VA, March 2000. (S)
- Calculated versus measured oxygen uptake discrepancy in heart failure patients. AACVPR National Meeting, Phoenix, AZ, September 1999. (S)
- Alteration of pulmonary function following left ventricular assist device implantation. VACVPR Annual Meeting, Richmond, VA, March 1999. (S)

BIBLIOGRAPHY

Web of Science Citation Metrics

Citations: 7,248
Citing Articles: 4,492
H-index: 40

Google Scholar Citation Metrics

Citations: 27,700
H-index: 58
G-Index: 237

ResearchGate

Citations: 10,251
H-index: 48
RG Score: 49.72

UICollaboratory Research Profiles

Citations: 8,369
H-index: 44
Co-Author Collaborations: 970

Papers published

Non-Refereed Publications

- Auffray C, Sagner M, Abdelhak S, Adcock I, Agusti A, Amaral M, Antonarakis S, Arena R, et al. Viva Europa, a Land of Excellence in Research and Innovation for Health and Wellbeing. Progress in Preventive Medicine. 2017;2:e0006.

- Sagner M and Arena R. Welcome to Progress in Preventive Medicine from the Editorial Board. *Progress in Preventive Medicine*. 2016;1:e0001.
- Kaminsky L, Arena R, Myers J. Active voice: Development of a national registry for cardiorespiratory fitness. *ACSM Sports Medicine Bulletin*. October 13, 2015.
- Writing group member: Increasing and improving physical education and physical activity in schools: Benefits for children's health and educational outcomes. *AHA Policy Statement*. April 25, 2015.
- Arena R. Introduction to Research Based Outcomes: Not as Scary as You May Think. *AACVPR National Conference Syllabus*, 2003: 249-253.
- Arena R. Assessment of Functional Status in Patients with Heart Failure. *AACVPR National Conference Syllabus*, 2001: 255-261.

Refereed Publications (443 total)

- Popovic D, Damjanovic S, Djordjevic T, Martic D, Ignjatovic S, Milinkovic N, Banovic M, Petrovic M, Lasica R, Guazzi M, Arena R. Stress hormones at rest and following exercise testing predict coronary artery disease severity and outcome. *Stress*. (Accepted 8/12/17).
- Babu A, Arena R, Morris N. Pulmonary hypertension - exercise for cardiovascular disease prevention and treatment. *Advances in Experimental Medicine and Biology*. (Accepted 8/9/2017).
- Guazzi M, Systrom D, Bandera F, Ozemek C, Arena R. Cardiopulmonary exercise testing: What is its value? *Journal of the American College of Cardiology*. (Accepted 8/2/17).
- Canada J, Trankle C, Buckley L, Carbone S, Abouzaki N, Kadariya D, Shah K, Cooke R, Kontos M, Patel J, Mankad P, Schatz A, Bhatnagar A, Arena R, Van Tassell B, Abbate A. Severely impaired cardiorespiratory fitness in patients with recently decompensated systolic heart failure. *American Journal of Cardiology*. (Accepted 8/2/17).

- Ozemek C and Arena R. Cardiopulmonary exercise testing in patients with heart failure and a preserved ejection fraction: filling the prognostic knowledge gap. *Revista Espanola de Cardiologia*. (Accepted 8/1/17).
- Wallen MP, Hall A, Dias KA, Ramos JS, Keating SE, Woodward AJ, Skinner TL, Macdonald GA, Arena R, Coombes JS. Impact of beta-blockers on cardiopulmonary exercise testing in patients with advanced liver disease. *Alimentary Pharmacology & Therapeutics*. (Accepted 7/23/17).
- Carbone S, Canada JM, Buckley L, Trankle C, Billingsley H, Dixon D, Mauro AG, Dessie S, Kadariya D, Mezzaroma E, Buzzetti R, Arena R, Van Tassell B, Toldo S, Abbate A. Dietary fat, sugar consumption and cardiorespiratory fitness in patients with heart failure with preserved ejection fraction. *JACC – Basic to Translational Science*. (Accepted 6/5/17).
- Costa IP, Dal Corso S, Borghi-Silva A, Peixoto F, Stirbulov R, Arena R, Cahalin LP, Sampaio L. Reliability of the shuttle walk test with controlled incremental velocity in patients with difficult-to-control asthma. *Journal of Cardiopulmonary Rehabilitation and Prevention*. (Accepted 1/18/17).
- Sabbahi A, Arena R, Woldt J, Wax B, Wolner F, Phillips SA. Improvements in cardiometabolic risk markers, aerobic fitness, and functional performance following a physical therapy weight loss program. *Physiotherapy Research and Practice*. (Accepted 12/12/16).
- Arena R, McNeil A, Popovic D. Exercise. *The SAGE Encyclopedia of Lifespan Human Development*. (Accepted 2/15/16).
- Carbone S, Popovic D, Lavie CJ, Arena R. Obesity, body composition and cardiorespiratory fitness in heart failure with preserved ejection fraction. *Future Cardiology*. (Epub ahead of print).
- Forestieri P, Bolzan DW, Santos VB, Moreira R, de Almeida DR, Trimer R, Brito F, Borghi-Silva A, Carvalho A, Arena R, Gomes WJ, Guizilini S. Neuromuscular electrical stimulation improves exercise tolerance in patients with advanced heart failure on continuous intravenous inotropic support use - Randomized controlled trial. *Clinical Rehabilitation*..
- Lavie CJ, Arena R, Alpert MA, Milani RV, Ventura HO. Management of cardiovascular diseases in patients with obesity. *Nature Reviews Cardiology*. (Epub ahead of print).

- Arena R, McNeil A, Lavie CJ, Ozemek C, Forman DE, Myers J, Laddu DR, Popovic D, Rouleau CR, Campbell TS, Hills AP. Assessing the Value of Moving More – The Integral Role of Qualified Health Professionals. *Current Problems in Cardiology*. (Epub ahead of print).
- Kachur S, Chongthammakun V, Lavie CJ, De Schutter A, Arena R, Milani RV, Franklin BA. Impact of cardiac rehabilitation and exercise training programs in coronary heart disease. *Progress in Cardiovascular Diseases*. (Epub ahead of print).
- Popovic D, Martic D, Djordjevic T, Pesic V, Guazzi M, Myers J, Mohebi R, Arena R. Oxygen consumption and carbon dioxide recovery kinetics in the prediction of coronary artery disease severity and outcome. *International Journal of Cardiology*. (Epub ahead of print).
- Forestieri P, Bolzan DW, Santos VB, Moreira R, de Almeida DR, Trimer R, Brito F, Borghi-Silva A, Carvalho A, Arena R, Gomes WJ, Guizilini S. Neuromuscular electrical stimulation improves exercise tolerance in patients with advanced heart failure on continuous intravenous inotropic support use - Randomized controlled trial. *Clinical Rehabilitation*. (Epub ahead of print).
- Archiza B, Olenski DKA, Caruso F, Bonjorno JR. JC, Oliveira CR, Ricci PA, Amaral AC, Mattiello SM, Libardi CA, Phillips SA, Arena R, Borghi-Silva A. Effects of inspiratory muscle training in professional women football players: a randomized sham-controlled trial. *Journal of Sports Sciences*. (Epub ahead of print).
- Paolillo FR, Borghi-Silva A, Arena R, Paolillo A, Parizotto N, Kurachi C, Bagnato V. Effects of phototherapy plus physical training on metabolic profile and quality of life in postmenopausal women. *The Journal of Nutrition, Health and Aging*. (Epub ahead of print).
- Arena R, McNeil A, Street S, Bond S, Laddu DR, Lavie CJ, Hills AP. Let's talk about moving: reframing the exercise and physical activity discussion. *Current Problems in Cardiology*. (Epub ahead of print).
- Van Tassell BW, Buckley LF, Carbone S, Trankle CR, Canada JM, Abouzaki N, Oddi-Erdie C, Biondi-Zoccai G, Arena R, Abbate A. Interleukin-1 blockade in heart failure with preserved ejection fraction – rationale and design of the diastolic heart failure – anakinra response trial 2 (D-HART2). *Clinical Cardiology*. (Epub ahead of print).

- Myers J, Kaminsky LA, Lima R, Chistle J, Arena R. A reference equation for national standards for VO₂ max: Analysis from the fitness registry and the importance of exercise national database (FRIEND Registry). *Progress of Cardiovascular Diseases*. (Epub ahead of print).
- Forman D (chair), Arena R (co-chair), Boxer R, Dolansky MA, Eng JJ, Fleg JL, Haykowsky M, Jahangir A, Kaminsky LA, Kitzman DW, Lewis E, Myers J, Reeves GR, Shen W. AHA Scientific Statement: Prioritizing functional capacity as a principal endpoint for therapies oriented to older adults with cardiovascular disease. *Circulation*. (Epub ahead of print).
- Harber MP, Kaminsky LA, Arena R, Blair SN, Franklin BA, Myers J, Ross R. Impact of cardiorespiratory fitness on all-cause and disease specific mortality. *Progress in Cardiovascular Diseases*. (Epub ahead of print).
- Rouleau C, King-Shier KM, Tomfohr-Madesn LM, Aggarwal S, Arena R, Campbell TS. A qualitative study exploring factors that influence enrollment in outpatient cardiac rehabilitation. *Disability and Rehabilitation*. (Epub ahead of print).
- Arena R, Lavie CJ, Guazzi M. Prescribing a healthy lifestyle polypill with high therapeutic efficacy in many shapes and sizes. *American Journal of Lifestyle Medicine*. (Epub ahead of print).
- Guazzi M (co-chair), Halle M, Piepoli MF, Arena R (co-chair), Myers J, Lavie CJ. Focused update: Clinical recommendations for cardiopulmonary exercise testing data assessment in specific patient populations, an EACPR/AHA Joint Scientific Statement. *European Heart Journal*. (Epub ahead of print).
- Arena R, Sagner M, Byrne N, Williams A, McNeil A, Street S, Hills A. Novel approaches for the promotion of physical activity and exercise for prevention and management of type 2 diabetes. *European Journal of Clinical Nutrition*. (Epub ahead of print).
- Paolillo FR, Borghi-Silva A, Arena R, Parizotto NA, Kurachi C, Bagnato VS. Effects of phototherapy plus physical training of metabolic profile and quality of life in postmenopausal women. *Journal of Cosmetic and Laser Therapy*. (Epub ahead of print).
- Kokkinos P, Kaminsky LA, Arena R, Zhang J, Myers J. New generalized equation for predicting maximal oxygen uptake: the FRIEND registry. *American Journal of Cardiology*. (Epub ahead of print).

- Lavie CJ, Bennett A, Arena R. Enhancing cardiac rehabilitation in women. *Journal of Women's Health*. (Epub ahead of print).
- Arena R, Bond S, O'Neil R, Laddu DR, Hills AP, Lavie CJ, McNeil A. Public park spaces as a platform to promote healthy living: Introducing a HealthPark concept. *Progress in Cardiovascular Diseases*. (Epub ahead of print).
- Dias KA, Masterson CE, Wallen MP, Tjonna AE, Hosseini MS, Davies P, Cain PA, Leong GM, Arena R, Ingul CB, Coombes JS. Assessment of the five-minute oxygen uptake efficiency slope in obese children. *Pediatric Exercise Science*. 2017;29:350-360.
- Coats A, Forman DE, Haykowsky M, Kitzman DW, McNeil A, Campbell T, Arena R. Physical function, physical activity and exercise training in the older patient with heart failure. *Nature Reviews Cardiology*. 2017;14:550-559.
- Trankle C, Canada JM, Buckley L, Carbone S, Dixon D, Arena R, Van Tassell B, Abbate A. Impaired myocardial relaxation with exercise determines peak aerobic capacity in heart failure with preserved ejection fraction. *ECS Heart Failure*. 2017;4:351-355.
- Ozemek C, Phillips S, Popovic D, Laudu-Patel D, Fancher IS, Arena R, Lavie CJ. Non-pharmacologic management of hypertension: a multidisciplinary approach. *Current Opinions in Cardiology*. 2017;32:331-338.
- Arakelian V, Trimer R, Mendes RG, Caruso FR, de Sousa NM, Borges VC, Gatto C, Baldissera V, Arena R, Borghi-Silva A. Critical load: A novel approach to determining a sustainable intensity during resistance exercise. *The Journal of Sports Medicine and Physical Fitness*. 2017;57:556-564.
- Matos-Garcia BC, Rocco I, Maiorano LD, Peixoto T, Moreira RS, Carvalho AC, Catai AM, Arena R, Gomes WJ, Guizilini S. A home based walking program improves respiratory endurance in patients suffering an acute myocardial infarction: a randomized controlled trial. *Canadian Journal of Cardiology*. 2017;33:785-791.
- Arena R, Girolami G, Aruin A, Keil A, Sainsbury J, Phillips SA. Integrated approaches to physical therapy education: A new comprehensive model from the University of Illinois at Chicago. *Physiotherapy Research and Practice*. 2017;33:353-360.
- Arena R and Lavie CJ. Preventing bad and expensive things from happening by taking the healthy living polypill: everyone needs this medicine. *Mayo Clinic Proceedings*. 2017;92:483-487.

- Arena R and McNeil A. Let's talk about moving: the impact of cardiorespiratory fitness, exercise, steps and sitting on cardiovascular risk. *Brazilian Journal of Cardiovascular Surgery*. 2017;32:III-IV.
- Phillips SA, Andaku DK, Mendes RG, Caruso F, Cabiddu R, Jaenisch RB, Arena R, Borghi-Silva A. Exploring vascular function biomarkers: implications for rehabilitation. *Brazilian Journal of Cardiovascular Surgery*. 2017;32:125-135.
- Jaenisch RB, Bertagnolli M, Borghi-Silva A, Arena R, Dal Lago P. Respiratory muscle training improves diaphragm citrate synthase activity in rats with heart failure. *Brazilian Journal of Cardiovascular Surgery*. 2017;32:104-110.
- Lounsbury P, Elokda AS, Bunning JM, Arena R, Gordon EE. The value of detecting asymptomatic signs of myocardial ischemia in patients with coronary artery disease in outpatient cardiac rehabilitation. *The Journal of Cardiovascular Nursing*. 2017;32:E1-E9.
- Petrovic M, Milasinovic G, Tesic B, Trifunovic D, Petrovic O, Nedeljkovic I, Petrovic I, Banovic M, Boricic-Kistic M, Petrovic J, Arena R, Popovic D. Gauging the response to cardiac resynchronization therapy: the important interplay between predictor variables and definition of a favorable outcome. *Echocardiography*. 2017;34:371-375.
- Kitsiou S, Thomas M, Marai E, Maglaveras N, Kondos G, Arena R, Gerber B. Development of an innovative mHealth platform for remote physical activity monitoring and health coaching of cardiac rehabilitation patients," *2017 IEEE EMBS International Conference on Biomedical & Health Informatics (BHI)*, 2017;133-136. doi: 10.1109/BHI.2017.7897223
- Rouleau CR, Toivonen K, Aggarwal S, Arena R, Campbell TS. The association between insomnia symptoms and cardiovascular risk factors in patients who complete outpatient cardiac rehabilitation. *Sleep Medicine*. 2017;32:201-207.
- Caruso F, Bonjorno JC, Arena R, Phillips SA, Cabiddu R, Mendes R, Bassi D, Arakelian VM, Bassi D, Borghi-Silva A. Hemodynamic, autonomic, ventilatory and metabolic alterations following resistance training in patients with coronary artery disease: a randomized controlled trial. *American Journal of Physical Medicine and Rehabilitation*. 2017;96:226-235.

- Sagner M, McNeil A, Puska P, Auffray C, Price ND, Hood L, Lavie CJ, Han Z, Chen Z, Brahmachari SK, McEwen B, Soares MB, Balling E, Epel E, Arena R. The P4 health spectrum – a predictive, preventive, personalized and participatory continuum for promoting healthspan. *Progress in Preventive Medicine*. 2017;2:e0002.
- Schwartzmann PV, Ramalho L, Neder L, Crivelenti F, Ayub-Ferreira M, Romeiro M, Takayangui O, Santos A, Schmidt A, Figueiredo L, Arena R, Simoes M. Zika virus meningoencephalitis in an immunocompromised patient. *Mayo Clinic Proceedings*. 2017;92:460-466.
- Arena R, McNeil A, Sagner M, Lavie CJ. Healthy living: the universal and timeless medicine for healthspan. *Progress in Cardiovascular Diseases*. 2017;56:419-421.
- Arena R, McNeil A, Sagner M, Hills A. The current global state of key lifestyle characteristics: health and economic implications. *Progress in Cardiovascular Diseases*. 2017;56:422-429.
- Pinkstaff SO, McNeil A, Arena R, Cahalin LP. Healthy living medicine in the workplace: more work to do. *Progress in Cardiovascular Diseases*. 2017;56:440-447.
- McNeil A and Arena R. The evolution of health literacy and communication: introducing health harmonics. *Progress in Cardiovascular Diseases*. 2017;56:463-470.
- Hivert MF, McNeil A, Lavie CJ, Arena R. Training health professionals to deliver healthy living medicine. *Progress in Cardiovascular Diseases*. 2017;56:471-478.
- Phillips SA, Martino S, Arena R. Research opportunities and challenges in the era of healthy living medicine: unlocking the potential. *Progress in Cardiovascular Diseases*. 2017;56:498-505.
- Sagner M, McNeil A, Puska P, Auffray C, Price ND, Hood L, Lavie CJ, Han Z, Chen Z, Brahmachari SK, McEwen B, Soares MB, Balling E, Epel E, Arena R. The P4 health spectrum – a predictive, preventive, personalized and participatory continuum for promoting healthspan. *Progress in Cardiovascular Diseases*. 2017;56:506-520.
- Sagner M, Binks M, Yapijakis C, Lavie CJ, Frank E, Franklin BA, Forman DE, Arena R, La Vecchia C, Puska P. Overcoming potential threats to scientific advancements: conflict of interest, ulterior motives, false innuendos and harassment. *Progress in Cardiovascular Diseases*. 2017;56:521-523.

- Gonzaga L, Matos-Garcia B, Begot I, Bolzan DW, Silva C, Tatani SB, Santos V, Carvalho A, Arena R, Gomes WJ, Guizilini S. Effects of acute oxygen supplementation on exercise capacity in Eisenmenger syndrome. *International Journal of Cardiology*. 2017;231:100-114.
- Carbone S, Johnson V, Lavie CJ, Arena R. Obesity and heart failure: focus on the obesity paradox. *Mayo Clinic Proceedings*. 2017;92:266-279.
- Kaminsky LA, Imboden MT, Arena R, Myers J. Reference standards for cardiorespiratory fitness measured with cardiopulmonary exercise testing using cycle ergometry: data from the fitness registry and the importance of exercise national databases (FRIEND Registry). *Mayo Clinic Proceedings*. 2017;92:228-233.
- Lavie CJ, Arena R, Blair S. A call to increase physical activity across the globe in the 21st century. *Future Cardiology*. 2016;12:605-607.
- Carbone S, Arena R, Abbate A. Lack of benefit from Liraglutide in heart failure: Does “advanced” mean “too late”, “too lean” or “both”? *Journal of the American Medical Association*. 2016;316:2429.
- Bolzan DW, Rocco IS, Pauletti HO, Hossne NA, Arena R, Gomes WJ, Guizilini S. Early open-lung ventilation improves clinical outcomes in patients with left cardiac dysfunction undergoing off pump coronary artery bypass: a randomized controlled trial. *Brazilian Journal of Cardiovascular Surgery*. 2016;31:358-364.
- Banyard T, Arena R, Myers J, Kaminsky L. The role of body habitus in predicting cardiorespiratory fitness: The FRIEND registry. *International Journal of Sports Medicine*. 2016;37:863-869.
- Arena R, Lavie CJ, Borghi-Silva A, Daugherty J, Bond S, Phillips SP, Guazzi M. Exercise training in group 2 pulmonary hypertension: Which intensity and what modality. *Progress in Cardiovascular Disease*. 2016;59:87-49.
- Jurgensen SP, Trimer R, Di Thommazo L, Dourado VZ, Bonjorno Jr. J, Oliveira CR, Arena R, Borghi-Silva A. Does the incremental shuttle walking test require maximal effort in young obese women? *Brazilian Journal of Medical and Biological Research*. 2016;49:e5229.

- Carbone S, Canada J, Buckley L, Trankle C, Dixon D, Arena R, Van Tassell BV, Abbate A. Obesity contributes to exercise intolerance in heart failure patients with preserved ejection fraction. *Journal of the American College of Cardiology*. 2016;61:13-15.
- Ross R, Blair SN, Arena R, Church T, Despres JP, Franklin BA, Haskell WL, Kaminsky LA, Levine BD, Lavie CJ, Myers J, Niebauer J, Sallis R, Sawada S, Sui X, Wisloff U, on behalf of the American Heart Association Physical Activity Committee and the Council on Lifestyle and Cardiometabolic Health. Importance of assessing cardiorespiratory fitness in clinical practice: A case for fitness as a clinical vital sign. *Circulation*. 2016;134:e653-e699.
- Forestieri P, Peres M, Bublitz C, Bolzan DW, Rocco I, Santos VB, Moreira RS, de Almeida DR, Carvalho AC, Arena R, Gomes WJ, Guizilini S. A cycle ergometer exercise program improves exercise capacity and inspiratory muscle function in hospitalized patients awaiting heart transplantation: a pilot study. *Brazilian Journal of Cardiovascular Surgery*. *Brazilian Journal of Cardiovascular Surgery*. 2016;31:389-395.
- Sabbahi A, Arena R, Elokda A, Phillips SA. Exercise and hypertension: uncovering the mechanisms of vascular control. *Progress in Cardiovascular Diseases*. 2016;59:326-234.
- Parto P, Lavie CJ, Arena R, Bond S, Popovic D, Ventura HO. Body habitus in heart failure: Understanding the mechanisms and clinical significance of the obesity paradox. *Future Cardiology*. 2016;12:639-653.
- Sampaio LM, Subramaniam S, Arena R, Bhatt T. Does virtual reality-based Kinect dance training paradigm improve autonomic nervous system modulation in individuals with chronic stroke? *Journal of Vascular and Interventional Neurology*. 2016;9:21-29.
- Simoes RP, Mendes RG, Castello-Simoes V, Catai AM, Arena R, Borghi-Silva A. Use of heart rate variability to estimate lactate threshold in coronary artery disease patients during resistance exercise. *Journal of Sports Science and Medicine*. 2016;15:649-657.
- Aggarwal S, Marra B, Moore RD, McBride M, Arena R, Stone J. Rehabilitation therapy in peripheral arterial disease. *Canadian Journal of Cardiology*. 2016;32:S374-S381.'

- Hivert MF, Arena R, Forman DE, Kohl H, Kris-Etherton PM, McBride PE, Pate RR, Reid M, Spring B, Trilk J, Van Horn LV, Kraus WE. Medical training to achieve competency in lifestyle counseling: An essential foundation for prevention and treatment of cardiovascular diseases and other chronic medical conditions: A scientific statement from the American Heart Association. *Circulation*. 2016;134:e308-e327.
- Ramadi A, Buijs DM, Threfall TG, Aggarwal SG, Arena R, Rodgers WM, Haennel RG. Long-term physical activity behavior after completion of traditional versus fast-track cardiac rehabilitation. *Journal of Cardiovascular Nursing*. 2016;31:E1-E7.
- Sagner M, Arena R, McNeil A, Brahmam G, Hills AP, de Silva HJ, Karunapema P, Wijeyaratne CN, Arambepola C, Puska P. Creating a pro-active health care system to combat chronic diseases in Sri Lanka: The central role of preventive medicine and healthy lifestyle behaviors. *Expert Review of Cardiovascular Therapy*. 2016;14:1107-1117.
- Leddy AL, Connolly M, Holleran CL, Hennessy PW, Woodward J, Arena R, Roth EJ, Hornby TG. Alterations in aerobic exercise performance and gait economy following high-intensity dynamic stepping training in persons with subacute stroke *Journal of Neurologic Physical Therapy*. 2016;40:239-248.
- Babu AS, Arena R, Myers J, Padmakumar R, Maiya AG, Cahalin LP, Waxman A, Lavie CJ. Exercise intolerance in pulmonary hypertension: Mechanism, evaluation and clinical implications. *Expert Rev Respir Med*. 2016;10:979-990.
- Sperling M, Caruso F, Simoes R, dos Santos D, Arakelian V, Mendes R, Dutra D, Bonjorno Jr J, Arena R, Borghi-Silva A. Is heart rate variability possible to determine anaerobic threshold in progressive resistance exercise of coronary artery disease patients? *Brazilian Journal of Physical Therapy*. 2016;20:289-297.
- Bassi D, Arakelian V, Caruso F, Mendes R, Cabiddu R, Bonjorno Jr J, Arena R, Borghi-Silva A. Potential effects of cardiorespiratory and metabolic status after concurrent strength and endurance training program in diabetic patients: A randomized controlled trial. *Sports Medicine*. 2016;2:31.
- Thommazo L, Carvalho LP, Luporini R, Trimer R, Pantoni BF, Catai A, Arena R, Borghi-Silva A. Are cardiovascular and metabolic responses to field walking tests interchangeable and obesity-dependent? *Disability and Rehabilitation*. 2016;38:1820-1829.

- Caruso FC, Bonjorno JC, Mendes RG, Sperling MPR, Arakelian VM, Bassi D, Arena R, Borghi-Silva A. Hemodynamic and metabolic response during dynamic and resistance exercise in different intensities: A cross-sectional study on implications of intensity on safety and symptoms in patients with coronary disease. *American Journal of Cardiovascular Disease*. 2016;18:36-45.
- Bublitz C, Renno A, Ramos R, Assis L, Sellera CA, Trimer R, Borghi-Silva A, Arena R, Guizilini S. Acute effects of low-level laser therapy irradiation on functional capacity, blood lactate and muscle fatigue perception in hospitalized patients with heart failure – a pilot study. *Lasers in Medical Science*. 2016;31:1203-1209.
- Bolzan DW, Trimer R, Begot I, Nasrala M, Forestieri P, Mendez V, Arena R, Gomes WJ, Guizilini S. Open lung ventilation improves clinical outcomes in off-pump coronary bypass surgery: A randomized controlled trial. *Journal of Cardiothoracic and Vascular Anesthesia*. 2016;30:702-708.
- Guazzi M (co-chair), Halle M, Piepoli MF, Arena R (co-chair), Myers J, Lavie CJ. Focused update: Clinical recommendations for cardiopulmonary exercise testing data assessment in specific patient populations, an EACPR/AHA Joint Scientific Statement. *Circulation*. 2016;133:e694-711.
- Arena R, Lavie CJ, Daugherty J, Bond S, Phillips S, Borghi-Silva A. The combination of obesity and hypertension: A highly unfavorable phenotype requiring attention. *Current Opinion in Cardiology*. 2016;31:394-401.
- Horsley KJ, Rouleau CR, Garland SN, Samuels CS, Aggarwal SG, Stone JA, Arena R, Campbell TS. Insomnia symptoms and heart rate recovery among patients enrolled in cardiac rehabilitation. *Journal of Behavioral Medicine*. 2016;39:642-651.
- Winstein C, Stein J, Arena R, Bates B, Cherney LR, Cramer SC, Deruyter F, Eng JJ, Fisher B, Harvey RL, Lang CE, MacKay-Lyons M, Ottenbacher KJ, Pugh S, Reeves MJ, Richards LG, Stiers W, Zorowitz RD, on behalf of the American Heart Association Stroke Council, Council on Cardiovascular and Stroke Nursing, Council on Clinical Cardiology, and Council on Quality of Care and Outcomes Research. Guidelines for adult stroke rehabilitation and recovery: A guideline for healthcare professionals from the American Heart Association/American Stroke Association. *Stroke*. 2016;47:e98-e16.

- Caruso F, Simoes R, Reis MS, Guizilini S, Alves V, Arena R, Borghi-Silva A. High-Intensity inspiratory protocol increases heart rate variability in myocardial revascularization patients. *Brazilian Journal of Cardiovascular Surgery*. 2016;31:38-44.
- Campos FV, Neves LM, Silva VZ, Chiappa GR, Cahalin L, Arena R, Cipriano GF, Cipriano Jr G. Hemodynamic effects induced by transcutaneous electrical nerve stimulation in apparently healthy subjects: a systematic review and meta-analysis. *Archives of Physical Medicine and Rehabilitation*. 2016;97:826-835.
- Lacerda D, Costa D, Reis M, Gomes E, Costa I, Borghi-Silva A, Marsico A, Roberto Stirbulov R, Arena R, Sampaio L. Influence of bilevel positive airway pressure on autonomic tone in hospitalized patients with decompensated heart failure. *The Journal of Physical Therapy Science*. 2016;28:1-6.
- Sperling MPR, Caruso FC, Mendes R, Dutra DB, Arakelian V, Bonjorno JC, Catai AM, Arena R, Borghi-Silva A. Relationship between noninvasive hemodynamic responses and cardiopulmonary exercise testing in patients with coronary artery disease. *Clinical Physiology and Functional Imaging*. 2016;36:92-98.
- Arena R, Myers J, Kaminsky L. Revisiting age-predicted maximal heart rate: can it be used as a valid measure of effort? *American Heart Journal*. 2016;173:49-56.
- Franklin NC and Arena R. Personalized weight management interventions for cardiovascular risk reduction: A viable option for African-American women. *Progress in Cardiovascular Diseases*. 2016;58:595-604.
- Lavie CJ, De Schutter A, Parto P, Jahangir E, Kokkinos P, Ortega FB, Arena R, Milani RV. Obesity and prevalence of cardiovascular diseases and prognosis – the obesity paradox update. *Progress in Cardiovascular Diseases*. 2016;58:537-547.
- Pinkstaff SO, Burger CD, Daugherty J, Bond S. Arena R. Cardiopulmonary exercise testing in patients with pulmonary hypertension: Clinical recommendations based on a review of the evidence. *Expert Review of Respiratory Medicine*. 2016;10:279-295.

- Guazzi M, Arena R, Pellegrino M, Bandera F, Generati G, Labate V, Alfonzetti E, Villani S, Gaeta MM, Halle M, Haslbauer R, Phillips SA, Cahalin L. Prevalence and characteristics of exercise oscillatory ventilation in apparently healthy individuals at variable risk for cardiovascular disease: a subanalysis of the EURO-EX trial. *European Journal of Preventive Cardiology*. 2016;23:328-334.
- Lavie CJ, Forman DE, Arena R, Bulking Up skeletal muscle to improve heart failure prognosis. *JACC-HF*. 2016;67:13-15.
- Canada JM, Fronk DT, Freeman L, Carbone S, Erdle CO, Abouzaki NA, Melchior RD, Thomas CS, Christopher S, Turlington JS, Trankle CR, Thurber CJ, Evans RK, Dixon DL, Van Tassell BW, Arena R, Abbate A. Usefulness of C-reactive protein plasma levels to predict exercise intolerance in patients with chronic systolic heart failure. *American Journal of Cardiology*. 2016;117:116-120.
- Pantoni C B F, Tommazo L, Mendes RG, Simoes RP, Caruso, FC, Arena R, Catai AM, Borghi-Silva A . Continuous positive airway pressure application during exercise improves walking time in patients undergoing inpatient cardiac rehabilitation following coronary artery bypass graft surgery: an open-label randomized controlled trial. *Journal of Cardiopulmonary Rehabilitation and Prevention*. 2016;36:20-27.
- Lavie CJ, Arena R, Franklin BA. Cardiac rehabilitation and healthy lifestyle interventions: Rectifying program deficiencies to improve patient outcomes. *Journal of the American College of Cardiology*. 2016;67:13-15.
- Arena R and Lavie CJ. In response to: lifestyle medicine in Expert Review of Cardiovascular Therapy. *Expert Review of Cardiovascular Therapy*. 2016;14:265-266.
- Arena R, Lavie CJ, Hivert MF, Williams MA, Briggs PD, Guazzi M. Who will deliver comprehensive healthy lifestyle interventions to combat non-communicable disease? Introducing the Healthy Lifestyle Practitioner. *Expert Review of Cardiovascular Therapy*. 2016;14:15-22.
- Arena R, Lavie CJ, Cahalin LP, Briggs PD, Guizilini S, Daugherty J, Chan W, Borghi-Silva A. Transforming cardiac rehabilitation into broad-based healthy lifestyle programs to combat non-communicable disease. *Expert Review of Cardiovascular Therapy*. 2016;14:23-36.

- Bien Udos, Souza G, Campos R, Santoro I, Costa A, Arena R, Sampaio L. Maximum inspiratory pressure and rapid shallow breathing index as predictors of successful ventilator weaning. *Journal of Physical Therapy Science*. 2015;27:3723-3727.
- Carvalho LP, Thommazo-Luporini L, Aubertin-Leheudre M, Bonjorno Jr JC, de Oliveira CR, Luporini R, Mendes RG, Zangrando KT, Trimer R, Arena R, Borghi-Silva A. Prediction of cardiorespiratory fitness by the six-minute step test and its association with muscle strength and power in sedentary obese and lean young women: a cross-sectional study. *PlosOne*. 2015;10:e0145960.
- Kaminsky L, Arena R, Myers J. Reference Standards for Cardiorespiratory Fitness Measured with Cardiopulmonary Exercise Testing: Data from the Fitness Registry and the Importance of Exercise National Database (FRIEND Registry). *Mayo Clinic Proceedings*. 2015;90:1515-1523.
- Bassi D, Arakelian V, Mendes R, Caruso FC, Bonjorno Jr JC, Zangando KTL, Oliveira CR, Haus J, Arena R, Borghi-Silva A. Poor glycemic control negatively impacts linear and non-linear dynamics of heart rate in Type 2 Diabetes. *Brazilian Journal of Sports Medicine*. 2015;21:313-317.
- Lavie CJ, Lee D, Sui X, Arena R, O'Keefe JH, Church TS, Milani RV, Blair SN. Effects of running on chronic diseases, cardiovascular and all-cause mortality. *Mayo Clinic Proceedings*. 2015;90:1541-1552.
- Parto P, Lavie CJ, Arena R, Ventura H. Preventing heart failure with exercise training. *Current Cardiovascular Risk Reports*. 2015;9:44.
- Da Silva VZ, Gurney B, Arena R, Noronha M, Durigan JL, Cipriano G. Current evidence demonstrate similar effects of Kilohertz-frequency and low-frequency current on quadriceps evoked torque and discomfort in healthy individuals: A systematic review with meta-analysis. *Physiotherapy Theory and Practice*. 2015;31:533-539.
- Guazzi M, Phillips SA, Arena R, Lavie CJ. Endothelial dysfunction and lung capillary injury in cardiovascular diseases. *Progress in Cardiovascular Disease*. 2015;57:454-462.
- Arena R, Guazzi M, Lavie CJ. Cardiopulse: The urgent need for the healthy lifestyle healthcare system. *European Heart Journal*. 2015;36:2023-2024.

- Mendes RG, de Souza CR, Machado MN, Correa PC, Thommazo L, Arena R, Myers J, Pizzolatto EB, Borghi-Silva A. Predicting reintubation, prolonged mechanical ventilation and death in post-coronary artery bypass graft surgery: a comparison between artificial neural networks and logistic regression models. *Archives of Medical Science*. 2015;11:756-763.
- Mazzuco AM, Medieros WM, Sperling M, de Souza AS, Alencar MC, Arbex F, Neder JA, Arena R, Boghi-Silva A. Relationship between linear and nonlinear dynamics of heart rate and impairment of lung function in COPD patients. *International Journal of COPD*. 2015;10:1651-1661.
- Sisante J, Arena R, Matlage AE, Rippee AE, Billinger SA. Cardiopulmonary response in subacute stroke is impaired during peak exercise testing. *Journal of Cardiopulmonary Rehabilitation and Prevention*. 2015;35:334-341.
- Arena R, Whitsel LP, Berra K, Lavie CJ, Kaminsky L, Williams M, Hivert MF, Franklin NC, Myers J, Dengel D, Lloyd-Jones DM, Guazzi M, Pinto FJ, Consentino F, Halle M, Gielen S, Dendale P, Niebauer J, Pelliccia A, Giannuzzi P, Corra U, Piepoli M, Lianov L, Guthrie G and Shurney D. Healthy Lifestyle Interventions to Combat Non-Communicable Disease: A Novel Non-Hierarchical Connectivity Model for Key Stakeholders: A Policy Statement from the AHA, ESC, EACPR and ACPM. *European Heart Journal*. 2015;36:2097-2109.
- Leggett L, Hauer, T, Martin BJ, Manns B, Aggarwal S, Arena R, Ausford LD, Meldrum D, Ghali W, Knudtson ML, Norris CM, Stone JA, Clement F. Optimizing value from cardiac rehabilitation: A cost-utility analysis comparing age, sex and clinical subgroups. *Mayo Clinic Proceedings*. 2015;90:1011-1020.
- Arena R. The Case for Cardiac Rehabilitation Post-PCI and Why We Aren't Meeting Our Goal. <http://www.acc.org>. August 14, 2015. <http://www.acc.org/latest-in-cardiology/articles/2015/08/13/14/10/the-case-for-cardiac-rehabilitation-post-pci>.
- Tomasi FP, Chiappa GR, Silva VM, Silva ML, Lima A, Arena R, Cipriano Jr G. Effect of transcutaneous electrical nerve stimulation improves exercise tolerance in health subjects. *International Journal of Sports Medicine*. 2015;36:661-665.

- Arena R, Whitsel LP, Berra K, Lavie CJ, Kaminsky L, Williams M, Hivert MF, Franklin NC, Myers J, Dengel D, Lloyd-Jones DM, Guazzi M, Pinto FJ, Consentino F, Halle M, Gielen S, Dendale P, Niebauer J, Pelliccia A, Giannuzzi P, Corra U, Piepoli M, Lianov L, Guthrie G and Shurney D. Healthy Lifestyle Interventions to Combat Non-Communicable Disease: A Novel Non-Hierarchical Connectivity Model for Key Stakeholders: A Policy Statement from the AHA, ESC, EACPR and ACPM. *Mayo Clinic Proceedings*. 2015;90:1082-1103.
- Colbert JD, Martin BJ, Haykowsky MJ, Hauer TL, Austford LD, Arena R, Knudtson ML, Meldrum DA, Aggarwal MD, Stone JA. Cardiac rehabilitation referral, attendance and mortality in women. *European Journal of Preventive Cardiology*. 2015;22:979-986.
- Loyaga-Rendon R, Plaisance E, Arena R, Shah K. Exercise physiology, testing and training: considerations for heart failure patients supported by left ventricular assist device. *Journal of Heart and Lung Transplantation*. 2015;34:1005-1016.
- Lavie CJ, Arena R, Swift DL, Johannsen NM, Xui X, Duck-Chui L, Earnest CP, Church TS, O'Keefe JH, Milani RV, Blair SN. Exercise and the cardiovascular system: clinical science and cardiovascular outcomes. *Circulation Research*. 2015;117:207-219.
- Guazzi M, Naeije R, Arena R, Corra U, Ghio S, Forfia P, Rossi A, Cahalin L, Bandera F, Temporelli P. Echocardiography of right ventriculo-arterial coupling combined to cardiopulmonary exercise testing to predict outcome in heart failure. *Chest*. 2015;148:226-234.
- Van Tassell BW, Raleigh JV, Oddi C, Carbone S, Canada J, Abouzaki NA, Biondi-Zoccai G, Arena R, Abbate A. Interleukin-1 blockade in recently decompensated systolic heart failure: study design of the recently decompensated heart failure Anakinra response trial (RED-HART). *Journal of Clinical Trials in Cardiology*. 2015;2:1-8.
- Simoes-Castello V, Minatel V, Karsten M, Simoes R, Persequini N, Milan J, Arena R, Neves L, Borghi-Silva A, Catai A. Circulatory and ventilatory power: characterization of novel cardiopulmonary exercise testing measures in patients with coronary artery disease. *Arquivos Brasileiros de Cardiologia*. 2015;104:476-485.

- Cahalin LP, Kaminsky L, Lavie CJ, Briggs P, Cahalin BL, Myers J, Forman DE, Patel M, Pinkstaff SO, Arena R. Development and implementation of a worksite health and wellness program: A focus on non-communicable disease. *Progress in Cardiovascular Disease*. 2015;58_94-101.
- Myers J, Arena R, Cahalin LP, Labate V, Guazzi M. Cardiopulmonary exercise testing in heart failure. *Current Problems in Cardiology*. 2015;40:322-372.
- Caruso FR, Arena R, Phillips SA, Bonjorno Jr JC, Mendes RG, Arakelian VM, Bassi D, Nogi C, Borghi-Silva A. Resistance exercise training improves heart rate variability and muscle performance: A randomized controlled trial in coronary artery disease patients. *European Journal of Physical and Rehabilitation Medicine*. 2015;51:281-289.
- Lounsbury P, Elokda AS, Gylten D, Arena R, Clarke W, Gordon EE. Text-messaging program improved outcomes in cardiovascular rehabilitation. *International Journal of Cardiology: Heart and Vasculature*. 2015;7:170-175.
- Jurgensen SP, Trimer R, Dourado VZ, Thommazo-Luporini L, Bonjorno Jr JC, Olioveira CR, Arena R, Mendes RG, Borghi-Silva A. Shuttle walk test in obese women: test-retest reliability and concurrent validity with peak oxygen uptake. *Clinical Physiology and Functional Imaging*. 2015;35:120-126.
- Pescatello LS, MacDonald HV, Ash GI, Lamberti LM, Farquhar WB, Arena R, Johnson BT. Assessing the existing professional exercise recommendations for hypertension: A review and recommendations for future research priorities. *Mayo Clinic Proceedings*. 2015;90:801-812.
- Fonarow GC, Calitz C, Arena R, Baase C, Isaac F, Lloyd-Jones D, Peterson ED, Pronk N, Sanchez E, Terry P, Volpp KG, Antman EM. AHA Presidential Advisory: Workplace Wellness Recognition for Optimizing Workplace Health. *Circulation*. 2015;131:e480-491.
- Arena R and Lavie CJ. The healthy lifestyle team is central to the success of accountable care organizations. *Mayo Clinic Proceedings*. 2015;90:572-576.
- Thommazo-Luporini L, Carvalho L, Luporini RL, Psntoni CB, Catai AM, Arena R, Borghi-Silva A. The six minute-step test as a predictor of cardiorespiratory function in obese women. *European Journal of Physical and Rehabilitation Medicine*. 2015;26:564-569.

- Arena R. Answering the AHA call to action: Are you a physical activity ambassador? Available in: *American Heart Association Learning Library*.
http://my.americanheart.org/professional/ScienceNews/Answering-the-AHA-Call-to-Action-Are-you-a-Physical-Activity-Ambassador_UCM_473900_Article.jsp. Posted April 28, 2015.
- Borghi-Silva A, Mendes RG, Trimer R, de Oliveira R, Catai AM, Fregonezi GAF, Resquetti V, Arena R, Jorge LM. Potential effects of 6 weeks versus 12-weeks of physical training on cardiac autonomic function and exercise capacity in COPD. *European Journal of Physical and Rehabilitation Medicine*. 2015;51:211-221.
- Jurgens CY, Goodlin S, Dolansky M, Ahmed A, Fonarow GC, Boxer R, Arena R, Blank L, Buck HG, Cranmer K, Fleg JL, Lampert RJ, Lennie TA, Lindenfeld J, Pina IL, Semla T, Trebbien P, Rich MW; on behalf of the American Heart Association Council on Quality of Care and Outcomes Research; and the Heart Failure Society of America. Heart Failure Management in Skilled Nursing Facilities: A Scientific Statement from the American Heart Association and the Heart Failure Society of America. *Circulation Heart Failure*. 2015;8:1-34
- Jurgens CY, Goodlin S, Dolansky M, Ahmed A, Fonarow GC, Boxer R, Arena R, Blank L, Buck HG, Cranmer K, Fleg JL, Lampert RJ, Lennie TA, Lindenfeld J, Pina IL, Semla T, Trebbien P, Rich MW; on behalf of the American Heart Association Council on Quality of Care and Outcomes Research; and the Heart Failure Society of America. Heart Failure Management in Skilled Nursing Facilities: A Scientific Statement from the American Heart Association and the Heart Failure Society of America. *Journal of Cardiac Failure*. 2015;24:263-299.
- Arena R, Cahalin LP, Borghi-Silva A, Myers J. The effect of exercise training on the pulmonary arterial system in patients with pulmonary arterial hypertension. *Progress in Cardiovascular Disease*. 2015;57:480-488.
- Cahalin LP and Arena R. Inspiratory muscle training in health and disease – novel methods and outcomes. *Exercise and Sport Sciences Reviews*. 2015;43:84-92.

- Babu AS, Raman VG, Arena R, Lavie CJ. Time to focus on preventing coronary artery disease through exercise training among normoglycemic individuals. *Mayo Clinic Proceedings*. 2015;90:418.
- Armstrong MJ, Sigal RJ, Arena R, Hauer TL, Austford LD, Aggarwal S, Stone JA, Martin BJ. Cardiac rehabilitation completion is associated with reduced mortality in diabetic patients with coronary artery disease. *Diabetologia*. 2015;58:691-698.
- Begot I, Peixoto T, Gonzaga L, Bolzan DW, Papa V, Carvalho A, Arena R, Gomes WJ, Guizilini S. A home-based walking program improves erectile dysfunction in males suffering an acute myocardial infarction: a randomized controlled trial. *American Journal of Cardiology*. 2015;115:571-575.
- Lavie CJ, Ventura HO, Milani RV, Arena R. Invited Editorial - Critical impact of fitness in the prevention and treatment of heart failure. *American Heart Journal*. 2015;169:194-196.
- Peixoto T, Begot I, Bolzan DW, Machado L, Reis MS, Papa V, Carvalho AC, Arena R, Gomes WJ, Guizilini S. Early exercise-based rehabilitation improves health-related quality of life and functional capacity after acute myocardial infarction: a randomized controlled trial. *Canadian Journal of Cardiology*. 2015;31:308-313.
- Peixoto-Souza FS, Sampaio L, de Campos E, Barbalho-Moulim M, de Araujo PN, Neto RL, Arena R, Costa D. Reproducibility of the incremental shuttle walk test for women with morbid obesity. *Physiotherapy Theory and Practice*. 2015;31:428-432-5.
- Franklin NC, Lavie CJ, Arena R. Personal health technology: A new era in cardiovascular disease prevention. *Postgraduate Medicine*. 2015;127:150-158.
- Ramos R, Oliveira F, Borghi-Silva A, Costa P, Correa JCF, Costa D, Santos VLA, Donner CF, Stirbulov R, Arena R, Sampaio LM. Peripheral muscle strength and functional capacity in patients with moderate to severe asthma. *Multidisciplinary Respiratory Medicine*. 2015;10:3.
- Arena R, Harrington RA, Depsres JP. A message from modern-day healthcare to physical activity and fitness: Welcome home! *Progress in Cardiovascular Disease*. 2015;57:293-295.

- Harrington RA, Arena R, Despres JP, Ciarochi A, Croll E, Bloch KD. More than 10 million steps in the right direction: results from the first American Heart Association Scientific Sessions walking challenge. *Progress in Cardiovascular Disease*. 2015;57:296-298.
- Myers J, McAuley P, Lavie C, Despres JP, Arena R, Kokkinos P. Physical activity and cardiorespiratory fitness as major markers of cardiovascular risk: their independent and interwoven importance to health status. *Progress in Cardiovascular Disease*. 2015;57:306-314.
- Abbate A, Arena R, Abouzaki N, Van Tassell BW, Canada J, Shah K, Biondi-Zoccai G, Voelkel NF. Heart failure with preserved ejection fraction: refocusing on diastole. *International Journal of Cardiology*. 2015;179C:430-440.
- Arena R. Exercise and rehabilitation in heart failure. *Heart Failure Clinics*. 2015;11:i.
- Arena R. Functional capacity and exercise training have earned a primary role in the assessment and treatment of patients with heart failure. *Heart Failure Clinics*. 2015;11:xv-xvii.
- Borghi-Silva A, Trimer R, Mendes RG, Arena R, Schwartzmann PV. Rehabilitation practice patterns for patients with heart failure: the South American perspective. *Heart Failure Clinics*. 2015;11:73-82.
- Abbate A, Van Tassell BW, Canada JM, Dixon DL, Arena R, Biondi-Zoccai G. Pharmacologic and surgical interventions to improve functional capacity in heart failure. *Heart Failure Clinics*. 2015;11:117-124.
- Cahalin LP and Arena R. Breathing Exercises and Inspiratory Muscle Training in Heart Failure. *Heart Failure Clinics*. 2015;11:149-172.
- Ramadi A, Haennel RG, Stone JA, Arena R, Threlfall TG, Hitt E, Aggarwal SG, Haykowsky M, Martin BJ. The sustainability of exercise capacity changes in home versus center-based cardiac rehabilitation. *Journal of Cardiopulmonary Rehabilitation and Prevention*. 2015;35:21-28.
- Guazzi M, Gomberg-Maitland M, Arena R. Pulmonary hypertension in heart failure with preserved ejection fraction. *Journal of Heart and Lung Transplantation*. 2015;34:273-281.

- Ritt LE, Myers J, Stein R, Arena R, Guazzi M, Chase P, Bensimhon D, Ashley E, Cahalin LP, Forman DE. Additive prognostic value of cardiopulmonary exercise test score in patients with heart failure and intermediate risk. *International Journal of Cardiology*. 2015;178:262-264.
- Paolillo FR, Arena R, Dutra DB, Durigan R, Araujo HS, de Souza HC, Parizotto NA, Cipriano G, Chiappa G, Borghi-Silva A. Low-level laser therapy associated with high intensity resistance training on cardiac autonomic control of heart rate and skeletal muscle remodeling in wistar rats. *Lasers in Surgery and Medicine*. 2014;46:796-803.
- Trimer R, Cabidu R, Sampaio LLM, Stirbulov R, Poiares D, Bianchi A, Costa FSM, Mendes RG, Delfino Jr A, Arena R, Borghi-Silva A. Heart rate variability and cardiorespiratory coupling in obstructive sleep apnea: elderly compared with young. *Sleep Medicine*. 2014;15:1324-1321.
- Neves LM, Cahalin LP, Silva VM, Lucena M, Spielholz NI, Arena R, Gerson C. Effect of chronic neuromuscular electrical stimulation on primary cardiopulmonary exercise test variables in heart failure patients: a systematic review and meta-analysis. *International Journal of Cardiology – Metabolic & Endocrine*. 2014;5:28-35.
- Pantoni CB, Mendes RG, Di Thommazo-Luporini L, Simoes RP, Amaral-Neto O, Arena R, Guizilini S, Gomes WJ, Catai AM, Borghi-Silva A. Recovery of linear and nonlinear heart rate dynamics after coronary artery bypass grafting surgery. *Clinical Physiology Functional Imaging*. 2014;34:449-456.
- Van Tassell B, Canada J, Arena R, Abbate A. Editorial: Colchicine in stable chronic heart failure. *JACC-HF*. 2014;2:538.
- Franco RL, Bowen MK, Arena R, Privett SH, Acevedo EO, Wickham EP, Sex RK. Differences in Pulmonary Oxygen Uptake Kinetics in Obese Adolescents. *The Journal of Pediatrics*. 2014;165:1161-1165.
- Babu AS, Veluswamy SK, Arena R, Guazzi M, Lavie CJ. Virgin coconut oil and its potential cardioprotective effects. *Postgraduate Medicine*. 2014;126:76-83.

- Cavalcante ES, Magario R, Conforti CA, Cipriano Jr G, Arena R, Carvalho ACC, Buffolo E, Luna Filho B. Intensive physiotherapy during the early recovery of coronary artery bypass surgery impacts positively the cognitive function. *Arquivos Brasileiros de Cardiologia*. 2014;103:391-397.
- Borghi-Silva A, Labate V, Arena R, Bandera F, Generati G, Pellegrino M, Alfonzetti E, Guazzi M. Exercise ventilatory power in heart failure patients functional phenotypes definition by combining cardiopulmonary exercise testing and stress echocardiograph. *International Journal of Cardiology*. 2014;176:1348-1349.
- Arena R, Guazzi M, Cahalin LP, Myers J. Revisiting CPX applications in heart failure: Aligning evidence with clinical practice. *Exercise and Sports Sciences Reviews*. 2014;42:153-160.
- Lima A, Otto ME, Da Silva ML, Neves LM, Fernandes J, Da Silva VM, Cipriano GB, Arena R, Cipriano Jr. G. Relationship between aerobic exercise responses and tissue Doppler imagine in Chagasic and ischemic heart failure. *Experimental and Clinical Cardiology*. 2014;20:4698-4714.
- Myers J, Forman DE, Balady G, Franklin B, Nelson-Worel J, Martin BJ, Herbert W, Guazzi M, Arena R. Supervision of exercise testing by non-physicians: a scientific statement from the American Heart Association. *Circulation*. 2014;130:1014-1027.
- Menezes AR, Lavie CJ, Forman DE, Arena R, Milani RV, Franklin BA. Cardiac rehab in the elderly. *Progress in Cardiovascular Disease*. 2014;57:152-159.
- Cipriano Jr G, Neder A, Umpierre D, Arena R, Vieira P, Chiappa A, Ribeiro J, Chiappa G. Sympathetic ganglion transcutaneous electrical nerve stimulation after coronary artery bypass graft surgery improves femoral blood flow and exercise tolerance. *Journal of Applied Physiology*. 2014;117:633-638.
- Cipriano G Jr, Cipriano VTG, Maldaner da Silva VC, Cipriano FB, Chiappa GR, Cahalin LP, Arena R. The effect of aerobic exercise training on ventilatory efficiency and biomarkers in patients with systolic heart failure: A Systematic Review and Meta-analysis. *Heart Failure Reviews*. 2014;19:655-667.
- Arena R, Cahalin LP, Borghi-Silva A, Phillips SA. Improving functional capacity in heart failure: the need for a multifaceted approach. *Current Opinion in Cardiology*. 2014;29:467-474.

- Arena R, Arnett DK, Terry P, Li S, Isaac F, Mosca L, Braun L, Roach WH, Pate RR, Sanchez E, Carnethon M, Whitsel LP. The role of worksite health screening: A policy statement from the American Heart Association. *Circulation*. 2014;130:719-734.
- Pinkstaff SO, Arena R, Myers J, Kaminsky L, Briggs P, Forman DE, Patel MJ, Cahalin LP. The affordable care act: New opportunities for cardiac rehab in the workplace. *Journal of Occupational and Environmental Medicine*. 2014;56:809-813.
- Martin BJ, Aggarwal S, Stone JA, Hauer T, Austford LD, Hemmelgarn B, Knudtson M, Arena R. Cardiac rehabilitation improves outcomes in patients with acute heart failure post myocardial infarction: analysis of a large, single-center cohort. *Experimental and Clinical Cardiology*. 2014;20:2206-2237.
- Billinger SA, Arena R, Bernhardt J, Eng JJ, Franklin BA, Johnson CM, MacKay-Lyons M, Macko RF, Mead GE, Roth EJ, Shaughnessy M, Tang A. Physical activity and exercise recommendations for stroke survivors: A statement for healthcare professionals from the American Heart Association/American Stroke Association. *Stroke*. 2014;45:2532-2553.
- Guazzi M, Labate V, Cahalin LP, Arena R. Cardiopulmonary exercise testing reflects similar pathophysiology and disease severity in heart failure patients with reduced and preserved ejection fraction. *European Journal of Preventive Cardiology*. 2014;21:847-854.
- Cahalin LP, Arena R, Labate V, Bandera F, Lavie CJ, Guazzi M. Predictors of abnormal heart rate recovery in patients with heart failure reduced and preserved ejection fraction. *European Journal of Preventive Cardiology*. 2014;21:906-914.
- Paolillo FR, Corazza AV, Paolillo AS, Borghi-Silva A, Arena R, Kurachi C, Bagnato VS. Phototherapy during treadmill training improves quadriceps performance in postmenopausal women. *Climacteric*. 2014;17:285-293.
- Forman DE, Daniels KM, Cahalin LP, Zavin A, Allsup K, Cao P, Santhanam M, Joseph J, Arena R, Lazzari A, Schulze C, Lecker S. Analysis of skeletal muscle gene expression patterns and the impact of functional capacity in patients with systolic heart failure. *Journal of Cardiac Failure*. 2014;20:422-430.

- Reis MS, Durigan JL, Arena R, Rossi BR, Mendes R, Borghi-Silva A. Effects of postero-anterior thoracic mobilization on heart rate variability and pain in women with fibromyalgia. *Rehabilitation Research and Practice*. 2014; Article ID 898763: 6 pages.
- Farias CC, Resqueti RV, Santos BP, Lavezzo FA, Borghi-Silva A, Arena R, de Freitas Fregonezi GA. Cost and benefits of pulmonary rehabilitation in chronic obstructive pulmonary disease: a randomized controlled trial. *Brazilian Journal of Physical Therapy*. 2014;18:165-173.
- Canada JM, Van Tassell BW, Christopher S, Oddi C, Abouzaki NA, Gambill ML, Mueller G, Melchior R, Shah K, Dinarello CA, Abbate A, Arena R. Clinical predictors of response to Anakinra in patients with heart failure. *International Journal of Cardiology*. 2014;173:537-539.
- Trimer R, Mendes RG, Costa ESM, Sampaio LMM, Delfino Jr. A, Arena R, Aletti F, Ferrario M, Borghi-Silva A. Is there a chronic stage-dependent linear and nonlinear cardiac autonomic impairment in obstructive sleep apnea? *Sleep and Breathing*. 2014;18:403-409.
- Armstrong MJ, Martin BJ, Arena R, Hauer TL, Austford LD, Stone JA, Aggarwal S, Sigal RJ. Patients with diabetes in cardiac rehabilitation: attendance and exercise capacity. *Medicine and Science in Sports and Exercise*. 2014;46:845-850.
- Vieira PJ, Guntzel AM, Cipriano Jr. G, Umpierre D, Arena R, Chiappa GR. Neuromuscular electrical stimulation improves clinical and physiological function in COPD patients. *Respiratory Medicine*. 2014;108:609-620.
- Silva Reis M, Arena R, Archixa B, deToledo CF, Catai AM, Borghi-Silva A. Deep breathing heart rate variability is associated with inspiratory muscle weakness in chronic heart failure. *Physiotherapy Research International*. 2014;19:16-24.
- Arena R. Lifestyle modification interventions and cardiovascular health: global perspectives on worksite health and wellness and cardiac rehabilitation. *Progress in Cardiovascular Disease*. 2014;56:473-475.

- Cahalin LP, Myers J, Kaminsky L, Briggs PD, Forman DE, Patel MJ, Pinkstaff SO, Arena R. Current trends in reducing cardiovascular risk factors in the United States: Focus on worksite health and wellness. *Progress in Cardiovascular Disease*. 2014;56:476-483.
- Simoes R, Mendes R, Archiza, B, dos Santos D, Bonjorno Jr JC, de Oliveira C, Aparecida C, Arena R, Borghi-Silva A. Identification of anaerobic threshold by analysis of heart rate variability during discontinuous dynamic and resistance exercise protocols in healthy older men. *Clinical Physiology and Functional Imaging*. 2014;34:98-108.
- Myers J, de Souza CR, Borghi-Silva A, Guazzi M, Chase P, Bensimhon D, Peberdy MA, Ashley E, West E, Cahalin LP, Forman D, Arena R. A neural network approach to predicting outcomes in heart failure using cardiopulmonary exercise testing. *International Journal of Cardiology*. 2014;171:265-269.
- Arena R and Cahalin LP. Evaluation of cardiorespiratory fitness and respiratory muscle function in the obese population. *Progress in Cardiovascular Disease*. 2014;56:457-464.
- Mendes RG, Simoes RP, Costa FS, Pantoni PB, Di Thommazo L, Luzzi S, Othon A, Arena R, Catai MA, Borghi-Silva A. Is applying the same exercise-based inpatient program to normal and reduced left ventricular function patients the best strategy after coronary surgery. *Disability and Rehabilitation*. 2014;36:155-162.
- Van Tassell BW, Arena R, Biondi-Zocchia G, Canada JM, Oddi C, Abouzaki NA, Jahangiri Am Falcao RA, Kontos MC, Shah KB, Voelkel NF, Dinarello CA, Abbate A. Effects of interleukin-1 blockade with Anakinra on aerobic exercise capacity in patients with heart failure and preserved ejection fraction (from the D-HART Pilot Study). *American Journal of Cardiology*. 2014;113:321-327.
- Neves LM, Neto AK, Arenas FP, de Oliveira VF, Arena R, Cipriano Jr G. Translation and cross-cultural adaptation of the Duke Activity Status Index to Brazilian Portuguese. *Physical Therapy in Movement*. 2013;26:631-638.

- Pinkstaff S, Guazzi M, Shapiro B, Arena R. CPX testing: overcoming institutional barriers. *Hospital Cardiovascular Disease Europe*. 2013: Autumn Issue: 17-19.
- Guazzi M, Gatto P, Giusti G, Pizzamiglio F, Previtoli I, Arena R. Pathophysiology of cardiorenal syndrome in decompensated heart failure : role of lung-right heart-kidney interaction. *International Journal of Cardiology*. 2013;169:379-384.
- Guazzi M, Bandera F, Pelissero G, Castelvechio S, Menicanti L, Ghio S, Temporelli PL, Arena R. Tricuspid annular plane systolic excursion and pulmonary arterial systolic pressure relationship in heart failure: an index of right ventricular contractile function and prognosis. *American Journal of Physiology – Heart and Circulatory Physiology*. 2013;305:H1373-1381.
- Daniels K, Arena R, Lavie CJ, Cahalin LP, Forman DE. Exercise: a vital means to moderate cardiovascular aging. *Aging Health*. 2013;9:473-482.
- Daniels D, Zavin A, Allsup K, Joseph J, Arena R, Lazzari A, Schulze PC, Lecker S, Brown JD, Forman DE. Serum Adiponectin in non-cachectic heart failure patients. *International Journal of Cardiology*. 2013;168:4363-4364.
- Simões R, Castello-Simões V, Mendes R, Archiza B, Santos D, Machado, H, Bonjorno Jr J, Oliveira C, Reis M, Catai A, Arena R, Borghi-Silva A. Lactate and heart rate variability threshold during resistance exercise in young and elderly. *International Journal of Sports Medicine*. 2013;34:991-996.
- Cahalin LP, Forman DE, Chase P, Guazzi M, Myers J, Bensimhon D, Perberdy MA, Ashley E, West E, Arena R. The prognostic significance of heart rate recovery is not dependent upon maximal effort in patients with heart failure. *International Journal of Cardiology*. 2013;168:1496-1501.
- Zavin A, Daniels K, Arena R, Allsup K, Lazzari A, Joseph J, Schulze CP, Lecker S, Forman DE. Adiposity facilitates increased strength in older heart failure patients. *International Journal of Cardiology*. 2013;167:2468-2471.

- Zavin A, Arena R, Joseph J, Kelly A, Daniels K, Schulze C, Lecker S, Forman DE. Dynamic assessment of ventilatory efficiency during recovery from peak exercise to enhance cardiopulmonary exercise testing. *European Journal of Preventive Cardiology*. 2013;20:779-785.
- Silva VM, Lima A, Cipriano G, da Silva M, Campos VM, Arena R, Chiappa G, Martins W, Bottaro M, Cipriano Jr G. Noninvasive ventilation improves the cardiovascular response and fatigability during resistance exercise in patients with heart failure. *Journal of Cardiopulmonary Rehabilitation and Prevention*. 2013;33:378-384.
- Lavie CJ, Arena R, Earnest CP. High-intensity interval training in patients with cardiovascular diseases and heart transplantation. *Journal of Heart and Lung Transplantation*. 2013;32:1056-1058.
- Reis MS, Berton DC, Arena R, Catai AM, Neder JA, Borghi-Silva A. Determination of anaerobic threshold through heart rate and near infrared spectroscopy in elderly healthy men. *Brazilian Journal of Physical Therapy*. 2013;17:506-515.
- da Silva VZ, Lima AC, Cahalin LP, Arena R, Cipriano Jr. G. Association between physical activity measurements and key parameters of cardiopulmonary exercise testing in patients with heart failure. *Journal of Cardiac Failure*. 2013;19:635-640.
- Chase PJ, Kenjale A, Cahalin LP, Arena R, Davis PG, Myers J, Guazzi M, Forman DE, Ashley E, Peberdy MA, West M, Kelly CT, Bensimhon D. The effect of respiratory exchange ratio on the prognostic value of peak oxygen consumption and ventilatory efficiency in patients with systolic heart failure. *JACC-HF*. 2013;1:427-432.
- Fletcher G, Ades PA, Kligfield P, Arena R, Balady G, Bittner V, Coke L, Fleg JL, Forman DE, Gerber T, Gulati M, Madan K, Rhodes J, Thompson PD, Williams MA. Exercise standards for testing and training: a statement for health professionals from the American Heart Association. *Circulation*. 2013;128:873-934.
- Guazzi M, Cahalin LP, Arena R. Cardiopulmonary exercise testing as a diagnostic tool for the detection of left-sided pulmonary hypertension in heart failure. *Journal of Cardiac Failure*. 2013;19:461-467.

- Babu AS, Arena R, Veluswamy SK, Maiya AG. Worksite wellness for promoting cardiovascular health. *Physiotimes*. 2013;5:36-39.
- Thompson PD, Arena R, Riebe D, Pescatello LS. ACSM's new preparticipation health screening recommendations from ACSM's guidelines for exercise testing and prescription the ninth edition. *Current Sports Medicine Reports*. 2013;12:215-217.
- Lavie CJ, Berra K, Arena R. Invited editorial: Formal cardiac rehabilitation and exercise training programs in heart failure – evidence of substantial clinical benefits. *Journal of Cardiopulmonary Rehabilitation and Prevention*. 2013;33:209-211.
- Babu AS, Myers J, Arena R, Maiya AG, Padmakumar R. Evaluating exercise capacity in patients with pulmonary arterial hypertension. *Expert Reviews of Cardiovascular Therapy*. 2013;11:729-723.
- Bandera F, Arena R, Guazzi M. Letter to the Editor on the Article by Kato TS et al “Value of Peak Exercise Oxygen Consumption Combined with Brain Natriuretic Peptide Levels for Optimal Timing of Cardiac Transplantation”. *Circulation-Heart Failure*. 2013;6:e41.
- Ferreira JB, Méa Plentz RD, Stein C, Casali KR, Arena R, Viero C, Hoscheidt L, Dal Lago P. Inspiratory muscle training reduces blood pressure and sympathetic activity in hypertensive patients: A randomized controlled trial. *International Journal of Cardiology*. 2013;166:61-67.
- Arena R, Guazzi M, Briggs PD, Cahalin LP, Myers J, Kaminsky LA, Forman DE, Cipriano G, Borghi-Silva A, Babu AS, Lavie CJ. Promoting health and wellness in the workplace: a unique opportunity to establish primary and extended secondary cardiovascular risk reduction programs. *Mayo Clinic Proceedings*. 2013;88:605-617.
- Martin BJ, Arena R, Haykowsky M, Hauer T, Austford LD, Knudtson M, Aggarwal S, Stone JA. Cardiovascular fitness and mortality following contemporary cardiac rehabilitation. *Mayo Clinic Proceedings*. 2013;88:455-463.
- Lavie CJ, Alpert MA, Arena R, Mehra MR, Milani RV, Ventura HO. Impact of obesity and the obesity paradox on prevalence and prognosis in heart failure. *JACC-HF*. 2013;1:93-102.

- Babu AS, Arena R, Maiya AG, Padmakumar R, Guazzi M. Should cardiopulmonary exercise testing become a part of regular evaluation for patients with a family history of pulmonary hypertension? *Pulmonary Circulation*. 2013;3:121-122.
- Arena R, Myers J, Guazzi M. The evolution of cardiopulmonary exercise testing as a prognostic tool in patients with heart failure: 1991-2011. *Salud(i) Ciencia*. 2013;19:536-539.
- Simoes RP, Bonjorno Jr JC, Beltrame T, Catai AM, Arena R, Borghi-Silva A. Slower heart rate and oxygen consumption kinetic responses in the on- and off-transient during discontinuous incremental exercise: effects of aging. *Rev Bras Fisioter*. 2013;17:69-76.
- Cahalin LP, Arena R, Labate V, Bandera F, Lavie CJ, Guazzi M. Heart rate recovery after the 6-minute walk test rather than distance ambulated is a powerful prognostic indicator in heart failure with reduced and preserved ejection fraction. *European Journal of Heart Failure*. 2013;15:519-527.
- Myers J, Oliveira R, Dewey F, Arena R, Guazzi M, Chase P, Bensimhon D, Peberdy MA, Ashley E, West E, Cahalin L, Forman D. Validation of a cardiopulmonary exercise test score in heart failure. *Circulation-Heart Failure*. 2013;6:211-218.
- Wang P, Ma W, Park J, Celi FS, Arena R, Choi JW, Tripodi DJ, Zhuang J, Lago CU, Strong LC, Talagala L, Balaban RS, Kang JG, Hwang P. Increase in oxidative metabolism Li-Fraumeni syndrome. *New England Journal of Medicine*. 2013;368:1027-1032.
- Pescatello LS, Arena R, Riebe D, Thompson PD. Preview of ACSM's guidelines for exercise testing and prescription the ninth edition. *ACSM's Health and Fitness Journal*. 2013;17:16-20.
- Lavie CJ, Cahalin LP, Chase P, Myers J, Bensimhon D, Peberdy MA, Ashley E, West E, Forman DE, Guazzi M, Arena R. Impact of cardiorespiratory fitness on the obesity paradox in patients with heart failure. *Mayo Clinic Proceedings*. 2013;88:251-258.
- Cahalin LP, Arena R, Guazzi M, Myers J, Cipriano G, Chiappa G, Lavie CJ, Forman DE. Inspiratory muscle training in heart failure – a review of literature with a focus on method of training and outcomes. *Expert Review of Cardiovascular Therapy*. 2013;11:161-177.

- Swift DL, Lavie CJ, Johannsen NM, Arena R, Earnest CP, O’Keefe JH, Milani RV, Blair SN, Chuch TS. Physical activity, cardiorespiratory fitness, and exercise training in primary and secondary coronary prevention. *Circulation Journal*. 2013;77:281-292.
- Kaminsky LA (chair), Arena R (co-chair), Beckie TM, Brubaker P, Church T, Forman DE, Franklin BA, Gulati M, Lavie CJ, Myers J, Patel MJ, Oina IL, Weintraub WS, Williams MA, on behalf of the American Heart Association Advocacy Coordinating Committee, Council on Clinical Cardiology, and Council on Nutrition, Physical Activity and Metabolism. The importance of cardiorespiratory fitness in the U.S.: The need for a national registry: A policy statement from the American Heart Association. *Circulation*. 2013;127:652-662.
- Castello-Somoos V, Polaquini-Simoos R, Beltrame T, Bassi D, Catai AM, Arena R, Carvalho NA, Nascimento Ortega JD, Borghi-Silva A. Effects of aerobic exercise training on variability and heart rate kinetic during submaximal exercise after gastric bypass surgery - a randomized controlled trial. *Disability Rehabilitation*. 2013;35:334-342.
- Hamm LF, Wenger NK, Arena R, Forman DE, Lavie CJ, Miller TD, Thomas RJ. Role of cardiac rehabilitation facilities in disability assessment, job task physical requirements, and rehabilitation: Position statement from the AACVPR. *Journal of Cardiopulmonary rehabilitation and prevention*. 2013;33:1-11.
- Cahalin LP, Chase P, Arena R, Myers J, Bensimhon D, Peberdy MA, Ashley E, West E, Forman DE, Pinkstaff S, Lavie CJ, Guazzi M. A meta-analysis of the prognostic significance of cardiopulmonary exercise testing in patients with heart failure. *Heart Failure Reviews*. 2013;18:79-94.
- Arena R, Myers J, Forman DE, Lavie CJ, Guazzi M. Should high intensity-aerobic interval training become the clinical standard in heart failure? *Heart Failure Reviews*. 2013;18:95-105.
- Arena R and Guazzi M. Cardiopulmonary exercise testing: the time has come. *Hospital Cardiology Europe*. 2012;Winter:13-16.
- Lavie CJ, Arena R, Church T, O’Keefe J. The role of physical fitness in cardiovascular disease prevention. *The Medical Roundtable: General Medicine Edition*. 2012;1:152-163.

- Guazzi M (co-chair), Adams V, Conraads V, Halle M, Mezzani A, Vanhees L, Arena R (co-chair), Fletcher GF, Forman DE, Kitzman DW, Lavie CJ, Myers J. EACPR/AHA Joint Scientific Statement: Clinical recommendations for cardiopulmonary exercise testing data assessment in specific patient populations. *European Heart Journal*. 2012;33:2917-2927.
- Di Thommazo L, Jurgenesen, SP, Castello V, Catai AM, Arena R, Borghi-Sliva A. Metabolic and clinical comparative analysis of treadmill six minute walking test and cardiopulmonary exercise testing in obese and eutrophic women. *Brazilian Journal of Physical Therapy*. 2012;16:469-478.
- Martin BJ, Aggarwal S, Stone JA, Hauer T, Austford LD, Knudtson M, Arena R. Obesity negatively impacts aerobic capacity improvements both acutely and one year following cardiac rehabilitation. *Obesity*. 2012;20:2377-2383.
- Lecker SH, Zavin A, Cao P, Arena R, Allsup K, Daniels KM, Joseph J, Schulze PC, Forman DE. Expression of the Irisin precursor FNDC5 in skeletal muscle correlates with aerobic exercise performance in patients with heart failure. *Circulation-Heart Failure*. 2012;5:812-818.
- Karsten M, Neves LM, Neves VR, Beltrame T, Borghi-Silva A, Arena R, Agostoni P, Catai AM. Recent myocardial infarction patients present ventilatory limitation during aerobic exercise. *International Journal of Cardiology*. 2012;161:180-181.
- Arena R, Guazzi M, Myers J, Chase P, Benisimhon D, Cahalin LP, Peberdy MA, Ashley E, Forman DE. The prognostic value of capnography during rest and exercise in patients with heart failure. *Congestive Heart Failure*. 2012;18:302-307.
- Cahalin L and Arena R. Impact of exercise rehabilitation on adverse event risk and quality of life in patients with heart failure. *Physical Therapy*. 2012;92:1371-1375.
- Guazzi M and Arena R. New clinical cardiopulmonary exercise testing joint statement from the European Society of Cardiology and American Heart Association. *Cardiopulse: European Heart Journal*. 2012;33:2627-2628.

- Guazzi M (co-chair), Adams V, Conraads V, Halle M, Mezzani A, Vanhees L, Arena R (co-chair), Fletcher GF, Forman DE, Kitzman DW, Lavie CJ, Myers J. EACPR/AHA Joint Scientific Statement: Clinical recommendations for cardiopulmonary exercise testing data assessment in specific patient populations. *Circulation*. 2012;126:2261-2274.
- Borghi-Silva A, Beltrame, T, Silva Reis M, Sampaio LM, Catai AM, Arena R, Costa D. Relationship between oxygen consumption kinetics and BODE index in COPD patients. *International journal of COPD*. 2012;7:711-718.
- Forman DE, Guazzi M, Myers J, Chase P, Bensimhon D, Cahalin LP, Peberdy MA, Ashley E, West E, Daniels KM, Arena R. Ventilatory power: A novel index that enhances prognostic assessment of patients with heart failure. *Circulation-Heart Failure*. 2012;5:621-626.
- Daniels KM, Arena R, Lavie CJ, Forman DE. Cardiac rehabilitation for women across the lifespan. *The American Journal of Medicine*. 2012;125:937.e1-7.
- Campbell TA, Stevenson A, Arena R, Hauer T, Bacon SL, Rouleau CR, Cannon C, Stone JA. An investigation of the benefits of stress management within a cardiac rehabilitation population. *Journal of Cardiopulmonary Rehabilitation and Prevention*. 2012;32:296-304.
- Levy WC, Arena R, Wagoner L, Dardas T, Abraham WT. Prognostic impact of the addition of ventilatory efficiency to the Seattle Heart Failure model in patients with heart failure. *Journal of Cardiac Failure*. 2012;18:614-619.
- Martin BJ, Hauer T, Arena R, Austford L, Galbraith PD, Lewin AM, Knudtson M, Ghali WA, Stone JA, Aggarwal S. Cardiac rehabilitation attendance and outcomes in coronary artery disease patients. *Circulation*. 2012;126:677-687.
- Guazzi M, Vitelli Am Labate V, Arena R. Treatment for pulmonary hypertension in left heart disease. *Current treatment options in cardiovascular medicine*. 2012;14:319-327.
- Meta-analysis global group in chronic heart failure (MAGGIC). The survival of patients with heart failure with preserved or reduced left ventricular ejection fraction: an individual patient data meta-analysis. *European Heart Journal*. 2012;33:1750-1757.

- Cahalin L, Arena R, Guazzi M. Heart rate recovery after the 6-minute walk test is comparable to cardiopulmonary exercise testing in heart failure patients with reduced and preserved ejection fraction. *American Journal of Cardiology*. 2012;110:467-468.
- Arena R, Guazzi M, Myers J, Chase P, Bensimhon D, Cahalin LP, Peberdy MA, Ashley E, West E, Forman DE. The prognostic utility of cardiopulmonary exercise testing stands the test of time in patients with heart failure. *Journal of Cardiopulmonary Rehabilitation and Prevention*. 2012;32:198-202.
- Guazzi M, Vitelli A, Arena R. The effect of exercise training on plasma NT-pro-BNP levels and its correlation with improved ventilatory efficiency in patients with heart failure. *International Journal of Cardiology*. 2012;158:290-291.
- Lavie CJ, Swift DL, Johannsen NM, Arena R, Church TS. Physical-fitness-an often forgotten cardiovascular risk factor. *Journal of Glycomics and Lipidomics*. 2012;2:1000e104.
- Lavie CJ, De Schutter A, Dharmendrakumar AP, Church TS, Arena R, Rmoero-Corral A, McAuley P, Ventura HO, Milani RV. New insights into the “obesity paradox” in cardiovascular outcomes. *Journal of Glycomics and Lipidomics*. 2012;2:1000e106.
- Paolillo FR, Milan JC, de Godoy Bueno P, Rossi Paolillo A, Borghi-Silva A, Parizotto NA, Arena R, Kurachi K, Bagnato VS. Effects body mass index on strength and fatigability of quadriceps in post-menopausal women. *Menopause*. 2012;19:556-561.
- Ritt LE, Brandao Oliveira R, Myers J, Arena R, Peberdy MA, Bensimhon D, Chase P, Forman D, Guazzi M. Heart failure patients in the “intermediate range” of peak VO_2 : additive value of heart rate recovery and the VE/VCO_2 slope in predicting mortality. *Journal of Cardiopulmonary Rehabilitation and Prevention*. 2012;32:141-146.
- Shizukuda Y, Smith KP, Tripodi DJ, Arena R, Yau, YY, Bolan CD, Waclawiw MA, Leitman SF, Rosing DR. Changes in exercise capacity of cardiac asymptomatic hereditary hemochromatosis subjects over 5-year follow up. *American Journal of Physical Medicine and Rehabilitation*. 2012;91:418-424.

- Guazzi M, Boracchi P, Vicenzi M, Arena R, Reina G. Exercise oscillatory breathing and NT-pro-BNP levels in stable heart failure provide the strongest prediction of cardiac outcome when combining biomarkers with cardiopulmonary exercise testing. *Journal of Cardiac Failure*. 2012;18:313-320.
- Van Tassell BW, Arena R, Toldo S, Mezzaroma E, Azam T, Seropian IM, Shah K, Canada J, Zou W, Kim I, Rockman H, Voelkel N, Dinarello CA, Abbate A. Enhanced Interleukin-1 activity contributes to exercise intolerance in systolic heart failure. *PLoS One*. 2012;7:e33438.
- Arena R, Williams M, Forman DE, Cahalin LP, Coke L, Myers J, Hamm L, Kris-Etherton K, Humphrey R, Bittner V, Lavie CJ; on behalf of the AHA exercise, cardiac rehabilitation and prevention committee of the council on clinical cardiology, council on epidemiology and prevention, and council on nutrition, physical activity and metabolism. Increasing referral and participation rates to outpatient cardiac rehabilitation: the valuable role of healthcare professionals in the inpatient and home health settings: a scientific advisory from the American Heart Association. *Circulation*. 2012;125:1321-1329.
- Arena R, Myers J, Guazzi M. Exercise prescription. *Encyclopedia of Lifestyle Medicine and Health*. 2012;1:436-439.
- Menezes AR, Lavie CJ, Milani RV, Arena RA, Church TS. Cardiac rehabilitation in the elderly-Is it worth the efforts? *Journal of Geriatric Cardiology*. 2012;9:68-75.
- Guazzi M, Vicenzi M, Arena R, Guazzi MD. Response to letters regarding articles, "Pulmonary hypertension in heart failure with preserved ejection fraction: a target of phosphodiesterase-5 inhibition in a 1-year study". *Circulation*. 2012;125:e409.
- Lima Deus AP, Ricardo Oliveira C, Polaquini Simões R, Baldissera V, Alberto Silva C, RO Rossi B, Dutra Souza HC, Parizotto NA, Arena R, Borghi-Silva A. Metabolic and cardiac autonomic effects of high-intensity resistance training protocol in Wistar rats. *Journal of Strength and Conditioning Research*. 2012;26:618-624.
- Arena R, Guazzi M, Myers J, Chase P, Bensimhon D, Cahalin L, Peberdy MA, Ashley E, West E, Forman DE. The relationship between minute ventilation and carbon dioxide production in heart failure: comparing peak VE/VO₂ and the oxygen uptake efficiency slope. *International Journal of Cardiology*. 2012;154:384-385.

- Deus AP, Bassi D, Simões RP, Baldissera V, Marqueti RC, Selistre de Araújo HS, Arena R, Borghi-Silva A. MMP-2 expression in skeletal muscle after strength training. *International Journal of Sports Medicine*. 2012;33:137-141.
- Aggarwal S, Arena R, Cuda L, Hauer T, Martin BJ, Austford L, Stone JA. The independent effect of traditional cardiac rehabilitation and the LEARN program on weight loss: a comparative analysis. *Journal of Cardiopulmonary Rehabilitation and Prevention*. 2012;32:48-52.
- Guazzi M, Vicenzi M, Arena R. PDE5-Inhibition with Sildenafil reverses exercise oscillatory breathing in chronic heart failure: a long-term cardiopulmonary exercise testing placebo-controlled study. *European Journal of Heart Failure*. 2012;14:82-90.
- Arena R, Guazzi M, Myers J, Chase P, Bensimhon D, Cahalin L, Peberdy MA, Ashley E, West E, Forman DE. Exercise oscillatory ventilation reflects diminished quality of life and perceived functional capacity in patients with heart failure. *International Journal of Cardiology*. 2011;153:213-214.
- Castello V, Simões RP, Bassi D, Catai AM, Arena R, Borghi-Silva A. Impact of Aerobic Exercise Training on Heart Rate Variability and Functional Capacity in Obese Women after Gastric Bypass Surgery. *Obesity Surgery*. 2011;21:1739-1749.
- DeLuca P and Arena R. Cardiopulmonary exercise testing abnormalities: a universal indicator of declining left ventricular function during exertion. *International Journal of Cardiology*. 2011;153:e59-61.
- Lavie CJ, Milani RV, Arena R. Particular utility of cardiac rehabilitation in relation to age. *Current Cardiovascular Risk Reports*. 2011;5:432-439.
- Stone J and Arena R. Exercise stress testing in cardiac rehabilitation: fit as a fiddle or fiddling with fitness? *CACR: Current issues in cardiac rehabilitation and prevention*. 2011;19:8-11.
- Kohli HS, Canada J, Arena R, Tang DG, Peberdy MA, Harton S, Flattery M, Doolin K, Katlaps GJ, Hess ML, Kasirajan V, Shah KB. Flat blood pressure response to exercise during mechanical support with a total artificial heart: The feasibility of cardiac rehabilitation. *Journal of Heart and Lung Transplantation*. 2011;30:1207-1213.

- Arena R, Pinkstaff S, Peberdy MA, Kontos MC, Finucane S, Forman DE. Differences in equations used to estimate aerobic capacity in patients being assessed for suspected myocardial ischemia. *American Journal of Cardiology*. 2011;108:1198-1199.
- Parker K, Stone JA, Arena R, Lundberg D, Aggarwal S, Goodhart D, Traboulsi M. An early cardiac access clinic significantly improves cardiac rehabilitation participation and completion rates in low risk STEMI patients. *Canadian Journal of Cardiology*. 2011;27:619-627.
- Arena R and Lavie CJ. Excess body weight and coronary artery disease: Associated risks, the obesity paradox and implications for cardiac rehabilitation. *U.S. Cardiology*. 2011;8:88-93.
- Arena R, Myers J, Abella J, Pinkstaff S, Brubaker P, Kitzman DM, Peberdy MA, Bensimhon D, Chase P, Guazzi M. Cardiopulmonary exercise testing is equally prognostic in young, middle-aged and older individuals diagnosed with heart failure. *International Journal of Cardiology*. 2011;151:278-283.
- Arena R, Goldberg LR, Ingersoll CD, Shelledy D, Larsen DS. Research in the Allied Health Professions: Why Fund It? *Journal of Allied Health*. 2011;40:161-166.
- Stone JA, Arena R, Hauer T, Martin B, Austford LD, Aggarwal S. Long-term retention of aerobic fitness improvements following participation in cardiac rehabilitation. *International Journal of Cardiology*. 2011;150:355-356.
- Perim R, Signorelli G, Myers J, Arena R, Araujo C. Oxygen pulse slope does not depend on maximal heart rate in elite soccer players. *Clinics*. 2011;66:829-835.
- Guazzi M, Vicenzi M, Arena R, Guazzi MD. Pulmonary hypertension in heart failure with preserved ejection fraction: a target of phosphodiesterase 5-inhibition in a 1-year duration study. *Circulation*. 2011;124:164-174.
- Pinkstaff S, Peberdy MA, Kontos MC, Fabiato A, Finucane S, Arena R. Overestimation of aerobic capacity with the Bruce treadmill protocol in patients being assessed for suspected myocardial ischemia. *Journal of Cardiopulmonary Rehabilitation and Prevention*. 2011;31:254-260.

- Mendes RG, Simões RP, de Souza Melo Costa F, Falasco Pantoni CB, Di Thommazo L, Luzzi S, Amaral-Neto O, Catai AM, Arena R, Borghi-Silva A. Left-ventricular function and autonomic cardiac adaptations after short-term inpatient cardiac rehabilitation: A prospective clinical trial. *Journal of Rehabilitation Medicine*. 2011;43:720-727.
- Arena R, Myers J, Guazzi M. Cardiopulmonary exercise testing is a core assessment for patients with heart failure. *Congestive Heart Failure*. 2011;17:115-119.
- Arena R. Detecting abnormal pulmonary hemodynamics with cardiopulmonary exercise testing. *Medicine and Science and Sports in Exercise*. 2011;43:982.
- Arena R. Exercise testing and training in chronic lung disease and pulmonary arterial hypertension. *Progress in Cardiovascular Diseases*. 2011;53:454-463.
- Arena R, Guazzi M, Myers J, Grinnen D, Forman DE, Lavie CJ. The emerging role of cardiopulmonary exercise testing in the assessment of suspected or confirmed pulmonary arterial hypertension and secondary pulmonary hypertension. *Expert Reviews in Pulmonary Medicine*. 2011;5:281-293.
- Rossi Caruso FC, Arena R, Mendes RG, Reis MS, Papa V, Borghi-Silva A. Heart rate autonomic responses during deep breathing and walking in hospitalized patients with chronic heart failure. *Disability and Rehabilitation*. 2011;33:751-757.
- Chaudhry S, Arena R, Wasserman K, Hansen J, Lewis GD, Myers, Boden WE, Belardinelli R, LaBudde B, Menasco N. The utility of cardiopulmonary exercise testing in the assessment of suspected microvascular ischemia. *International Journal of Cardiology*. 2011; 148:e7-9.
- Pinkstaff S, Peberdy MA, Kontos MC, Fabiato A, Finucane S, Lavie C, Arena R. The Influence of referral source on characteristics of patients undergoing cardiac stress testing: emergency department vs. outpatient office. *Postgraduate Medicine*. 2011; 123:36-41.
- Arena R and Sietsema K. Cardiopulmonary exercise testing in the clinical evaluation of patients with heart and lung disease. *Circulation*. 2011;123:668-680.

- Guazzi M, Vicenzi M, Arena R, Guazzi MD. PDE-5-Inhibition with Sildenafil improves diastolic function, cardiac geometry and clinical status in patients with stable systolic heart failure. Results of a 1-year prospective, randomized, placebo controlled study. *Circulation-HF*. 2011;4:8-17.
- Arena R, Myers J, Lavie CJ, Forman DE, Guazzi M. Ordering a cardiopulmonary exercise test for your patient: key considerations for the referring physician. *Future Cardiology*. 2011;7:55-60.
- De Souza Botega F, Cipriano G, de Oliveira Lima F, Arena R, da Fonseca, Gerola LR. Cardiovascular behavior during rehabilitation after coronary artery bypass grafting. *Brazilian Journal of Cardiovascular Surgery*. 2010;25:527-533.
- Arena R, Myers J, Abella J, Pinkstaff S, Peberdy MA, Bensimhon D, Chase P, Guazzi M. Prognostic characteristics of heart rate recovery according to sex in patients with heart failure. *International Journal of Cardiology*. 2010;145:293-294.
- Pinkstaff S, Peberdy MA, Kontos MC, Finucane S, Arena R. The ability of percent age predicted maximal heart rate, rate pressure product and perceived exertion to quantify exertion level during exercise stress testing. *Mayo Clinic Proceedings*. 2010;85:1095-1100.
- Chase P, Arena R, Guazzi M, Myers J, Peberdy MA, Bensimhon D. Prognostic usefulness of the functional aerobic reserve in patients with heart failure. *American Heart Journal*. 2010;160:922-927.
- Guazzi M, Myers J, Vicenzi M, Bensimhon D, Chase P, Pinkstaff S, Arena R. Cardiopulmonary exercise testing characteristics in heart failure patients with and without concomitant chronic obstructive pulmonary disease. *American Heart Journal*. 2010;160:900-905.
- Pinkstaff S, Peberdy MA, Kontos MC, Fabiato A, Finucane S, Arena R. Usefulness of a decrease in the oxygen uptake efficiency slope to identify myocardial perfusion defects in men undergoing myocardial ischemic evaluation. *American Journal of Cardiology*. 2010;106:1534-1539.
- Forman D, Myers J, Lavie CJ, Guazzi M, Celli B, Arena R. Cardiopulmonary exercise testing: relevant but underused. *Postgraduate Medicine*. 2010;122:68-86.

- Abdul-Waheed M, Yousuf M, Kelly SJ, Arena R, Ying J, Naz T, Dunlap SH, Shizukuda Y. Does Left Atrial Volume Affect Exercise Capacity of Heart Transplant Recipients? *Journal of Cardiothoracic Surgery*. 2010;17:113.
- Guazzi M and Arena R. Pulmonary hypertension with left sided heart disease. *Nature Reviews Cardiology*. 2010;7:648-659.
- Chaudhry S, Arena R, Hansen JE, Lewis GD, Myers JN, Sperling L, LaBudde BD, Wasserman K. The utility of cardiopulmonary exercise testing to detect and track early stage ischemic heart disease. *Mayo Clinic Proceedings*. 2010;85:928-932.
- Silva VZ, Barros J, Azevedo M, Souza HA, Godoy JR, Arena R, Cipriano G. Bone mineral density and respiratory muscle strength in male individuals with mental retardation (with and without Down Syndrome). *Research in Developmental Disabilities*. 2010;31:1585-1589.
- Guazzi M, Boracchi, P, Arena R, Myers J, Vicenzi M, Peberdy MA, Bensimhon D, Chase P, Reina G. Development of a cardiopulmonary exercise prognostic score for optimising risk stratification in heart failure: The (P)e(R)i(O)dic (B)reathing during (E)xercise (PROBE) Study. *Journal of Cardiac Failure*. 2010;16:799-805.
- Guazzi M, Myers J, Peberdy MA, Bensimhon D, Chase P, Arena R. Ventilatory efficiency and dyspnea on exertion improvements are related to reduced pulmonary pressure in heart failure patients receiving Sildenafil. *International Journal of Cardiology*. 2010;144:410-412.
- Guazzi M, Myers J, Peberdy MA, Bensimhon D, Chase P, Arena R. Heart rate recovery predicts sudden cardiac death in heart failure. . *International Journal of Cardiology*. 2010;144:121-123.
- Arena R, Brubaker P, Moore B, Kitzman D. The oxygen uptake efficiency slope is reduced in older patients with heart failure and a normal ejection fraction. *International Journal of Cardiology*. 2010;144:101-102.
- Guazzi M, Myers J, Peberdy MA, Bensimhon D, Chase P, Pinkstaff S, Arena R. Echocardiography with tissue Doppler imaging and cardiopulmonary exercise testing in patients with heart failure: A correlative and prognostic analysis. *International Journal of Cardiology*. 2010;143:323-329.

- Arena R, Pinkstaff S, Wheeler E, Peberdy MA, Guazzi M, Myers J. Neuromuscular electrical stimulation and inspiratory muscle training as potential adjunctive rehabilitation options for patients with heart failure. *Journal of Cardiopulmonary Rehabilitation and Prevention*. 2010;30:209-223.
- Drinkard BE, Keyser RE, Paul PM, Arena R, Plehn JF, Yanovski JA, Di Prospero NA. Exercise capacity and idebenone intervention in children and adolescents with Friedreich's Ataxia. *Archives of Physical Medicine and Rehabilitation*. 2010;91:1044-1050.
- Cipriano G, Bernardelli GF, Arena R, Oliveira LV, Valdez F, Branco JN. Cardio-respiratory responses of the 6-minute walk test in patients with refractory heart failure during the preoperative period for heart transplant surgery. *Monaldi Arch Chest Dis*. 2010;74:64-69.
- Pinkstaff S, Peberdy MA, Fabiato A, Finucane S, Arena R. The clinical utility of cardiopulmonary exercise testing in suspected or confirmed myocardial ischemia. *The American Journal of Lifestyle Medicine*. 2010;4:327-348.
- Balady GJ, Arena R, Sietsema K, Myers J, Coke L, Fletcher GF, Forman D, Franklin B, Guazzi G, Gulati M, Keteyian SJ, Lavie CJ, Macko R, Mancini D, Milani RV. American Heart Association Scientific Statement: A clinician's guide to cardiopulmonary exercise testing in adults. *Circulation*. 2010;122:191-225.
- Cipriano GF, Tayar Peres PA, Cipriano G, Arena R, Carlos Carvalho A. Safety and cardiovascular behavior during assessment of pulmonary function in patients with Marfan syndrome. *Clinical Genetics*. 2010;78:57-65.
- Arena R, Myers J, Abella J, Pinkstaff S, Brubaker P, Kitzman D, Peberdy MA, Bensimhon D, Chase P, Forman D, Guazzi M. Defining the optimal prognostic window for cardiopulmonary exercise testing in patients with heart failure. *Circulation-Heart Failure*. 2010;3:405-411.
- Arena R, Myers J, Guazzi M. The future of aerobic exercise testing in clinical practice: Is it the ultimate vital sign? *Future Cardiology*. 2010;6:325-342.

- Reis MS, Arena R, de Deus AP, Simões RP, Aniceto I, de Toledo CF, Martins LE, Catai AM, Borghi-Silva A. Deep breathing heart rate variability is associated with respiratory muscle weakness in patients with chronic obstructive pulmonary disease. *Clinics*. 2010;65:369-375.
- Abbate A, Kontos MC, Grizzard JD, Biondi-Zoccai G, Van Tassell BW, Robati R, Roach LM, Arena RA, Roberts CF, Varma A, Gelwix CC, Salloum FN, Hastillo A, Dinarello CA, Vetrovec GW. Interleukin-1 blockade with Anakinra to prevent adverse cardiac remodeling following acute myocardial infarction: The Virginia Commonwealth University Anakinra Remodeling Trial (VCU-ART) Pilot Study. *American Journal of Cardiology*. 2010;105:1371-1377.
- Guazzi M, Myers J, Peberdy MA, Bensimhon D, Chase P, Arena R. Cardiopulmonary exercise testing variables reflect the degree of diastolic dysfunction in patients with heart failure-normal ejection fraction. *Journal of Cardiopulmonary Rehabilitation and Prevention*. 2010;30:165-172.
- Mendes RG, Simões RP, Costa F, Pantoni C, Di Thommazo L, Luzzi S, Catai AM, Arena R, Borghi-Silva A. Short-term supervised inpatient physiotherapy exercise protocol improves cardiac autonomic function following coronary artery bypass graft surgery: A Randomized Controlled Trial. *Disability and Rehabilitation*. 2010;32:1320-7.
- Simões RP, Mendes RG, Castello V, Machado HG, de Almeida LB, Baldissera V, Catai AM, Arena R, Borghi-Silva A. Heart rate variability and blood lactate threshold interaction during progressive resistance exercise in healthy older men. *Journal of Strength and Conditioning Research*. 2010;24:1313-1320.
- Arena R, Arrowood J, Fei D, Shelar S, Helm S, Kraft KA. The influence of sex on the relationship between heart rate recovery and other cardiovascular risk factors in apparently healthy subjects. *Scandinavian Journal of Medicine and Science in Sports*. 2010;20:291-297.
- Arena R, Myers J, Abella J, Pinkstaff S, Brubaker P, Kitzman D, Peberdy MA, Bensimhon D, Chase P, Guazzi M. Prognostic significance of the oxygen uptake efficiency slope: percent-predicted versus actual value. *American Journal of Cardiology*. 2010;105:757-758.

- Guazzi M, Myers J, Peberdy M, Bensimhon D, Chase P, Pinkstaff S, Arena R. Heart Rate Recovery and Tissue Doppler Echocardiography in Heart Failure. *Clinical Cardiology*. 2010;33:e61-e64.
- Arena R, Myers J, Abella J, Peberdy MA, Bensimhon D, Chase P, Guazzi M. The Prognostic Value of the Heart Rate Response during Exercise and Recovery in Patients with Heart Failure: Influence of Beta-Blockade. *International Journal of Cardiology*. 2010;138:166-173.
- Arena R, Lavie C, Milani R, Myers J, Guazzi M. Cardiopulmonary exercise testing in patients with pulmonary hypertension: An evidence-based review. *Journal of Heart and Lung Transplantation*. 2010;29:159-173.
- Arena R, Myers J, Abella J, Peberdy MA, Bensimhon D, Chase P, Guazzi M. The Prognostic Value of the Heart Rate Response during Exercise and Recovery in Patients with Heart Failure: Influence of Beta-Blockade. *International Journal of Cardiology*. 2010;138:166-173.
- Arena R and Lavie CJ. The obesity paradox and outcome in heart failure: Is excess body weight truly protective? *Future Cardiology*. 2010;6:1-6.
- Guazzi M, Reina G, Gripari P, Tumminello G, Vincenzi M, Arena R. Prognostic value of flow-mediated dilatation following myocardial Infarction. *International Journal of Cardiology*. 2009;132:45-50.
- Guazzi M, Myers J, Peberdy MA, Bensimhon D, Chase P, Arena R. Maximal dyspnea on exertion during cardiopulmonary exercise testing is related to poor prognosis and echocardiography with tissue Doppler Imaging in heart failure. *Congestive Heart Failure*. 2009;15:277-283.
- Guazzi M, Dickstein K, Vicenzi M, Lanfredini M, Antelmi M, Arena R. 6 Minute Walk Test and Cardiopulmonary Exercise Testing in Chronic Heart Failure: a Comparative Analysis on Clinical and Prognostic Insights. *Circulation-Heart Failure*. 2009;2:549-555.
- Myers J, Arena R, Oliveira R, Bensimhon D, Hsu L, Chase P, Guazzi M, Brubaker P, Moore B, Kitzman D, Peberdy MA. The lowest VE/VCO₂ ratio during exercise as a predictor of outcomes in patients with heart failure. *Journal of Cardiac Failure*. 2009; 15:756-762.

- Guazzi M and Arena R. The impact of pharmacotherapy on the cardiopulmonary exercise test response in patients with heart failure: A mini review. *Current Vascular Pharmacology*. 2009; 7:557-569.
- Arena R, Myers J, Abella J, Pinkstaff S, Brubaker P, Moore B, Kitzman D, Peberdy MA, Bensimhon D, Chase P, Forman D, West E, Guazzi M. Influence of etiology of heart failure on the obesity paradox in patients with heart failure. *American Journal of Cardiology*. 2009; 104:1116-1121.
- Arena R and Lavie CJ. Cardiopulmonary stress testing in pulmonary artery hypertension. *Mayo Clinic Proceedings*. 2009;84:939-942.
- Borghi-Silva A, Arena R, Castello V, Simoes RP, Martins LE, Catai AM, Costa D. Aerobic exercise training improves autonomic nervous control in patients with COPD. *Respiratory Medicine*. 2009;103:1503-1510.
- Wheeler E and Arena R. The impact of feeder school selectivity on predicting academic success in an allied health professional program. *Journal of Allied Health*. 2009;38:e79-e83.
- Arena R, Myers J, Guazzi M. Optimizing the clinical application of cardiopulmonary exercise testing in patients with heart failure. *International Journal of Cardiology*. 2009;137:e18-22.
- Oliveira RB, Myers J, Araujo CG, Arena R, Mandic S, Bensimhon D, Chase P, Guazzi M, Brubaker P, Moore B, Kitzman D, Peberdy MA. Does peak oxygen pulse complement peak VO₂ in risk stratifying patients with heart failure? *American Journal of Cardiology*. 2009;104:554-558.
- Guazzi M, Arena R, Pinkstaff S, Guazzi MD. Six months of Sildenafil therapy improves heart rate recovery in patients with heart failure. *International Journal of Cardiology*. 2009;136:341-343.
- Arena R, MacCarter D, Olson TP, Lalande S, Ceridon ML, Olson LJ, Johnson B. Ventilatory expired gas at constant-rate low-intensity exercise predicts adverse events and is related to neurohormonal markers in patients with heart failure. *Journal of Cardiac Failure*. 2009;15:482-488.

- Arena R, Arrowood J, Fei D, Helm S, Kraft KA. Maximal aerobic capacity and the oxygen uptake efficiency slope as predictors of large artery stiffness in apparently healthy subjects. *Journal of Cardiopulmonary Rehabilitation and Prevention*. 2009;29:248-254.
- Guazzi M, Arena R, Vicenzi M, Guazzi MD. Regulation of alveolar gas conductance by NO in man, as based on studies with NO donors and inhibitors of NO production. *Acta Physiologica*. 2009;196:267-277.
- Myers J, Arena R, Franklin B, Pina I, Kraus W, McInnis K, Balady G. Recommendations for clinical exercise laboratories: A Scientific Statement for Healthcare Professionals from the American Heart Association Committee of the Clinical Cardiology Council on Exercise, Cardiac Rehabilitation, and Prevention, and the Council on Nutrition, Physical Activity, and Metabolism. *Circulation*. 2009;119:3144-3161.
- Arena R, Myers J, Abella J, Pinkstaff S, Brubaker P, Moore B, Kitzman D, Peberdy MA, Bensimhon D, Chase P, Forman D, West E, Guazzi M. Determining the preferred percent-predicted equation for peak oxygen consumption in patients with heart failure. *Circulation-Heart Failure*. 2009;2:113-120.
- Chaudhry S, Arena R, Wasserman K, Hansen J, Lewis GD, Myers J, Chronos N, Boden WE. Exercise-induced Myocardial Ischemia Detected by Cardiopulmonary Exercise Testing. *American Journal of Cardiology*. 2009;103:615-619.
- Guazzi M and Arena R. Endothelial dysfunction and pathophysiological correlates in atrial fibrillation. *Heart*. 2009;95:102-106.
- Burnet EB, Arena R, Pidcoe P. Relationship between pelvic motion, torque, and metabolic energy in running. *The Engineering of Sport 7*. 2008;2:261-265.
- Burnet EB, Arena R, Pidcoe P. Relationship between gluteus medius muscle activity, pelvic motion, and metabolic energy in running. *The Engineering of Sport 7*. 2008;2:267-271.
- Arena R, Myers J, Abella J, Peberdy M, Bensimhon D, Chase P, Guazzi M. The prognostic characteristics of cardiopulmonary exercise testing in Caucasian and African-American patients with heart failure. *Congestive Heart Failure*. 2008;14:310-315.

- Guazzi M, Myers J, Peberdy M, Bensimhon D, Chase P, Arena R. Exercise oscillatory breathing in diastolic heart failure: prevalence and prognostic insights. *European Heart Journal*. 2008;29:2751-2759.
- Porto Haefner M, Menz Ferreira G, Barreto S, Arena R, Dall'Ago P. Incentive spirometry with expiratory positive airway pressure reduces pulmonary complications, improves pulmonary function and six-minute walk distance in patients undergoing coronary artery bypass graft surgery. *American Heart Journal*. 2008;156: 900.e1-900.e8.
- Arena R, Myers J, Guazzi M. The clinical significance of aerobic exercise testing and prescription: from apparently healthy to confirmed cardiovascular disease. *American Journal of Lifestyle Medicine*. 2008;2:519-536.
- Myers J, Arena R, Dewey F, Bensimhon D, Abella J, Hsu L, Chase P, Guazzi M, Peberdy MA. A cardiopulmonary exercise testing score for predicting outcomes in patients with heart failure. *American Heart Journal*. 2008;156:1177-1183.
- Arena R, Myers J, Abella J, Pinkstaff S, Brubaker P, Moore B, Kitzman D, Peberdy MA, Bensimhon D, Chase P, Guazzi M. The partial pressure of resting end-tidal carbon dioxide predicts major cardiac events in patients with systolic heart failure. *American Heart Journal*. 2008;156:982-8.
- Chase P, Arena R, Myers J, Abella J, Peberdy M, Guazzi M, Kenjale A, Bensimhon D. Prognostic usefulness of dyspnea versus fatigue as reason for exercise test termination in patients with heart failure. *American Journal of Cardiology*. 2008;102:879-82.
- Guazzi M, Myers J, Abella J, Peberdy M, Bensimhon D, Chase P, Arena R. The added prognostic value of ventilatory efficiency to the Weber classification system in patients with heart failure. *International Journal of Cardiology*. 2008;129:86-92.
- Arena R, Myers J, Peberdy MA, Bensimhon D, Chase P, Guazzi M. The ventilatory classification system effectively predicts hospitalization in patients with heart failure. *Journal of Cardiopulmonary Rehabilitation and Prevention*. 2008;28:195-198.

- Arena R, Myers J, Guazzi M. The clinical importance of cardiopulmonary exercise testing and aerobic training in patients with heart failure. *Brazilian Journal of Physical Therapy*. 2008;12:75-87.
- Arena R, Owens D, Arevalo J, Smith K, Mohiddon S, McAreavey D, Ullisney K, Tripodi D, Fananapazir L, Plehn J. Ventilatory efficiency and resting hemodynamics in hypertrophic cardiomyopathy. *Medicine and Science in Sports and Exercise*. 2008;40:799-805.
- Arena R, Myers J, Guazzi G. The Clinical and Research Applications of Aerobic Capacity and Ventilatory Efficiency in Heart Failure: An Evidence-Based Review. *Heart Failure Reviews*. 2008;13:245-269.
- Arena R, Myers J, Abella J, Peberdy M, Bensimhon D, Chase P, Guazzi M. The influence of body mass index on the oxygen uptake efficiency slope in patients with heart failure. *International Journal of Cardiology*. 2008;125:270-272.
- Arena R, Myers J, Abella J, Peberdy M, Pinkstaff S, Bensimhon D, Chase P, Guazzi M. The Prognostic Value of Timing and Duration Characteristics of Exercise Oscillatory Ventilation in Patients with Heart Failure. *Journal of Heart and Lung Transplantation*. 2008;27:341-347.
- Guazzi M, Arena R, Casali M, Guazzi MD. Evolving changes in lung interstitial fluid content after acute myocardial infarction: pathophysiologic correlates. *American Journal of Physiology; Heart and Circulatory Physiology*. 2008;294:H1357-H1364.
- Chase P, Arena R, Myers J, Abella J, Peberdy MA, Guazzi M, Bensimhon D. Relation of the prognostic value of ventilatory efficiency to body mass index in patients with heart failure. *American Journal of Cardiology*. 2008;101:348-352.
- Arena R, Arrowood J, Fei D, Helm S, Kraft K. A diastolic blood pressure response during exercise is associated with dyslipidemia in apparently healthy subjects. *Journal of Cardiopulmonary Rehabilitation and Prevention*. 2008;28:38-42.
- Guazzi M, Samaja M, Arena R, Vicenzi M, Guazzi MD. Long-term use of Sildenafil in the therapeutic management of heart failure. *Journal of the American College of Cardiology*. 2007;27:2136-2144.

- Pagel-Langenickel I, Schwartz D, Arena R, Minerbi D, Johnson D, Waclawiw M, Cannon R, Tripodi D, Balaban R, Sack M. A discordance in rosiglitazone mediated insulin sensitization and skeletal muscle mitochondrial content/activity in type 2 diabetes mellitus. *American Journal of Physiology; Heart and Circulatory Physiology*. 2007;293:2659-2666.
- Gambetta M, Dunn P, Nelson D, Herron B, Arena R. Impact of the implementation of telemanagement on a disease management program in an elderly heart failure cohort. *Progress in Cardiovascular Nursing*. 2007;22:196-200.
- Kraft K, Arena R, Arrowood J, Fei D. High aerobic capacity does not attenuate aortic stiffness in hypertensive subjects. *American Heart Journal*. 2007;154:976-982.
- Arena R, Fei D, Arrowood J, Kraft K. Influence on aerobic fitness on aortic stiffness in apparently healthy Caucasian and African-American subjects. *International Journal of Cardiology*. 2007;122:202-206.
- Arena R, Myers J, Hsu L, Peberdy M, Pinkstaff S, Bensimhon D, Chase P, Vicenzi M, Guazzi M. The minute ventilation/carbon dioxide production slope is prognostically superior to the oxygen uptake efficiency slope. *Journal of Cardiac Failure*. 2007;13:462-469.
- Arena R, Guazzi M, Myers J. Ventilatory abnormalities during exercise in heart failure: A mini review. *Current Respiratory Medicine Reviews*. 2007;3:179-187.
- Arena R, Myers J, Williams M, Gulati M, Kligfield P, Balady G, Collins, E, Fletcher G. Assessment of functional capacity in clinical and research settings: An advisory from the Committee on Exercise, Rehabilitation, and Prevention, Council on Clinical Cardiology, American Heart Association. *Circulation*. 2007;116:329-343.
- Guazzi M, Raimondo R, Arena R, Proserpio C, Braga S, Pedretti R. Exercise oscillatory ventilation predicts sudden cardiac death in heart failure patients. *Journal of the American College of Cardiology*. 2007;50:299-308.

- Arena R, Shizukuda Y, Bolan C, Tripodi D, Yau Y, Smith K, Waclawiw MA, Leitman S, Rosing D. Heart rate recovery is lower following supine exercise in asymptomatic hereditary hemochromatosis subjects compared to healthy controls. *Journal of Cardiopulmonary Rehabilitation and Prevention*. 2007;27:157-160.
- Arena R, Myers J, Abella J, Peberdy M, Bensimhon D, Chase P, Guazzi M. Development of a Ventilatory Classification System in Patients with Heart Failure. *Circulation*. 2007;115:2410-2417.
- Guazzi M, Arena R, Reina G, Ascione N, Guazzi MD. Exercise oscillatory breathing and increased ventilation to CO₂ production slope in heart failure: an unfavorable combination with high prognostic value. *American Heart Journal*. 2007;153:859-867.
- Arena R, Guazzi M, Myers J. Prognostic value of end-tidal carbon dioxide during exercise testing in heart failure. *International Journal of Cardiology*. 2007;117:103-108.
- Arena R, Guazzi M, Myers J, Abella J. The prognostic value of ventilatory efficiency with beta-blocker therapy in heart failure. *Medicine and Science in Sports and Exercise*. 2007;39:213-219.
- Shizukuda Y, Bolan C, Tripodi D, Yau Y, Smith K, Arena R, Waclawiw M, Leitman S, Rosing D. Exercise capacity of cardiac asymptomatic hereditary hemochromatosis subjects. *Medicine and Science in Sports and Exercise*. 2007;39:3-7.
- Guazzi M, Arena R, Myers J. Comparison of the prognostic value of cardiopulmonary exercise testing between male and female patients with heart failure. *International Journal of Cardiology*. 2006;113:395-400.
- Shizukuda Y, Tripodi D, Smith K, Arena R, Waclawiw M, Rosing D. Can We Use Heart Rate Recovery Information from Supine Ergometry Exercise? *American Journal of Cardiology*. 2006;98:1297-1298.
- Arena R, Arrowood J, Fei D, Helm S, Kraft K. The Relationship between C-Reactive Protein and other Cardiovascular Risk Factors in Men and Women. *Journal of Cardiopulmonary Rehabilitation*. 2006;26:323-329.

- Kraft K, Fei D, Shao X, Chang Y, Arena R. Improved aortic stiffness assessment in the elderly using a one-dimensional fluid displacement MR method. *J Magn Reson Imaging*. 2006;24:603-610.
- Arena R, Peberdy M. Short-term reliability of oxygen uptake on-kinetics in apparently healthy subjects. *Journal of Cardiopulmonary Rehabilitation*. *Journal of Cardiopulmonary Rehabilitation*. 2006;26:219-223.
- Arena R, Peberdy M, Myers J, Guazzi M, Tevald M. Prognostic value of resting end-tidal carbon dioxide in patients with heart failure. *International Journal of Cardiology*. 2006;109:351-358.
- Arena R, Guazzi M, Myers J, Peberdy M. Prognostic Value of Heart Rate Recovery in Patients with Heart Failure. *American Heart Journal*. 2006;151:851.e7-851.e13.
- Arena R, Myers J, Aslam S, Varughese E, Peberdy M. Impact of time past exercise testing on prognostic variables in heart failure. *International Journal of Cardiology*. 2006;106:88-94.
- Arena R, Guazzi M, Myers J, Peberdy M. Prognostic Characteristics of Cardiopulmonary Exercise Testing in Heart Failure: Comparing American and European Models. *European Journal of Cardiovascular Prevention and Rehabilitation*. 2005;12:562-567.
- Arena R, Myers J, Abella J, Peberdy M. Influence of Heart Failure Etiology on the Prognostic Value of Peak VO₂ and VE/VCO₂ Slope. *Chest*. 2005;128:2812-2817.
- Guazzi M, Myers J, Arena R. Cardiopulmonary exercise testing in the clinical practice and prognostic assessment of heart failure patients with preserved systolic function. *Journal of the American College of Cardiology*. 2005;46:1883-1890.
- Arena R, Arrowood J, Fei D, Shao X, Kraft K. Effect of aerobic exercise training on aortic wave velocity in obese subjects: A report of five cases. *Case Reports and Clinical Practice Review*. 2005;6:211-215.
- Arena R, Peberdy M. Reliability of resting end-tidal carbon dioxide in chronic heart failure. *Journal of Cardiopulmonary Rehabilitation*. 2005;25:177-180.

- Arena R, Tevald M, Peberdy M. Influence of Etiology on Ventilatory Expired Gas and Prognosis in Heart Failure. *International Journal of Cardiology*. 2005;99:217-223.
- Fei D, Arena R, Arrowood J, Kraft K. Relationship between Arterial Stiffness and Heart Rate Recovery in Apparently Healthy Adults. *Vascular Health and Risk Management*. 2005;1:85-89.
- Arena R, Peberdy M, Tevald M, Turner T. Prognostic value of phase one of oxygen consumption on-kinetics in the heart failure population: a pilot Report. *Journal of Cardiopulmonary Rehabilitation*. 2004;24:401-404.
- Arena R, Myers J, Aslam S, Varughese E, Peberdy M. Influence of subject effort on the prognostic value of peak VO_2 and VE/VCO_2 slope in patients with heart failure. *Journal of Cardiopulmonary Rehabilitation*. 2004;24:317-320.
- Arena R, Myers J, Aslam S, Varughese E, Peberdy M. Prognostic comparison of the VE/VCO_2 ratio and slope in patients with heart failure. *HeartDrug*. 2004;4:133-139.
- Arena R, Myers J, Aslam S, Varughese E, Peberdy M. Peak VO_2 and VE/VCO_2 slope in patients with heart failure: A prognostic comparison. *American Heart Journal*. 2004;147:354-360.
- Arena R, Humphrey R, Peberdy M. Prognostic ability of VE/VCO_2 slope calculations using different exercise test time intervals in subjects with heart failure. *European Journal of Cardiovascular Prevention and Rehabilitation*. 2003;10:463-468.
- Arena R, Greenspan N, Tevald M, Haas JE. Safety and efficacy of pulmonary rehabilitation in elderly females with chronic obstructive pulmonary disease: a pilot report. *Journal of Cardiopulmonary Physical Therapy*. 2003;14:3-6.
- Arena R, Myers J, Aslam S, Varughese E, Peberdy M. Technical considerations related to the VE/VCO_2 slope in patients with heart failure. *Chest*. 2003;124:720-727.
- Arena R, Humphrey R, Peberdy M, Madigan M. Predicting peak oxygen consumption during a conservative ramping protocol: implications for the heart failure population. *Journal of Cardiopulmonary Rehabilitation*. 2003;23:183-189.

- Arena R, Humphrey R, Peberdy M, Madigan M. Comparison of oxygen uptake on-kinetic calculations during submaximal exercise. *Journal of Exercise Physiology*_{online}. 2003;6:1-7.
- Arena R, Humphrey R, Peberdy M, Madigan M. Comparison of oxygen consumption on-kinetic calculations in heart failure. *Medicine and Science in Sports and Exercise*. 2002;34:1563-1569.
- Arena R, Humphrey R, Peberdy M. Relationship between the Minnesota Living With Heart Failure Questionnaire and key ventilatory expired gas measures during exercise testing in patients with heart failure. *Journal of Cardiopulmonary Rehabilitation*. 2002;22:272-277.
- Arena R, Humphrey R, Peberdy M. Using the Duke Activity Status Index in heart failure. *Journal of Cardiopulmonary Rehabilitation*. 2002;22:23-25.
- Arena R, Humphrey R. Comparison of ventilatory expired gas parameters used to predict hospitalization in patients with heart failure. *American Heart Journal*. 2002;143:427-432.
- Arena R, Humphrey R. Measurement of oxygen consumption on-kinetics during exercise: implications for the patient with chronic heart failure. *Journal of Cardiac Failure*. 2001;7:302-311.
- Arena R, Humphrey R. Relationship between ventilatory expired gas and cardiac parameters during symptom-limited exercise testing in patients with chronic heart failure. *Journal of Cardiopulmonary Rehabilitation*. 2001;21:130-134.
- Arena R, Humphrey R. Characteristic expired gas values in heart failure patients during exercise testing. *Clinical Exercise Physiology*. 2001;3:17-26.
- Arena R, Humphrey R, Peberdy M. Safety and efficacy of exercise training in a heart failure patient awaiting heart transplantation while on positive intravenous inotropic support. *Journal of Cardiopulmonary Rehabilitation*. 2000;20:259-261.
- Arena R, Humphrey R. Oxygen uptake kinetics and functional status issues in congestive heart failure: a pilot report. *Cardiopulmonary Physical Therapy Journal*. 2000;11:54-58.

- Humphrey R, Arena R. Update: Surgical advances in heart failure and implications for cardiopulmonary rehabilitation. *Physical Therapy*. 2000;80:61-69.
- Arena R, Humphrey R, McCall R. Altered exercise pulmonary function following left ventricular device implantation. *Journal of Cardiopulmonary Rehabilitation*. 1999;19:344-346.

Broad Involvement in Clinical Trials

Role: MAGGIC Investigator

- Berry C, Poppe KK, Gamble GD, Earle NJ, Ezekowitz JA, Squire IB, McMurray J, McAlister FA, Komajda M, Swedberg K, Maggioni AP, Ahmed A, Whalley GA, Doughty RN, Tarantini L, on behalf of the Meta-Analysis Global Group in Chronic Heart Failure (MAGGIC). Prognostic significance of anemia in patients with heart failure with preserved and reduced ejection fraction: results from the MAGGIC individual patient data meta-analysis. *QJM*. (epub ahead of print).
- Simpson J, Castagno D, Doughty RN, Poppe KK, Earle N, Squire I, Richards M, Anderson B, Ezekowitz JA, Komajda M, Petrie MC, McAlister FA, Gamble GD, Whalley GA, McMurray, JV, on behalf of the Meta-Analysis Global Group in Chronic Heart Failure. Is heart rate a risk marker in patients with chronic heart failure and concomitant atrial fibrillation? Results from the MAGGIC meta-analysis. *European Journal of Heart Failure*. 2015;17:1182-1191.
- Jackson CE, Castagno D, Maggioni AP, Køber L, Squire IB, Swedberg K, Andersson B, Richards AM, Bayes-Genis A, Tribouilloy C, Dobson J, Ariti CA, Poppe KK, Earle N, Whalley G, Pocock SJ, Doughty RN, McMurray JJ; on behalf of the Meta-Analysis Global Group in Chronic Heart Failure (MAGGIC). Differing prognostic value of pulse pressure in patients with heart failure with reduced or preserved ejection fraction: results from the MAGGIC individual patient meta-analysis. *European Heart Journal*. 2015;36:1106-1114.
- Wong CM, Hawkins NM, Petrie MC, Jhund PS, Gardner RS, Ariti CA, Poppe KK, Earle N, Whalley GA, Squire IB, Doughty RN, McMurray JJ, on behalf of the MAGGIC Investigators. Heart failure in younger patients: the Meta-analysis Global Group in Chronic Heart Failure (MAGGIC). *European Heart Journal*. 2014;35:2714-2721.

- Padwal R, McAlister FA, Jiv McMurray J, Cowie MR, Rich M, Pocock S, Swedberg K, Maggioni A, Gamble G, Ariti C, Earle N, Whalley G, Poppe KK, Doughty RN, Bayes-Genis A, For the Meta-Analysis Global Group in Chronic Heart Failure (MAGGIC) Investigators. The obesity paradox in heart failure patients with preserved versus reduced ejection fraction: a meta-analysis of individual patient data. *International Journal of Obesity*. 2014;38:1110-1114.
- Poppe KK, Squire IB, Whalley GA, Kober L, McAlister FA, McMurray JV, Pocock S, Earle NJ, Berry C, Doughty RN, on behalf of the MAGGIC Investigators. Known and missing left ventricular ejection fraction and survival in patients with heart failure: a MAGGIC meta-analysis report. *European Journal of Heart Failure*. 2013;15:1220-1227.
- Pocock, SJ, Ariti, CA, McMurray J, Maggioni A, Kober L, Squire IB, Swedberg K, Dobson J, Poppe KK, Whalley GA, Doughty RN, on behalf of the MAGGIC Investigators. Predicting survival in heart failure: a risk score based on 39, 372 patients from 30 studies. *European Heart Journal*. 2013;34:1404-1413.
- Rusinaru D, Tribouilloy C, Berry C, Richards, MA, Earle N, Poppe KK, Guazzi M, Macin SM, Komajda M, Doughty RN, on behalf of the MAGGIC Investigators. Relationship of serum sodium concentration to mortality in a wide spectrum of heart failure patients with preserved and with reduced ejection fraction: an individual patient data meta-analysis. *European Journal of Heart Failure*. 2012;14:1139-1146.
- McAlister FA, Ezekowitz JA, Tatantini L, Squire I, Komajda M, Bayes-Genis A, Gotsman I, Whalley G, Earle N, Poppe KK, Doughty RN; For the meta-analysis global group in chronic heart failure (MAGGIC) investigators. Renal dysfunction in patients with heart failure with preserved versus reduced ejection fraction: impact of the new chronic kidney disease-epidemiology collaboration group formula. *Circulation-Heart Failure*. 2012;5:309-314.
- Martinez-Selles M, Doughty RN, Poppe K, Whalley GA, Earle N, Tribouilloy C, McMurray J, Swedberd K, Kober L, Colin B, Squire I, on behalf of the Meta-Analysis Global Group in Chronic Heart Failure (MAGGIC). Gender and survival in patients with heart failure: interactions with diabetes and aetiology. Results from the MAGGIC individual patient meta-analysis. *European Journal of Heart Failure*. 2012;14:473-479.

Abstracts (269 total):

- Chase PJ, Arena R, Forman DE, Guazzi M, Kaminsky LA, Myers J, Perberdy MA, Popovic D, Thomas K, Bensimhon DR. Prognostic value of the systolic blood pressure response during cardiopulmonary exercise testing in patients with heart failure. *Journal of Cardiac Failure*. 2017;23:S40.
- Carvalho L, Mendes R, Di Thommazo L, Basso-Vanelli R, Ricci P, Bonjorno Jr. JC, Luporini RL, Oliveira CR, Trimer R, Phillips S, Arena R, Borghi-Silva A. Maximal fat oxidation: Optimal exercise intensity for weight management and its dissociation from anaerobic threshold. *Medicine and Science in Sports and Exercise*. 2017;49:158-159.
- Kella G, Bello N, Althouse A, Allsup K, Lemieux N, Kostra J, Byard T, Smith R, Mancino J, Shultz J, Tarolli K, Hickey G, Arena R, Forman DE. Facility- and home-based cardiac rehabilitation achieve similar magnitude of functional improvements. *Medicine and Science in Sports and Exercise*. 2017;49:405-406.
- Allsup K, Smith R, Althouse A, Bello N, Tarolli K, Byard T, Kella G, Kostra J, Lemieux N, Hickey G, Mancino J, Shultz J, Arena R, Forman DE. Stratification of patients in cardiac rehabilitation as novel programs develop. *Medicine and Science in Sports and Exercise*. 2017;49:410.
- Christle JW, Moneghetti KJ, Lima R, Arena R, Kaminsky L, Myers J. The use of prediction equations in hypertrophic cardiomyopathy. *Medicine and Science in Sports and Exercise*. 2017;49:598.
- Mehta R, Lahgi F, Dunnner LA, Burdinie C, Platou DS, Arena R, Weaver T, Tobin M, Jubran A. Contribution of muscle wasting to muscle weakness in patients requiring prolonged mechanical ventilation. *Am J Respir Crit Care Med*. 2017;195:A1769.
- Buckley LF, Carbone S, Canada J, Trankle C, Christopher S, Regan J, Viscusi MM, Dixon DL, Abouzaki N, Kadariya D, Arena R, Abbate A, Van Tassell B. Arterial elastance drives ventilatory inefficiency in systolic heart failure. *Journal of the American College of Cardiology*. 2017;69:746.

- Trankle C, Canada J, Buckley L, Carbone S, Dixon DL, Arena R, Van Tassell B, Abbate A. Early diastolic annular velocity at peak exercise determines peak aerobic exercise capacity in heart failure with preserved ejection fraction. *Journal of the American College of Cardiology*. 2017;69:889.
- Kachur S, De Schutter A, Lavie C, Morledge M, Arena R, Milani R. Fitness and the obesity paradox in cardiac rehabilitation: how does weight loss factor in? *Journal of the American College of Cardiology*. 2017;69:1667.
- Kachur S, McNeil A, De Schutter A, Lavie C, Arena R, Milani R. Search for the super-responder: progressive increases in fitness and an association with lower mortality. *Journal of the American College of Cardiology*. 2017;69:1732.
- Calitz C, Pham K, Santana A, Sanchez E, Arena R, Fonarow GC. Improving heart health in the workplace: results from the first year of the American Heart Association's Workplace Health Achievement Index. *Circulation*. 2017;135:AP005.
- Martin B, Devrome A, Hauer T, Austford L, Arena R, Stone JA, Aggarwal S. Cardiac rehabilitation in subjects with peripheral arterial disease: A higher risk patient population who benefit from attendance. *Circulation*. 2016;134:A18122.
- Martin B, Hauer T, Austford LD, Arena R, Stone JA, Aggarwal S. Cardiac rehabilitation in subjects with peripheral arterial disease: a higher risk patient population who benefit from attendance. *Canadian Journal of Cardiology*. 2016;32:S110.
- Caruso F, Archiza B, Olenski D, Trimer R, Mattiello S, Libardi C, Amaral A, Bonhorno Jr J, de Oliveria CR, Phillips SA, Arena R, Neder JA, Borghi-Silva A. The effects of inspiratory resistive loading on respiratory and locomotors muscle oxygenation during high intensity exercise in female soccer players. *European Respiratory Journal*. 2016;48:PA697.
- Dutra D, Arakelian V, Mendes R, Caruso F, Bonjorno Jr. J, Arena R, Borghi-Silva. Circulatory and ventilatory power: New indices to assess cardiorespiratory responses in diabetics. *European Respiratory Journal*. 2016;48:PA2271.

- Marsico A, de Cravalho E, Cahalin LP, Dal Corso S, Stirbulov R, Costa I, Arena R, Sampaio L. Comparison of three walking tests to cardiopulmonary exercise tests in the assessment of exercise tolerance in individuals with pulmonary arterial hypertension. *European Respiratory Journal*. 2016;48:PA4434.
- Costa I, Cahalin LP, Politti F, de Carvalho E, Arena R, Costa D, Parizotto N, Sampaio L. Acute effects using light-emitting diode therapy (LEDT) for muscle function during isometric exercise in asthma patients: Preliminary results. *European Respiratory Journal*. 2016;48:PA539.
- Silva N, Cahalin LP, Dal Corso S, Arena R, Oliveira C, Sampaio L. Reproducibility and relationships of the 6-minute walk test and shuttle walk test in children with cerebral palsy. *European Respiratory Journal*. 2016;48:PA4448.
- Neves LM, Cahalin LP, Silva VZM, Silva ML, Arena R, Spielholz NI, Cipriano Jr G. Effects of neuromuscular stimulation on functional status and quality of life in heart failure. *European Heart Journal*. 2016;37:P5477.
- Mazzuco A, de Souza A, Arbex F, Alencar M, Arena R, Phillips S, Borghi-Silva A. Does HRV during submaximal exercise transitions from rest relate to maximal cardiorespiratory responses in COPD? *Medicine and Science in Sports and Exercise*. 2016;48:S283.
- Wallen MP, Hall A, Dias KA, Ramos JS, Keating SE, Skinner TL, Woodward AJ, Macdonald GA, Arena R, Coombes JS. The oxygen uptake efficiency slope is not influenced by beta-blockade in end-stage liver disease patients. *Medicine and Science in Sports and Exercise*. 2016;48:S711.
- Bassi D, Mendes R, Tossini N, Arakelian V, Caruso F, Bonjorno Junior J, Arena R, Cabiddu R, Borghi-Silva A. Cardiopulmonary and cardiocirculatory responses in the coexistence of hypertension in diabetes type II patients. *Medicine and Science in Sports and Exercise*. 2016;48:S912.
- Coombes JS, Masterson CE, Wallen MP, Ingul CB, Davies P, Leong GM, Cain PA, Arena R, Dias KA. Validity of six-minute oxygen uptake efficiency slope in obese children to determine cardiorespiratory fitness. *Medicine and Science in Sports and Exercise*. 2016;48:S1023.

- Dias KA, Masterson CE, Wallen MP, Ingul CB, Davies P, Leong G, Cain PA, Arena R, Coombes JS. The oxygen uptake efficiency slope reflects exercise-training induced changes in VO₂max in obese children. *Medicine and Science in Sports and Exercise*. 2016;48:S1024.
- Baynard T, Arena R, Myers J, Kaminsky LA. The role of body habitus in predicting cardiorespiratory fitness: findings from the FRIEND registry. *The FASEB Journal*. 2016;30:1288.4.
- Fares S, Laghi F, Duffner LA, Burdinie C, Arena R, Tobin MJ, Jubran J. Impact of neuromuscular electrical stimulation on quadriceps size and functional activity in patients weaning from prolonged ventilation. *American Journal of Respiratory and Critical Care Medicine*. 2016;193:A2294.
- Peres Costa I, Fernandes Silva M, Santos Alves V, Aletti F, Stirbulov R, Costa D, Cahalin LP, Arena R, Sampaio L. Autonomic modulation in supine and standing positions in patients with difficult-to-control asthma. *American Journal of Respiratory and Critical Care Medicine*. 2016;193:A2305.
- Marsico A, Teixeira De Carvalho EF, Arakelian V, Peres Costa I, Cahalin LP, Dal Corso S, Stirbulov R, Arena R, Sampaio L. Functional performance tests elicit a maximal cardiovascular response in patients with pulmonary hypertension. *American Journal of Respiratory and Critical Care Medicine*. 2016;193:A2315.
- Trimer R, Mendes RG, Costa FSM, Sampaio L, Olivera Jr A, Aletti F, Arena R, Borghi-Silva A. Is heart rate variability altered during different parts of the sleep cycle in mild and moderate OSA? *American Journal of Respiratory and Critical Care Medicine*. 2016;193:A3461.
- Silva NP, Cahalin LP, Peres Cost L, Dal Corso S, Arena R, Sampaio L. Functional capacity tests: 6MWT and SWT in children with cerebral palsy. *American Journal of Respiratory and Critical Care Medicine*. 2016;193:A4499.
- Bien U, Peres Costa I, Arena R, Sampaio L. Identifying APACHE II and SOFA threshold values that predict successful weaning and extubation from mechanical ventilation. *American Journal of Respiratory and Critical Care Medicine*. 2016;193:A5295.

- Cahalin LP, Wong ML, Allsup K, Arena R, Forman DE. Cardiopulmonary exercise test differences in healthy adults with and without anxiety disorders - does activity level and fitness have an influence? *American Journal of Respiratory and Critical Care Medicine*. 2016;193:A5728.
- Melo PF, Silva V, Cipriano G, Lima A, Campos F, Cahalin LP, Arena R, Tavernard L. Relationship between physical activity patterns and key exercise testing variables in patients with heart failure. *American Journal of Respiratory and Critical Care Medicine*. 2016;193:A5852.
- Da Silva V, Lima A, Teixeira F, Neves L, Da Silva M, Bottaro M, Arena R, Gurney B, Cipriano Jr G, Cipriano G. Non-invasive ventilation improves cardiovascular adjustments and fatigability in patients with heart failure. *American Journal of Respiratory and Critical Care Medicine*. 2016;193:A5960..
- Bassi D, Arakelian VM, Mendes R, Caruso F, Bonjorno Jr LC, Arena R, Borghi-Silva A. Glycemic control affecting the autonomic modulation in type 2 diabetes. *Diabetology and Metabolic Syndrome*. 2015;7(S1):A3.
- Bassi D, Arakelian VM, Mendes RG Caruso FC, Bonjorno Jr JC, Arena R, Borghi-Silva A. Effects of a concurrent strength and endurance training program in diabetes patients: A randomized controlled trial. *Circulation*. 2015;132:A15980.
- De Schutter A, Lavie C, Jahangir E, Menezes A, Dinshaw H, Shum K, Arena R, Milani R. Nonresponders to cardiac rehabilitation and outcomes. *Circulation*. 2015;132:A16117.
- Andaku DK, Archiza B, Caruso FC, Zangrando KT, Lanzotti H, Amaral AC, Bonjorno Jr JC, de Oliveira CR, Phillips SA, Arena R, Borghi-Silva A. Post-exercise flow mediated dilation is augmented in highly trained female athletes. *Circulation*. 2015;132:A16530.
- Pescatello LS, MacDonald V, Ash GI, Lamberti LM, Farquhar WB, Arena R, Johnson BT. A synopsis of the professional recommendations for exercise and hypertension and their clinical and research implications. *Health Care: Current Reviews*. 2015;2:81.
- Arena R. Assessing cardiopulmonary fitness in chronic disease populations. *International Conference on Diet and Activity Methods 2015 Abstract Book*. Pages 64-65.

- Simoes VC, Karsten M, Minatel V, Simoes RP, Silva E, Tamburus NY, Arena R, Borghi-Silva A, Catai AM. Evaluation of the expiratory flow limitation during exercise of moderate and high intensity in patients with coronary artery disease. *Journal of the State Society of Cardiology of Sao Paulo*. 2015;25(supplement 2b):280.
- Ramadi A, Threfall TG, Hitt E, Hauer T, Jardine KD, Aggarwal SG, Stone JA, Arena R, Haennel RG. Daily sedentary behavior in center-based cardiac rehabilitation participants. *Journal of Cardiopulmonary Rehabilitation and Prevention*. 2015;35:367.
- Rouleau CR, King-Shier KM, Stone JA, Aggarwal S, Arena R, Campbell TS. A qualitative investigation of decisions about cardiac rehabilitation enrolment in patients with acute coronary syndrome. *Journal of Cardiopulmonary Rehabilitation and Prevention*. 2015;35:370.
- Manning K, Allsup K, Cahalin LP, Arena R, Lazzari AA, Davis SA, Joseph J, Vokonas P, Forman DE. Diminished muscular endurance in heart failure without differences in body composition. *Medicine and Science in Sports and Exercise*. 2015;47(supplement 1);s61-s62.
- Allsup K, Manning K, Cahalin LP, Arena R, Lazzari AA, Davis SA, Joseph J, Vokonas P, Forman DE. Influence of adiposity on walking speed in heart failure – the functional paradox. *Medicine and Science in Sports and Exercise*. 2015;47(supplement 1);s316-s317.
- Fares S, Laghi F, Duffner LA, Burdinie C, Arena R, Tobin MJ, Jubran A. Impact of neuromuscular electrical stimulation on quadriceps size and function in patients weaning from prolonged mechanical ventilation. *American Journal of Respiratory and Critical Care Medicine*. 2015;191:A2294.
- Neves L, Chiappa A, da Silva P, Vieira P, Cipriano Jr. G, Arena R, Dias A. Comparative effects of inspiratory muscle training and resistance training on respiratory and skeletal muscle strength in COPD: Responses of a pulmonary rehabilitation program. *European Respiratory Journal*. 2014;44(Supplement 58):598.
- Neves L, Vieira P, Chiappa A, Cipriano Jr. G, Umpierre D, Arena R. Neuromuscular electrical stimulation improves clinical and physiological function in COPD patients. *European Respiratory Journal*. 2014;44(Supplement 58):1289.

- Neves LM, Lima C, Otto ME, da Silva L, da Silva M, Nakata H, Campos V, Teixeira A, Arena R, Cipriano Jr. G. Ventilatory parameters on cardiopulmonary exercise testing in advanced heart failure: Chagas versus ischemic etiology. *European Respiratory Journal*. 2014;44(Supplement 58): 2159.
- De Lima A, Da Silva M, Neves L, Da Silva V, Giollo L, Chiappa G, Arena R, Cipriano G. A maximal bout of aerobic exercise changes vascular function in patients with Chagasic heart failure, but not in patients with ischemic heart disease. *Assobrafir Science*. 2014;5:277.
- Simoes VC, Karsten M, Minatel V, Simoes RP, Arena R, Neves L, Borghi-Silva A, Catai AM. Ventilatory efficiency for oxygen consumption and for pro production of carbon dioxide of patients in different states of myocardial infarction. *Assobrafir Science*. 2014;5:285.
- Melo PF, Silva V, Cipriano G, Lima A, Campos F, Cahalin L, Arena R, Tavernard L. Relationship between physical activity patterns and key cardiopulmonary exercise testing variables in patients with heart failure. *American Journal of Respiratory and Critical Care Medicine*. 2014;189:A5852.
- Pantoni CB, Trimer R, Thommazo-Luporini L, Mendes RG, Caruso FC, Messalira D, Arena R, Amaral-Neto O, Catai AM, Borghi-Silva A. Non-invasive ventilation during exercise during the CABG postoperative period. *Brazilian Journal of Cardiovascular Surgery*. 2014;29.1:146.
- Simoes VC, Minatel V, Karsten M, Simoes RP, Neves LM, Arena R, Borghi-Silva A, Catai AM. Evaluation of ventilatory efficiency in patients at different stages of myocardial. *Journal of the Cardiology Society of the State of Sao Paulo*. 2014;24:221.
- Martin BJ, Hauer T, Austford LD, Knudtson ML, Arena R, Meldrum DAN, Aggarwal S, Stone JA. Cardiac rehabilitation characteristics of those who drop out after initiating a program. *Circulation*. 2013;128:A17051
- Van Tassell BW, Arena R, Oddi C, Canada J, Abouzaki N, Jahangiri Am Melchior R, Falcao RA, Kontos MC, Sha KS, Voelkel NF. Interleukin-1 blockate improves exercise capacity in heart failure with preserved ejection fraction (HFpEF): Results of the D-HART Study. *Circulation*. 2013;128:A18369.

- Ramadi A, Haennel RG, Haykowsky M, Aggarwal SG, Stone JA, Hitt E, Austford LD, Arena R, Martin BJ. Evaluating exercise capacity sustainability in home versus center-based cardiac rehabilitation. *Journal of Cardiopulmonary Rehabilitation*. 2013;33:342-343.
- Timer R, Costa F, Mendes R, Sampaio L, Olivera Jr A, Aletti F, Arena R, Borghi-Silva A. Heart rate variability in obstructive sleep apnea: A non-linear analysis. *European Respiratory Journal*. 2013;42:2566.
- Rouleau CR, Horsley KJ, Morse E, Hauer T, Aggarwal S, Arena R, Campbell TS. Insomnia symptoms are not associated with adherence to a phase-II cardiac rehabilitation program. *Journal of Cardiopulmonary Rehabilitation*. 2013;33:342-343.
- Tomasi FP, Chiappa GR, da Silva VM, da Silva ML, Lima A, Arena R, Cipriano Jr. G. Effect of transcutaneous electrical nerve stimulation on cardiopulmonary responses during endurance exercise in healthy subjects. *Medicine and Science in Sports and Exercise*. 2013;45:s307.
- Silva VM, Lima AC, Neves LT, Gurney B, da Silva ML, Arena R. Relationship between physical activity patterns and key cardiopulmonary exercise testing variables in patients with heart failure. *Medicine and Science in Sports and Exercise*. 2013;45:s455.
- Chase P, Arena R, Davis PG, Cahalin LP, Myers J, Guazzi M, Forman DE, Bensimhon DR. The oxygen uptake efficiency slope identifies submaximal exercise test in patients with heart failure and low oxygen consumption. *Medicine and Science in Sports and Exercise*. 2013;45:s482.
- Bowen MK, Franco RL, Arena R, Caslin HL, Evans RK, Wickham EP. Pulmonary oxygen uptake off-kinetics and fitness in obese adolescents. *Medicine and Science in Sports and Exercise*. 2013;45:s490.
- Trimer R, Mendes RG, Costa F, Sampaio LM, Oliveira Jr. AD, Aletti F, Arena R, Borghi-Silva A. Is heart rate variability altered during different parts of the sleep cycle in mild and moderate OSA? *Respiratory and Critical Care Medicine*. 2013;187:A3461.

- Da Silva VM, Lima A, Teixeira F, Neves L, Da Silva M, Bottaro M, Arena R, Gurney B, Cipriano Jr. G, Cipriano G. Non-invasive ventilation improves cardiovascular adjustments and fatigability in patients with heart failure. *Respiratory and Critical Care Medicine*. 2013;187:A5960.
- Bandera F, Arena R, Castelvechchio S, Menicanti L, Labate V, Generati G, Alfonzetti E, Ghio S, Temporelli P, Guazzi M. The relationship between tricuspid annular systolic excursion and pulmonary arterial systolic pressure in heart failure: an indicator of cardiac length versus force relationship that discloses disease severity and prognosis. *Journal of the American College of Cardiology*. 2013;61:E573.
- Daniels K, Arena R, Zavin A, Allsup K, Lazzari A, Schulze C, Forman DE. Adiponectin resistance in non-cachectic heart failure patients. *Journal of the American College of Cardiology*. 2013;61:E600.
- Colbert J, Martin BJ, Hauer T, Haykowsky M, Austford L, Arena R, Knudtson M, Meldrum D, Aggarwal S, Stone J. Cardiac rehabilitation referral and attendance in women: a high-risk population with two strikes against it. *Journal of the American College of Cardiology*. 2013;61:E1414.
- Arena R, Myers JN, de Souza RC, Borghi-Silva A, Guazzi M, Chase P, Bensimhon D, Peberdy MA, Ashley E, West E, Cahalin L, Forman D. A neural network approach to predicting outcomes in heart failure using cardiopulmonary exercise testing. *Journal of the American College of Cardiology*. 2013;61:E1415.
- Bandera F, Arena R, Labate V, Castelvechchio S, Menicanti L, Guazzi M. The relationship between TAPSE and PASP in heart failure: an indicator of cardiac velocity/force relationship that discloses disease severity and prognosis. *European Heart Journal – Cardiovascular Imaging*. 2012;13:i147-i148.
- Mendes RG, Simaes RP, Costa F, Pantoni C, Di Thommazo L, Luzzi S, Amaral-Neto O, Catai A, Arena R, Borghi-Silva A. Cardiac autonomic responses exercise-induced during inpatient cardiac rehabilitation in patients undergoing CABG and left ventricular function different. *European Respiratory Journal*. 2012;40:494.

- Borghi-Silva A, Beltrame T, Reis M, Sampaio L, Arena R, Costa D. Relationship between oxygen uptake kinetics and BODE index at the onset of high-intensity exercise in moderate-to-severe COPD patients. *European Respiratory Journal*.2012;40:4394.
- Lavie CJ, Cahalin LP, Chase P, Myers J, Bensimhon D, Peberdy M, Ashley E, West E, Forman DE, Guazzi M, Arena R. Impact of cardiorespiratory fitness on the obesity paradox in patients with heart failure. *Circulation*. 2012;126:A14551.
- Armstrong MJ, Sigal RJ, Hauer T, Austford LD, Arena R, Aggarwal S, Martin B. Cardiac rehabilitation completion is associated with reduced mortality in diabetic subjects with coronary artery disease. *Circulation*. 2012;126:A16447.
- Martin B, Hauer T, Austford LD, Knudtson ML, Stone JA, Aggarwal S, Arena R. Cardiac rehabilitation is associated with reduced mortality and hospitalization in subjects with congestive heart failure. *Circulation*. 2012;126:A18183.
- Martin B, Hauer T, Knudtson ML, Arena R, Austford LD, Stone JA, Aggarwal S. Lack of impact of automated referral on attendance at cardiac rehabilitation among coronary artery bypass grafting patients. *Circulation*. 2012;126:A18219.
- Martin B, Hauer T, Austford LD, Southern DA, Knudtson ML, Arena R, Aggarwal S, Stone JA. Referral to cardiac rehabilitation: a quality indicator associated with reduced mortality. *Circulation*. 2012;126:A19130.
- Martin B, Haykowsky M, Hauer T, Southern DA, Knudtson ML, Arena R, Stone JA, Aggarwal S. Cardiac rehabilitation in the elderly: an under referred population that does not attend. *Circulation*. 2012;126:A19178.
- Armstrong M, Martin BJ, Hauer TL, Austford LD, Arena R, Aggarwal S, Sigal RJ. Adherence rates and cardiorespiratory fitness outcomes in people with and without diabetes completed a cardiac rehabilitation program. *Canadian Journal of Diabetes*. 2012;36:S54-S55.
- Martin B, Hauer T, Knudtson ML, Austford LD, Arena R, Stone JA, Aggarwal SG. Lack of automated referral on attendance at cardiac rehabilitation among coronary artery bypass grafting patients: the Calgary experience. *Canadian Journal of Cardiology*. 2012;28:S124-125.

- Martin B, Southern DA, Quan H, Hauer T, Knudtson ML, Arena R, Stone JA, Aggarwal SG. South Asian ethnicity is associated with reduced rates of referral to cardiac rehabilitation. *Canadian Journal of Cardiology*. 2012;28:S167.
- Martin B, Hauer T, Knudtson ML, Arena R, Stone JA, Aggarwal SG. Obesity and cardiac rehabilitation: a differential association with referral and attendance in women vs. men. *Canadian Journal of Cardiology*. 2012;28:S217.
- Martin B, Hauer T, Austford LD, Knudtson ML, Arena R, Aggarwal SG, Stone JA. Referral to cardiac rehabilitation: a quality indicator associated with reduced mortality. *Canadian Journal of Cardiology*. 2012;28:S219.
- Martin B, Hauer T, Haykowsky M, Knudtson ML, Austford LD, Stone JA, Aggarwal SG, Arena R. Cardiac rehabilitation is associated with reduced mortality and hospitalization in subjects with congestive heart failure. *Canadian Journal of Cardiology*. 2012;28:S290-291.
- Martin B, Haykowsky M, Hauer T, Southern DA, Knudtson ML, Arena R, Aggarwal SG, Stone, JA. Cardiac rehabilitation in the elderly: an under referred population that does not attend. *Canadian Journal of Cardiology*. 2012;28:S392.
- Corcelli A, Martin BJ, Hauer T, Austford LD, Stone JA, Arena R, Marra B, Aggarwal S. The effect of cardiac rehabilitation on heart rate recovery differs according to sex. *Journal of Cardiopulmonary Rehabilitation and Prevention*. 2012;32:306.
- Marra B, Martin BJ, Hauer T, Austford LD, Stone JA, Corcelli A, Aggarwal S, Arena R. Change in blood lipid profile immediately following cardiac rehabilitation and at one year follow-up. *Journal of Cardiopulmonary Rehabilitation and Prevention*. 2012;32:310.
- Zavin A, Daniels K, Arena R, Lecker S, Allsup K, Joseph J, Lazzari A, Davis S, Schulze C, Forman DE. Adiponectin is associated with reduced muscular strength in elderly heart failure patients. *Journal of Cardiac Failure*. 2012;18:S29.
- Schlaak S, Kvisle B, Threfall T, Arena R, Austford L, Aggarwal S, Stone J. Long-term retention of aerobic fitness improvements following participation in cardiac rehabilitation. *Journal of General Internal Medicine*. 2012;27:551-552.

- Allsup K, Zavin A, Arena R, Daniels K, Davis S, Joseph J, Lecker S, Lazzari A, Forman DE. Relationship between body composition and the oxygen uptake efficiency slope in heart failure patients. *Medicine and Science in Sports and Exercise*. 2012;44:S341.
- Bowen MK, Franco RL, Hall SL, Arena R, Evans RK, Wickham EP. Sex differences in the oxygen uptake kinetic response to moderate intensity exercise in obese adolescents. *Medicine and Science in Sports and Exercise*. 2012;44:S389.
- Zavin A, Daniels KM, Allsup K, Arena R, Lecker S, Joseph J, Schulze PC, Forman DE. The six minute walk distance as an indicator of frailty and functional incapacity in elderly heart failure patients. *Journal of the American College of Cardiology*. 2012;59:A228.
- Joseph J, Zavin A, Lecker SH, Daniels KM, Allsup K, Arena R, Schulze PC, Forman DE. Correlation between recovery kinetics and skeletal muscle gene expression in systolic heart failure. *Journal of the American College of Cardiology*. 2012;59:A229.
- Daniels KM, Lecker S, Zavin A, Allsup K, Joseph J, Arena R, Schulze PC, Lazzari A, Cao P, Santhanam M, Forman DE. PGC-1 α and IGFBP-5 expression in skeletal muscle of HF patients. *Journal of the American College of Cardiology*. 2012;59:A236.
- Daniels KM, Lecker S, Zavin A, Allsup K, Joseph J, Arena R, Schulze PC, Cao P, Santhanam M, Forman DE. Gene expression of the Ubiquitin-proteasome pathway is reflected by ventilatory expired gas analysis indices at peak exercise in heart failure. *Journal of the American College of Cardiology*. 2012;59:A244,
- Myers JN, Oliveira R, Guazzi M, Chase P, Bensimhon D, Ashley E, Forman DE, Peberdy MA, West E, Arena R. Validation of a cardiopulmonary exercise test score in heart failure. *Journal of the American College of Cardiology*. 2012;59:A477.
- Forman D, Allsup K, Zavin A, Lazzari A, Lecker S, Joseph J, Arena R. Handgrip strength reflects decreased lean tissue and function in elderly heart failure patients. *The Gerontologist*. 2011;51:664.

- Guazzi M, Boracchi P, Vicenzi M, Arena R, Reina G. Exercise oscillatory breathing and NT-pro-BNP levels in stable heart failure provide the strongest prediction of cardiac outcome when combining biomarkers with cardiopulmonary exercise testing. The prognostic importance of metabolic syndrome in a large cardiac rehabilitation cohort. *Circulation*. 2011;124:A9748.
- Martin B, Hauer T, Arena R, Austford LD, Stone JA, Aggarwal S. Cardiac rehabilitation following cardiac surgery: patient characteristics, participation rate and outcomes. The prognostic importance of metabolic syndrome in a large cardiac rehabilitation cohort. *Circulation*. 2011;124:A11349.
- Martin B, Arena R, Hauer T, Austford LD, Aggarwal S, Stone JA. The prognostic importance of metabolic syndrome in a large cardiac rehabilitation cohort. *Circulation*. 2011;124:A13818.
- Martin B, Arena R, Hauer T, Austford LD, Aggarwal S, Stone JA. Cardiovascular fitness and mortality following contemporary cardiac rehabilitation. *Circulation*. 2011;124:A13845.
- Guazzi M, Vicenzi M, Arena R, Guazzi MD. A long term follow-up study of patients with mild to moderate group 2 pulmonary hypertension treated with PDE5-inhibition: A comparison between heart failure with reduced and preserved ejection fraction. The prognostic importance of metabolic syndrome in a large cardiac rehabilitation cohort. *Circulation*. 2011;124:A14722.
- Van Tassell BW, Arena R, Shah K, Toldo S, Mezzaroma E, Kim G, Chang CM, Yumori B, Voelkel NF, Abbate A. Interleukin-1 blockade improves cardiopulmonary exercise performance in patients with systolic heart failure. *Circulation*. 2011;124:A15762.
- Reis M, Arena R, Berton D, Barroco A, Catai A, Neder JA, Borghi-Silva S. Determination of anaerobic threshold through different methodologies during ramp protocol in elderly healthy men. *European Respiratory Journal*. 2011;38:S863.
- Martin B, Arena R, Hauer T, Aggarwal S, Stone J. Cardiovascular fitness and mortality following contemporary cardiac rehabilitation. *Canadian Journal of Cardiology*. 2011;27:S110.
- Martin B, Arena R, Hauer T, Stone J, Aggarwal S. Higher body mass index is negatively associated with higher aerobic capacity improvements one year following participation in cardiac rehabilitation. *Canadian Journal of Cardiology*. 2011;27:S111.

- Martin B, Arena R, Hauer T, Stone J, Aggarwal S. Cardiac rehabilitation following surgery: patient characteristics, participation rate and outcomes. *Canadian Journal of Cardiology*. 2011;27:S127.
- Martin B, Arena R, Hauer T, Aggarwal S, Stone JA. The prognostic importance of metabolic syndrome in a large cardiac rehabilitation cohort. *Journal of Cardiopulmonary Rehabilitation and Prevention*. 2011;31:E3.
- Martin B, Arena R, Hauer T, Aggarwal S, Stone JA. Prognostic Comparison of estimated aerobic capacity and percent-predicted values in men and women completing cardiac rehabilitation. *Journal of Cardiopulmonary Rehabilitation and Prevention*. 2011;31:E3.
- Zavin A, Allsup K, Gagnon DR, Arena R, Davis S, Joseph J, Lecker S, Lazzari A, Schulze PC, Forman DE. Fat mass and functional characteristics in heart failure patients. *Journal of Cardiac Failure*. 2011;17:S9.
- Zavin A, Allsup K, Gagnon DR, Arena R, Joseph J, Lazzari A, Schulze PC, Lecker S, Davis S, Forman DE. Lean mass as an indicator of muscle strength in patients with heart failure. *Journal of Cardiac Failure*. 2011;17:S14-S15.
- Allsup K, Zavin A, Joseph J, Arena R, Vokonas P, Lecker S, Lazzari L, Schulze PC, Forman DE. Strength and aerobic capacities both contribute to functional decline in heart failure. *Journal of Cardiac Failure*. 2011;17:S17.
- Ferreira J, Plentz RDM, Stein C, Casali KR, Arena R, Dal Lago P. Inspiratory muscle training reduces blood pressure and sympathetic activity in hypertensive patients: a randomized controlled trial. *European Heart Journal*. 2011;32:384-385.
- Chase P, Davis P, Arena R, Myers J, Guazzi M, Kelly C, Klein S, Bensimhon D. Low heart rate reserve identifies patients with heart failure who may benefit from device optimization. *Medicine and Science in Sports and Exercise*. 2011;43:S77.
- Hauer T, Cuda L, Austford L, Arena R, Stone J, Aggarwal S. The independent effect of traditional cardiac rehabilitation and the LEARN program on weight loss: a comparative analysis. *Medicine and Science in Sports and Exercise*. 2011;43:S79.

- Schlaak S, Kvisle B, Threlfall T, Arena R, Austford D, Aggarwal S, Stone J. Long-term retention of aerobic fitness improvements following participation in cardiac rehabilitation. *Medicine and Science in Sports and Exercise*. 2011;43:S379.
- Smith K, Shizukuda Y, Tripodi D, Arena R, Bolan CD, Yau YY, Leitman SF, Rosing DR. Changes in exercise capacity of asymptomatic Hereditary Hemochromatosis subjects over 5-year follow up. *Medicine and Science in Sports and Exercise*. 2011;43:S525.
- Stone JA, Arena R, Campbell T, Hauer T, Aggarwal S. Women display greater benefit from cardiac rehabilitation on symptoms of anxiety and depressed mood. *European Journal of Cardiovascular Prevention & Rehabilitation*. 2011;18: S67-S91.
- Kohli HS, Canada J, Arena RA, Tang DG, Peberdy MA, Harton S, Flattery M, Katlaps GJ, Hess ML, Kasirajan V, Shah KB. Flat blood pressure response to exercise in patients with the total artificial heart. *The Journal of Heart and Lung Transplantation*. 2011;30: S44.
- Vicenzi M, Arena R, Guazzi M. Cardiopulmonary exercise testing characteristics in heart failure patients with and without concomitant chronic obstructive pulmonary disease. *Italian Heart Journal*. 2010;11:25S.
- Martin BJ, Hauer T, Lewin A, Ghali WA, Knudtson M, Arena R, Stone JA, Aggarwal SG. Cardiac rehabilitation is associated with especially improved outcomes in women and the elderly: results from a large cohort study of coronary artery disease patients. *Circulation*. 2010;122:A9033.
- Silva VZ, Barros J, Azevedo M, Godoy JR, Arena R, Cirpiano Jr G, Soares M, Gualberto T. Respiratory muscle strength as a predictor of bone mineral density in individuals with Down Syndrome. *Brazilian Journal of Physical Therapy*. 2010;14:474.
- Silva VZ, Barros J, Azevedo M, Godoy JR, Arena R, Cipriano Jr G, Brito L, Xavier AP. Relationship between isokinetic muscle strength and exercise capacity in patients with Down Syndrome. *Brazilian Journal of Physical Therapy*. 2010;14:476.

- Guazzi M, Vicenzi M, Arena R, Guazzi MD. PDE5-inhibition with sildenafil reverses exercise oscillatory breathing in chronic heart failure: a 1-year cardiopulmonary exercise testing placebo-controlled study. *Circulation*. 2010;122:A13384.
- Martin B, Hauer T, Lewin AM, Galbraith D, Ghali WA, Knudtson ML, Arena R, Stone JA, Aggarwal S. The impact of cardiac rehabilitation on outcomes in patients with coronary artery disease: focus on women and elderly. *The Canadian Journal of Cardiology*. 2010;52D:163.
- Chase P, Arena R, Guazzi M, Myers J, Peberdy MA, Bensimhon D. Prognostic usefulness of the functional aerobic reserve in patients with heart failure. *Medicine and Science in Sports and Exercise*, 2010;42:S55.
- Arena R, Myers J, Abella J, Pinkstaff S, Brubaker P, Kitzman D, Peberdy MA, Bensimhon D, Chase P, Guazzi M. Cardiopulmonary exercise testing is equally prognostic in young, middle-aged and older individuals diagnosed with heart failure. *Medicine and Science in Sports and Exercise*, 2010;42:S55.
- Abbate A, Kontos MC, Grizzard J, Biondi-Zoccai G, Van Tassell BW, Robati R, Arena R, Roberts C, Varma A, Gelwix C, Salloum FN, Hastillo A, Dinarello CA, Vetrovec GW. Interleukin-1 blockade ameliorates left ventricular remodeling following ST-segment elevation acute myocardial infarction - The VCU-ART Pilot Study. *Journal of the American College of Cardiology*. 2010;55:E951.
- Vicenzi M, Myers J, Peberdy MA, Bensimhon D, Chase P, Pinkstaff, S, Arena R, Guazzi M. Percent-predicted oxygen uptake efficiency slope prognostically outperforms the actual value in patients with heart failure. *Italian Heart Journal*. 2009;10:173S.
- Vicenzi M, Myers J, Peberdy MA, Bensimhon D, Chase P, Pinkstaff S, Arena R, Guazzi M. Prognostic characteristics of heart rate recovery according to gender in patients with heart failure. *Italian Heart Journal*. 2009;10:218S.
- Vicenzi M, Reina G, Boracchi P, Arena R, Myers J, Peberdy MA, Bensimhon D, Chase P, Guazzi M. Development of a cardiopulmonary exercise prognostic score for optimizing risk stratification in heart failure: The (P)e(R)i(O)dic (B)reathing during (E)xercise (PROBE) study. *Italian Heart Journal*. 2009;10:223S.

- Vicenzi M, Arena R, Dickstein K, Guazzi M. 6 minute walk test and cardiopulmonary exercise testing in chronic heart failure: A comparative analysis and prognostic insights. *Italian Heart Journal*. 2009;10:278S.
- Arena R, Myers J, Peberdy MA, Bensimhon D, Chase P, Pinkstaff S, Guazzi M. Prognostic characteristics of heart rate recovery according to sex in patients with heart failure. *Circulation*. 2009;120:S729
- Arena R, Myers J, Peberdy MA, Bensimhon D, Chase P, Pinkstaff S, Guazzi M. Percent-predicted oxygen uptake efficiency slope prognostically outperforms the actual value in patients with heart failure. *Circulation*. 2009;120:S730.
- Guazzi M, Boracchi P, Arena R, Myers J, Peberdy M, Bensimhon D, Chase P, Reina G. Development of a cardiopulmonary exercise prognostic score for optimizing risk stratification in heart failure: The (P)e(R)i(O)dic (B)reathing during (E)xercise (PROBE) study. *Circulation*. 2009;120:S730.
- Guazzi M, Arena R, Vicenzi M, Guazzi MD. Chronic PDE5-inhibition with sildenafil improves diastolic function and clinical status in patients with stable HF. *Circulation*. 2009;120:S867.
- Parker KL, Hauer T, Arena R, Lundberg D, Aggarwal S, Goodhart D, Stone J, Traboulsi M. The effect of participation in an early discharge clinic in cardiac rehabilitation attendance and outcome in current cigarette smokers suffering a STEMI. *Canadian Journal of Cardiology*. 2009;25:72.
- MacCarter DJ, Miller FC, Gilmett KB, Arena R. Functional differentiation of CRT responders vs. non-responders. *Journal of Cardiac Failure*. 2009;15:S26.
- Pinkstaff S, Myers J, Guazzi M, Peberdy MA, Bensimhon D, Chase P, Arena R. Exercise dyspnea sensation by Borg scale is a powerful independent predictor of cardiac mortality in heart failure. *Medicine and Science in Sports and Exercise*. 2009;41:S38.
- Guazzi M, Myers J, Peberdy MA, Bensimhon D, Chase P, Pinkstaff S, Arena R. Echocardiography with tissue Doppler imaging and cardiopulmonary exercise testing correlates in patients with diastolic heart failure. *Medicine and Science in Sports and Exercise*. 2009;41:S384.

- Parker K, Hauer T, Arena R, Lundberg D, Aggarwal S, Goodhart D, Traboulsi D. An early discharge clinic further improves aerobic capacity following cardiac rehabilitation among myocardial infarction patients. *Medicine and Science in Sports and Exercise*. 2009;41:S438-439.
- Parker K, Hauer T, Arena R, Lundberg DL, Aggarwal S, Goodhart D, Traboulsi M. Attendance in an early discharge clinic with symptom limited maximal exercise testing is safe and improves cardiac rehabilitation participation among low-risk stemi patients. *European Journal of Cardiovascular Prevention and Rehabilitation*. 2009;16:S53.
- Parker K, Hauer T, Arena R, Lundberg DL, Goodhart D, Aggarwal S, Traboulsi M. A new clinical care paradigm improves cardiac rehabilitation enrollment in post myocardial infarction patients: Targeting the care gap following hospital discharge. *European Journal of Cardiovascular Nursing*. 2009;8:S11.
- Arena R, Guazzi M, Myers J, Peberdy MA, Bensimhon D, Chase P, Brubaker P, Moore B, Kitzman D. Defining the optimal prognostic window for cardiopulmonary exercise testing in patients with heart failure. *Journal of the American College of Cardiology*. 2009;53:A299.
- Ritt LE, Oliveira RB, Mandic S, Arena R, Peberdy MA, Bensimhon D, Chase P, Brubaker P, Moore B, Kitzman D, Guazzi M, Myers J. Heart failure patients in the intermediate range of peak VO_2 : Additive value of heart rate recovery and the VE/VCO_2 slope in predicting mortality. *Journal of the American College of Cardiology*. 2009;53:A300.
- Arena R, Guazzi M, Myers J, Peberdy MA, Bensimhon D, Chase P, Brubaker P, Moore B, Kitzman D. Which equation for percent predicted oxygen consumption provides the best prognostic assessment in patients with heart failure? *Journal of the American College of Cardiology*. 2009;53:A301.
- Vicenzi M, Arena R, Zagari I, Guazzi M. Exercise dyspnea sensation by Borg scale is a powerful independent predictor of cardiac mortality in heart failure. *Italian Journal of Cardiology*. 2008; 9:S47.
- Vicenzi M, Arena R, Guazzi M. Exercise oscillatory breathing in diastolic heart failure: prevalence and prognostic insights. *Italian Journal of Cardiology*. 2008; 9:S48.

- Vicenzi M, Zagari I, Myers J, Peberdy MA, Bensimhon D, Chase P, Pinkstaff S, Arena R, Guazzi M. Echocardiography with tissue doppler imaging and cardiopulmonary exercise testing in patients with heart failure: a correlative and prognostic analysis *Italian Journal of Cardiology*. 2008; 9:S138.
- Vicenzi M, Myers J, Peberdy MA, Bensimhon D, Chase P, Pinkstaff S, Arena R, Guazzi M. The prognostic value of the increase in heart rate during the first minute of progressive exercise testing in patients with heart failure. *Italian Journal of Cardiology*. 2008; 9:S141.
- Vicenzi M, Arena R, Guazzi M. Prognostic comparison of normalized and absolute left ventricular mass and volume in patients with heart failure. *Italian Journal of Cardiology*. 2008; 9:S160.
- Vicenzi M, Myers J, Peberdy MA, Bensimhon D, Chase P, Pinkstaff S, Arena R, Guazzi M. Heart rate recovery predicts sudden cardiac death in heart failure. *Italian Journal of Cardiology*. 2008; 9:S256.
- Guazzi M, Myers J, Peberdy MA, Bensimhon D, Chase P, Pinkstaff S, Arena R. Improvement in ventilatory efficiency and dyspnea on exertion are related to reduced pulmonary pressure in heart failure patients undergoing chronic phosphodiesterase-5 inhibition. *Circulation*. 2008;118:S798.
- Arena R, Brubaker P, Moore B, Kitzman D. The oxygen uptake efficiency slope is reduced in older patients with heart failure and a normal ejection fraction. *Circulation*. 2008;118:S1023.
- Guazzi M, Myers J, Peberdy MA, Bensimhon D, Chase P, Arena R. Prognostic value of the initial heart Rate increase during progressive exercise testing in heart failure. *Circulation*. 2008;118:S1028.
- Stone JA, Hauer T, Aggarwal SA, Meldrum D, Austford L, Arena R. Retention of gains in exercise capacity one year following completion of cardiac rehabilitation. *Journal of Cardiopulmonary Rehabilitation and Prevention*. 2008;28:339-340.
- Myers J, Arena R, Oliviera R, Bensimhon D, Abella J, Hsu L, Chase P, Guazzi M, Peberdy M. The lowest VE/VCO₂ ratio during exercise as a predictor of outcome in patients with heart failure. *Journal of Cardiac Failure*. 2008;14:S18.

- MacCarter D, Miler F, Gilment K, Washam M, Jantz R, Renker M, Arena R. Acute and chronic improvement in breathing efficiency with exercise based AV/VV CRT optimization. *Journal of Cardiac Failure*. 2008;14:S63.
- Guazzi M, Myers J, Peberdy M, Bensimhon D, Chase P, Pinkstaff S, Arena R. The ability of heart rate recovery to predict arrhythmic and non-arrhythmic mortality in patients with heart failure. *Journal of Cardiac Failure*. 2008;14:S90.
- Guazzi M, Vicenzi M, Myers J, Peberdy M, Bensimhon D, Chase P, Arena R. Prognostic comparison of normalized and absolute left ventricular mass and volume in patients with heart failure. *Journal of Cardiac Failure*. 2008;14:S95.
- Arena R, Myers J, Peberdy M, Bensimhon D, Chase P, Guazzi M. The impact of oscillatory ventilation on the prognostic value of aerobic capacity and ventilatory efficiency in patients with heart failure. *Journal of Cardiac Failure*. 2008;14:S95.
- Abul-Waheed M, Likki S, Yousuf M, Maz T, Dunlap S, Kelly S, Arena R, Shizukuda Y. Left atrial volume predicts ventilatory efficiency in heart transplant recipients. *Journal of Cardiac Failure*. 2008;14:S102.
- Arena R, Shizukuda Y, Bolan CD, Tripodi D, Yau Y, Smith KP, Waclawiw MA, Leitman SF, Rosing DR. Phlebotomy improves the oxygen uptake efficiency slope in asymptomatic hereditary hemochromatosis subjects. *Medicine and Science in Sports and Exercise*. 2008;40:S30-31.
- Pinkstaff S, Arrowood J, Fei D, Kraft KA, Arena R. Impact of gender on the relationship between heart rate recovery and other makers of cardiovascular health. *Medicine and Science in Sports and Exercise*. 2008;40:S180.
- Burnet EN, Arena R, Pidcoe PE. Relationship between pelvic motion and metabolic energy in running. *Medicine and Science in Sports and Exercise*. 2008;40:S212.
- Bradford JC, Arena R, Pidcoe PE. Metabolic energy and muscle activity differences when using a modified elliptical trainer for gate training. *Medicine and Science in Sports and Exercise*. 2008;40:S379.

- Stone JA, Aggarwal SA, Brown B, Dottridge A, Arena R. Defining an optimal LDL threshold indicating a high likelihood of normal apolipoprotein B levels in patients with coronary artery disease. *European Journal of Cardiovascular Prevention and Rehabilitation*. 2008;15:S127.
- Guazzi G, Myers J, Peberdy MA, Bensimhon D, Chase P, Pinkstaff S, Arena R. Heart rate recovery and Doppler echocardiography in patients with heart failure: A correlative and prognostic analysis. *Journal of the American College of Cardiology*. 2008;51:A347.
- Vicenzi M, Casali M, Myers J, Peberdy M, Bensimhon D, Chase P, Arena R, Guazzi M. Exercise oscillatory ventilation predicts cardiac mortality in heart failure patients with preserved systolic function. *Italian Journal of Cardiology*. 2007; 8:S73.
- Vicenzi M, Casali M, Myers J, Peberdy M, Bensimhon D, Chase P, Arena R, Guazzi M. The minute ventilation/carbon dioxide production slope prognostically outperforms the oxygen uptake efficiency slope. *Italian Journal of Cardiology*. 2007; 8:S87.
- Casali M, Vicenzi M, Arena R, Guazzi M, Podda M. Long term treatment with a phosphodiesterase 5 inhibitor (Sildenafil) in compensated heart failure. *Italian Journal of Cardiology*. 2007; 8: S157.
- Vicenzi M, Casali M, Myers J, Peberdy M, Bensimhon D, Chase P, Arena R, Guazzi MD. Heart rate increase from rest to maximal exercise is prognostically significant in beta-blocked patients with heart failure. *Italian Journal of Cardiology*. 2007;8:S204.
- Vicenzi M, Casali M, Myers J, Peberdy M, Bensimhon D, Chase P, Arena R, Guazzi M, Guazzi MD. Ventilatory abnormalities during exercise are associated with Doppler-estimated left ventricular filling pressure and ejection fraction in patients with heart failure. *Italian Journal of Cardiology*. 2007; 8:S312.
- Guazzi M, Myers J, Peberdy M, Bensimhon D, Chase P, Arena R. Exercise oscillatory ventilation predicts cardiac mortality in heart failure patients with preserved systolic function. *Circulation*. 2007;116:II-648.
- Myers J, Arena R, Bensimhon D, Abella J, Hsu L, Chase P, Guazzi M, Myers J, Peberdy M. A cardiopulmonary exercise testing score for predicting risk in patients with heart failure. *Circulation*. 2007;116:II-695-696.

- Arena R, Myers J, Peberdy M, Bensimhon D, Abella J, Chase P, Guazzi M. Heart rate recovery predicts major cardiac events in patients with heart failure receiving a beta-blocking agent. *Circulation*. 2007;116:II-696.
- Arena R, Myers J, Peberdy M, Bensimhon D, Chase P, Guazzi M. The prognostic characteristics of cardiopulmonary exercise testing in Caucasian and African-American patients with heart failure. *Circulation*. 2007;116:II-739.
- Greenspan N, Mackles M, Long T, Novak C, Arena R. Heart rate recovery following exercise training in elderly patients with COPD. *Chest*. 2007;132:472a
- Hauer T, Austford A, Stone J, Arena R. Change in SF-12 subscores following cardiac rehabilitation. *Journal of Cardiopulmonary Rehabilitation and Prevention*. 2007;27:326.
- Hauer T, Austford A, Stone J, Arena R. Cardiac rehabilitation significantly improves aerobic exercise capacity in patients of advanced age. *Journal of Cardiopulmonary Rehabilitation and Prevention*. 2007;27:327.
- Arena R, Arrowood J, Fei D, Pinkstaff S, Kraft K. A hypertensive diastolic blood pressure during exercise is associated with dyslipidemia in apparently healthy subjects. *Journal of Cardiopulmonary Rehabilitation and Prevention*. 2007;27:327.
- Chase P, Bensimhon D, Myers J, Guazzi M, Arena R. General fatigue vs. Dyspnea: differences in exercise variables and prognosis according to reason for test termination in patients with heart failure. *Journal of Cardiopulmonary Rehabilitation and Prevention*. 2007;27:327.
- Guazzi M, Vicenzi M, Raimondo R, Sarzi S, Pedretti R, Arena R. Ventilatory abnormalities during exercise are associated with Doppler-estimated left ventricular filling pressure and ejection fraction in patients with heart failure. *Journal of Cardiac Failure*. 2007;13:S88.
- Guazzi M, Myers J, Peberdy M, Bensimhon D, Chase P, Arena R. Heart rate increase from rest to maximal exercise is prognostically significant in beta-blocked patients with heart failure. *Journal of Cardiac Failure*. 2007;13:S158.

- Arena R, Myers J, Peberdy M, Bensimhon D, Chase P, Guazzi M. Large oscillatory ventilation amplitude at low intensity exercise indicates poor prognosis in heart failure. *Journal of Cardiac Failure*. 2007;13:S160.
- Guazzi M, Vicenzi M, Raimondo R, Sarzi S, Pedretti R, Arena R. A prognostic comparison of echocardiography vs. cardiopulmonary derived variables in patients with heart failure. *Journal of Cardiac Failure*. 2007;13:S165.
- Chase P, Bensimhon D, Myers J, Perberdy M, Guazzi M, Arena R. Cardiopulmonary exercise testing maintains prognostic value in obese patients with heart failure. *Journal of Cardiac Failure*. 2007;13:S165-166.
- Dunn P, Gambetta M, Nelson D, Herron B, Arena R. Reduction in b-type natriuretic peptide using telemanagement in patients with heart failure. *Journal of Cardiac Failure*. 2007;13:S187.
- Bradford CJ, Arena R, Pidcoe P. Mechanical and metabolic energy differences when using a modified NordicTrack elliptical trainer for gait training. *Medicine and Science in Sports and Exercise*. 2007;39:S155.
- Hauer T, Austford L, Stone J, Arena R. Influence of gender on the improvement in exercise capacity following cardiac rehabilitation. *Medicine and Science in Sports and Exercise*. 2007;39:S282-283.
- Guazzi M, Arena R, Reina G, Ascione N, Guazzi MD. Exercise oscillatory ventilation and increased ventilation to CO₂ production slope in patients with heart failure: An unfavorable combination with high prognostic value. *Medicine and Science in Sports and Exercise*. 2007;39:S405.
- Dinkard B, Arena R, Paul S, Baker A, Diprospero N. Aerobic capacity and disease severity in subjects with Friedreich's ataxia. *Medicine and Science in Sports and Exercise*. 2007;39:S441.
- Arena R, Shizukuda Y, Bolan C, Tripodi D, Yau Y, Smith K, Waclawiw M, Leitman S, Rosing D. Relationship between Transferrin and exercise capacity in asymptomatic hereditary hemochromatosis subjects. *Medicine and Science in Sports and Exercise*. 2007;39:S444-445.

- Arena R, Myers J, Guazzi M, Peberdy MA, Bensimhon D, Chase P. Short and long term prognostic value of resting end-tidal carbon dioxide in heart failure. *European Journal of Cardiovascular Prevention and Rehabilitation*. 2007;14(Suppl 1):S40.
- Arena R, Myers J, Guazzi M, Peberdy MA, Bensimhon D, Chase P. Prognostic value of change in ventilatory efficiency from rest to exercise in patients with heart failure. *European Journal of Cardiovascular Prevention and Rehabilitation*. 2007;14(Suppl 1):S40-S41.
- Guazzi M, Arena R, Reina G, Ascione N, Guazzi MD. Exercise oscillatory ventilation is a strong predictor of sudden death in heart failure patients. *Journal of the American College of Cardiology*. 2007;49 (Suppl 1):111A.
- Arena R, Myers J, Guazzi M, Peberdy MA, Abella J, Bensimhon D, Chase P. The minute ventilation/carbon dioxide production slope prognostically outperforms the oxygen uptake efficiency slope. *Journal of the American College of Cardiology*. 2007;49 (Suppl 1):133A.
- Guazzi M, Arena R, Myers J. Comparison of the prognostic value of cardiopulmonary exercise testing between male and female patients with heart failure. *Core Journals in Cardiology*. 2007;28:25.
- Guazzi M, Myers J, Arena R. Cardiopulmonary exercise testing in the clinical and prognostic assessment of diastolic heart failure. *The Year Book of Sports Medicine*. 2006;Chapter 7:213-214.
- Bianco E, Guazzi M, Arena R, Myers J, Guazzi MD. Development of a Ventilatory Classification System in Patients with Heart Failure *Italian Journal of Cardiology*. 2007;7:20S.
- Vicenzi M, Guazzi M, Arena R, Myers J, Cirafici G, Biancone E, Guazzi MD. Prognostic Value of End-tidal Carbon Dioxide in Patients with Heart Failure. *Italian Journal of Cardiology*. 2007;7:80S.
- Bianco E, Guazzi M, Arena R, Myers J, Guazzi MD. The added prognostic value of ventilatory efficiency to the Weber classification system in patients with heart failure. *Italian Journal of Cardiology*. 2007;7:80S.

- Vicenzi M, Guazzi M, Arena R, Myers J, Guazzi MD. The prognostic value of ventilatory efficiency in heart failure patients with preserved aerobic capacity. *Italian Journal of Cardiology*. 2007;7:121S.
- Arena R, Myers J, Guazzi M, Bensimhon D, Chase P, Peberdy M. Development of a ventilatory classification system for patients with heart failure. *Circulation*. 2006;114:II-574.
- Guazzi M, Tumminello G, Arena R, Guazzi MD. Chronic Sildenafil therapy improves quality of life, exercise oxygen uptake and ventilation efficiency in stable heart failure patients. *Circulation*. 2006;114:II-571-II-572.
- Greenspan N, Mackles M, Tobin J, Long T, Arena R. Aerobic exercise and strength training in elderly patients with chronic obstructive pulmonary disease, *Chest*. 2006;130:118S.
- Guazzi M, Arena R, Myers J. The added prognostic value of ventilatory efficiency to the Weber classification system in patients with heart failure. *Journal of Cardiopulmonary Rehabilitation*. 2006;26:253.
- Arena R, Arrowood J, Fei D, Pinkstaff S, Kraft K. Influence on self-reported physical activity on arterial stiffness in apparently healthy subjects. *Journal of Cardiopulmonary Rehabilitation*. 2006;26:268.
- Guazzi M, Gripari P, Tumminello G, Arena R. The added prognostic value of endothelial brachial artery flow-mediated dilatation in patients with uncomplicated myocardial infarction. *Journal of Cardiopulmonary Rehabilitation*. 2006;26:272.
- Dunn P, Gambetta M, Nelson D, Arena R. Relationship between pulmonary auscultation and brain natriuretic peptide in patients with heart failure. *Journal of Cardiopulmonary Rehabilitation*. 2006;26:272.
- Dunn P, Gambetta M, Nelson D, Herron B, Arena R. Prognostic comparison of B-type natriuretic peptide and n-terminal-proB-type natriuretic peptide in patients with heart failure. *Journal of Cardiopulmonary Rehabilitation*. 2006;26:273.
- Gambetta M, Nelson D, Dunn P, Arena R. Relationship between brain Natriuretic peptide and heart failure symptoms. *Journal of Cardiac Failure*. 2006;12:S121.

- Dunn P, Gambetta M, Nelson D, Herron B, Arena R. Change in brain natriuretic peptide predicts risk for hospitalization in patients with Heart Failure. *Journal of Cardiac Failure.* 2006;12:S125.
- Dunn P, Gambetta M, Nelson D, Herron B, Arena R. Impact of a heart failure disease management program on hospitalization. *Journal of Cardiac Failure.* 2006;12:S125.
- Guazzi M, Tumminello G, Arena R., Guazzi MD. Chronic Sildenafil therapy improves quality of life, exercise oxygen uptake and ventilation efficiency in stable heart failure patients. *Journal of Cardiac Failure.* 2006;12:S71.
- Arena R., Myers J, Abella J, Peberdy M. Influence of Heart Failure Etiology on the Prognostic Value of Peak VO₂ and VE/VCO₂ Slope. *Internal Medicine (Section 6 Embase).* 2006;116:87-88.
- Arena R., Arrowood J, Fei D, Kraft K. The relationship between arterial stiffness and age and aerobic capacity across the lifespan. *Medicine and Science in Sports and Exercise.* 2006;38:S43.
- Madigan M and Arena R. Older adults exhibit lower peak muscle power during single step balance recovery. *Medicine and Science in Sports and Exercise.* 2006;38:S117-118.
- Dunn P, Petty K, Hardisty J, Conard S, Reneau J, Arena R. The prevalence of cardiovascular risk factors among cardiac and non-cardiac hospital Admissions. *Medicine and Science in Sports and Exercise.* 2006;38:S428.
- Wilson E, Madigan M, Arena R. Evertor fatigue alters peroneal reflexes elicited by sudden ankle inversion. *Medicine and Science in Sports and Exercise.* 2006;38:S450.
- Kraft K, Fei D, Chang Y, Arena R. Influence of aerobic fitness and hypertension on aortic stiffness throughout the adult age span. *Proc. Intl. Soc. Mag. Reson. Med.* 2006;14:875.
- Arena R., Myers J, Guazzi M. Impact of age on the prognostic value of cardiopulmonary exercise testing in subjects with heart failure. *Journal of the American College of Cardiology.* 2006;47 (Suppl A): 154A.

- Arena R, Owens D, Smith K, Mohaddin S, McAreavey D, Ullisney K, Fananapazir L, Hadi M, Plon JF. Relationship between cardiopulmonary exercise testing and pulmonary pressures in hypertrophic cardiomyopathy. *Journal of the American College of Cardiology*. 2006;47 (Suppl A): 156A.
- Arena R, Guazzi M, Peberdy MA, Myers J. Influence of heart failure etiology on the prognostic value of body mass index. *Circulation*. 2005;112:II-456.
- Owens D, Arena R, Smith K, Mohaddin S, McAreavey D, Bacharach SL, Ullisney K, Fananapazir L, Hadi M, Plon JF. Indices of ventricular relaxation are not related to objective measures of exercise capacity in non-obstructive hypertrophic cardiomyopathy. *Circulation*. 2005;112:II-603.
- Arena R, Guazzi M, Peberdy MA. Characteristics of cardiopulmonary exercise testing in heart failure: comparing American and European models. *Journal of Cardiopulmonary Rehabilitation*. 2005;25:292.
- Dunn P, Gambetta M, Arena R. Effect of a comprehensive cardiac rehabilitation program on cardiac-related events in a female cohort. *Journal of Cardiopulmonary Rehabilitation*. 2005;25:294.
- Dunn P, Gambetta M, Arena R. Effect of a comprehensive cardiac rehabilitation program on cardiac related events in subjects of advanced age. *Journal of Cardiopulmonary Rehabilitation*. 2005;25:302.
- Arena R, Arrowood J, Fei D, Kraft K. Correlation between c-reactive protein and cholesterol in apparently healthy adults: the influence of gender. *Journal of Cardiopulmonary Rehabilitation*. 2005;25:304.
- Arena R, Peberdy M, Tevald M. Short-term reliability of oxygen uptake on-kinetics in apparently healthy subjects. *Journal of Cardiopulmonary Rehabilitation*. 2005;25:306.
- Arena R, Myers J, Guazzi M, Peberdy M, Abella J. Relationship between body mass index and exercise test variables in patients with heart failure. *Journal of Cardiac Failure*. 2005;11:S111.
- Arena R, Myers J, Guazzi M, Peberdy M. Prognostic value of heart rate recovery in patients with heart failure. *Journal of Cardiac Failure*. 2005;11:S171.

- Gambetta M, Nelson D, Dunn P, Arena R. Brain natriuretic peptide is a predictor of thirty day hospital admission in patients enrolled in a collaborative care heart failure treatment program. *Journal of Cardiac Failure*. 2005;11:S177.
- Arena R, Peberdy M, Tevald M. Prognostic Value of Resting End-Tidal Carbon Dioxide in Patients with Heart Failure. *Medicine and Science in Sports and Exercise*. 2005;37:S228.
- Fei D, Arena R, Arrowood J, Chang Y, Kraft K. Relationship between arterial stiffness and heart rate recovery in apparently healthy adults. *Circulation*. 2005;111:e339.
- Arena R, Peberdy M, Tevald M. Prognostic value of end-tidal carbon dioxide during exercise in heart failure. *Circulation*. 2005;111:e339.
- Kraft K, Shao X, Arena R, Fei D. Improved aortic stiffness assessment in the elderly using multi-site flow displacement. *Proc. Intl. Soc. Mag. Reson. Med*. 2005;13:601.
- Shao X, Fei D, Arena R, Kraft K. Test-retest repeatability of a rapid aortic wave velocity technique. *Proc. Intl. Soc. Mag. Reson. Med*. 2005;13:1723.
- Arena R, Guazzi M, Myers J. Prognostic Value of Cardiopulmonary Exercise Testing in a Group of Female Patients with Heart Failure. *Journal of the American College of Cardiology*. 2005;45 (Suppl A): 159A.
- Arena R, Arrowood J, Fei D, Kraft K. Relationship between Resting Heart Rate and Aortic Wave Velocity in Apparently Healthy Individuals. *Journal of the American College of Cardiology*. 2005;45 (Suppl A): 261A.
- Arena R, Guazzi M, Myers J. Prognostic value of cardiopulmonary exercise testing in heart failure patients with preserved systolic function. *Circulation*. 2004;110 (Suppl III):III-534.
- Arena R, Guazzi M, Myers J. Impact of beta-blockade use on the prognostic value of cardiopulmonary exercise testing in patients with heart failure. *Journal of Cardiopulmonary Rehabilitation*. 2004;24:350.

- Arena R, Arrowood J, Fei D, Shao X, Kraft K. Effect of Aerobic Exercise Training on Aortic Wave Velocity in Obese Subjects. *Journal of Cardiopulmonary Rehabilitation*. 2004;24:352.
- Arena R, Arrowood J, Fei D, Kraft K. Baseline Predictors of Maximal Oxygen Consumption in Apparently Healthy Individuals *Journal of Cardiopulmonary Rehabilitation*. 2004;24:358.
- Guazzi M, Arena R, Myers J. Prognostic value of cardiopulmonary exercise testing in heart failure patients with preserved systolic function. *Journal of Cardiac Failure*. 2004;10 (Suppl 4):S106.
- Arena R, Myers J, Varughese E, Peberdy M, Aslam S. VE/VCO₂ at Ventilatory Threshold and Peak Exercise: A Prognostic Comparison. *Medicine and Science in Sports and Exercise*. 2004;36:(Suppl 5):S27-S28.
- Myers J, Arena R, Varughese E, Aslam S, Peberdy M. Impact of time past exercise testing on prognostic variables in patients with heart failure. *Eur J Cardiovasc Prev Rehabil*. 2004;11 (Suppl):67.
- Arena R, Myers J, Aslam S, Varughese E, Peberdy M. Influence of heart failure etiology on the prognostic value of peak oxygen consumption and the minute ventilations-carbon dioxide production slope. *Journal of the American College of Cardiology*. 2004;43(Suppl A):168A.
- Arena R, Myers J, Varughese E, Peberdy M, Aslam S. Influence of subject effort on the prognostic ability of peak VO₂ and VE/VCO₂ slope in patients with heart failure. *Journal of Cardiopulmonary Rehabilitation*. 2003;23:371.
- Arena R, Myers J, Varughese E, Peberdy M, Aslam S. Prognostic comparison of the VE/VCO₂ ratio and slope in patients with heart failure. *Journal of Cardiopulmonary Rehabilitation*. 2003;23:370.
- Tevald M, Arena R, Turner T, Peberdy M. Prognostic value of phase one oxygen consumption on-kinetics in the heart failure population. *Medicine and Science in Sports and Exercise*. 2003;35:(Suppl 5):S352.
- Arena R, Myers J, Aslam S, Varughese E, Peberdy M. Technical Considerations Related to the VE/VCO₂ Slope in Patients with Heart Failure. *Medicine and Science in Sports and Exercise*. 2003;34:(Suppl 5):S353.

- Aslam S, Arena R, Myers J, Varughese E, Peberdy M. Peak VO_2 and VE/VCO_2 slope in patients with heart failure: A prognostic comparison. *Journal of the American College of Cardiology*. 2003;41(suppl A):216A.
- Arena R, Greenspan N, Mackles MJ. Comparison of Pulmonary Function Test Parameters in Predicting Treadmill and 6 Minute Walk Test Performance. *Cardiopulmonary Physical Therapy Journal*. 2003;14:20.
- Arena R, Humphrey R, Peberdy M. Test-Retest Reliability of Resting End-Tidal Carbon Dioxide in Patients With Heart Failure. *Cardiopulmonary Physical Therapy Journal*. 2003;14:20-21.
- Arena R, Greenspan N, Haas JE. Safety and Efficacy of Pulmonary Rehabilitation in Elderly Females with Chronic Obstructive Pulmonary Disease. *Journal of Cardiopulmonary Rehabilitation*. 2002;22:347.
- Arena R, Humphrey R, Peberdy M. Relationship Between Rating of Perceived Exertion and Quality of Life in Heart Failure. *Journal of Cardiopulmonary Rehabilitation*. 2002;22:360.
- Arena R, Humphrey R, Peberdy M. Difference Between Ventilatory expired gas measures during maximal and sub-maximal exercise in heart failure. *The Journal of Heart Failure*. 2002;7:48.
- Arena R, Tevald M, Humphrey R, Peberdy M. Influence of etiology on ventilatory expired gas measures and prognosis in heart failure. *Medicine and Science in Sports and Exercise*. 2002;34:(Suppl 5):S291.
- Arena R, Humphrey R. Partial pressure of end-tidal carbon dioxide production as a predictor of hospitalization in heart failure. *Circulation*. 2001;104:II-554.
- Arena R, Humphrey R. Prognostic ability of VE/VCO_2 slope calculations using different exercise-test time intervals in subjects with heart failure. *Journal of Cardiopulmonary Rehabilitation*. 2001;21:309.
- Arena R, Humphrey R. VE/VCO_2 slope as a continuous and categorical variable in assessing cardiac-related hospitalization in heart failure. *Journal of Cardiopulmonary Rehabilitation*. 2001;21:309.

- Arena R, Humphrey R. The minute ventilation-carbon dioxide production relationship in congestive heart failure: determination of appropriate expression. *Clinical and Investigative Medicine*. 2001;24(Suppl 3):S51.
- Arena R, Humphrey R, Peberdy M. Comparison of peak VO_2 to VE/VCO_2 slope in assessing prognosis in chronic heart failure. *Medicine and Science in Sports and Exercise*. 2001;33(Suppl 5):S304.
- Arena R, Humphrey R, Peberdy M. Relationship between the VE/VCO_2 slope and subjective dyspnea rating in subjects with congestive heart failure during symptom-limited exercise testing. *Journal of Cardiopulmonary Rehabilitation*. 2000;20:289.
- Humphrey R, Arena R. Exercise training during intravenous inotrope infusion in heart failure patients awaiting heart transplantation. *Medicine and Science in Sports and Exercise*. 2000;32(Suppl 5):S336.
- Arena R, Humphrey R. Relationship between VE/VCO_2 slope and percentage of age predicted maximal heart rate achieved in subjects with heart failure. *Medicine and Science in Sports and Exercise*. 2000;32(Suppl 5):S142.
- Arena R, Humphrey R. Discrepancy between calculated and measured peak oxygen consumption in heart failure patients. *Journal of Cardiopulmonary Rehabilitation*. 1999;19:380.

Book Chapters

- Ozemek C, Arena R, Bond S, Daniels K. Exercise and Rehabilitation. In: Color Atlas of Heart Failure. McGraw Hill. In Press
- Sagner M, McNeil A, Arena R. The next chapter: the future of healthcare and lifestyle intervention. In: Preventive Medicine – Lifestyle in the Prevention and Treatment of Chronic Disease, 3rd Edition. Elsevier, June 2017.
- Sorino C, Arena R, Di Paco A, Forman D. Cardiopulmonary exercise testing. In: Diagnostic Evaluation of the Respiratory System. Jaypee Brothers, Medical Publishers Pvt, December 2016.

- Lavie CJ, Milani RV, Arena R. Exercise-based cardiac rehabilitation: outcomes and expectations. In: Lifestyle Medicine. CRC Press, March 2013.
- Arena R. Section II - Exercise testing: Pre-exercise evaluations. In: ACSM's Guidelines for Exercise Testing and Prescription, 9th ed. Lippincott Williams & Wilkins, February 2013.
- Arena R. Section II - Exercise testing: Health related physical fitness testing and interpretation. In: ACSM's Guidelines for Exercise Testing and Prescription, 9th ed. Lippincott Williams & Wilkins, February 2013.
- Arena R. Section II - Exercise testing: Clinical exercise testing. In: ACSM's Guidelines for Exercise Testing and Prescription, 9th ed. Lippincott Williams & Wilkins, February 2013.
- Arena R. Section II - Exercise testing: Interpretation of clinical exercise testing data. In: ACSM's Guidelines for Exercise Testing and Prescription, 9th ed. Lippincott Williams & Wilkins, February 2013.
- Grinnan DC, Arena R, Bogaard HJ. The role of exercise in the prognosis, diagnosis and management of pulmonary arterial hypertension. In Pulmonary Hypertension: The Present and future. Shelton: People's Medical Publishing House, June 2011.
- Stone JA, Clark AM, Arena R. Cardiac rehabilitation as chronic disease care. In Canadian Association for Cardiac Rehabilitation (Ed.), Canadian Guidelines for Cardiac Rehabilitation and Cardiovascular Disease Prevention: Translating Knowledge into Action -3rd Edition. Winnipeg: Canadian Association for Cardiac Rehabilitation, October 2009.
- Arena R and Humphrey R. Cardiac transplant. In American College of Sports Medicine (Ed.), ACSM's Exercise Management for Persons with Chronic Diseases and Disabilities-3rd Edition. Champaign: Human Kinetics, August 2009.

REVIEW ACTIVITY

American Heart Journal, Chest, Circulation, European Heart Journal, European Journal of Heart Failure, International Journal of Cardiology, Journal of the American College of Cardiology, Journal of Cardiac Failure, Journal of Cardiopulmonary Rehabilitation and Prevention, Journal of Heart and Lung Transplantation, Journal of Internal Medicine, Journal of

Obesity, Medicine and Science in Sports and Exercise, Medical Science Monitor, Physical Therapy, SLACK Incorporated, American Association of Cardiovascular and Pulmonary Rehabilitation Clinical Practice Guidelines

INTERVIEWS

A Breath of Fresh Air, Empowering Patients with Lung Cancer, Today in PT, April 2, 2007

"Obesity Paradox" Not Consistent for Overweight Heart Failure Patients, Reuters Health, November 11, 2009

Defining the Optimal Prognostic Window for Cardiopulmonary Exercise Testing in Patients with Heart Failure, MDLinx, March 22, 2010

Quantifying Exertion Level During Exercise Stress Testing Using Percentage of Age-Predicted Maximal Heart Rate, Rate Pressure Product, and Perceived Exertion, MDLinx, December 9, 2010

Physical Fitness and Primary Prevention--Kenneth Cooper, AHA Health Science News, November 18, 2013

American Heart Association Issues Guidance to Improve Health Screening in the Workplace, AHA/ASA Newsroom, July 10, 2014

Supervision of Exercise Testing by Nonphysicians: American Heart Association Featured Video, July 17, 2014

Employers are increasingly using Workplace Health Screenings. American Heart Association, September 25, 2014

Healthy Lifestyle Interventions. Mayo Clinic Proceedings, May 1, 2015

Indiana, Chicago researchers measure the country's physical fitness, Times of Northwest Indiana, May 29, 2015

Green fitness area proposed for old skate park site in Grant Park, Chicago Tribune, February 16, 2016

PhD alumnus Ross Arena reframes the discussion: life span becomes health span, VCU School of Medicine, August 18, 2017

EVIDENCE OF MENTORSHIP

Mentorship of Students

Thesis and Dissertation Committees

School of Medicine: Virginia Commonwealth University*

- Thesis Committee, The effect of cobalt protophyrin and cobalt Chloride on heme oxygenase expression and protection from deoxycholate-induced apoptosis, Tina Lawson (2010)
- Dissertation Committee Chair, The use of cardiopulmonary exercise testing in the detection of myocardial ischemia, Sherry Pinkstaff (2008-2010)
 - Significant mentorship role: Weekly communication over specified time period
 - Provided mentorship in generating research questions, data analysis, scientific writing, future career considerations
 - Outcome: Successful completion of doctoral degree with three peer reviewed publications and two additional manuscripts in review at this point (Dr. Pinkstaff first author on all)
- Thesis Committee, Development of a software application to measure the diameter of the aorta and to verify if diameter is a predictor of mean wave velocity, Sumeet Sudhir Shelar (2007)
- Dissertation Committee, The role of the microcirculation in skeletal muscle dysfunction associated with Chronic Heart Failure, Michael Tevald (2003-2005)
- Dissertation Committee, Effects of emphysema and chronic hypoxemia on skeletal muscle oxygen supply and demand, John Lowman (2002-2004)
- Thesis Advisor, Short Term Reliability of Oxygen Uptake On-Kinetics, Brian Weber (2004)

* All students listed above successfully completed their degrees; contact during specified periods of time variable (weekly to monthly); provided mentorship in generating research questions, data analysis and scientific writing

School of Nursing: Virginia Commonwealth University

- Dissertation Committee, Health promoting lifestyle and quality of life in patients with chronic obstructive pulmonary disease, Saichol Janwijit (2005-2007)
 - Variable degree of contact during specified time period (weekly to monthly)
 - Successful completion of doctoral degree

School of Education: Virginia Commonwealth University

- Thesis Committee: Effect of insulin resistance on oxygen uptake kinetics following an exercise intervention. Katie Bowen (2010-Present)
 - Variable degree of contact that is ongoing (weekly to monthly)
 - Provided mentorship in generating research questions and data analysis
 - Preparing for data collection phase of project

School of Medicine: University of New Mexico

- Mentor for Medical Student Research Project: Cardiac Rehabilitation Outcomes in Hispanic Patients with Heart Disease: Linsey Sandoval and Edward Romero (2011-2013)
 - Variable degree of contact that is ongoing (weekly to monthly)
 - Provided mentorship in generating research questions and data analysis

Department of Physical Therapy, College of Applied Health Sciences, University of Illinois at Chicago

- Dissertation Committee, Exercise Testing and Training for Cardiometabolic Health, Ahmad Sabbahi (2016-Present)
 - Mentorship role: monthly communication over specified time period
 - Provided mentorship in generating research questions, scientific writing, future career considerations

Department of Kinesiology and Nutrition, College of Applied Health Sciences, University of Illinois at Chicago

- Dissertation Committee Chair, Health Literacy for Health Living Interventions, Amy McNeil (2016-Present)
 - Significant mentorship role: Weekly communication over specified time period
 - Provided mentorship in generating research questions, data analysis, scientific writing, future career considerations
 - Outcome: As of August 2016, Mrs. McNeil is an author on 11 accepted peer-reviewed publications and two book chapters.

Federal University of Health Sciences of Porto Alegre

- Dissertation Committee, Inspiratory muscle training reduces blood pressure and sympathetic activity in hypertensive patient: A randomized controlled trial, Janaina Ferreira (2010-2012)
 - Variable degree of contact that is ongoing (weekly to monthly)
 - Provided mentorship in generating research questions and data analysis

- Successful completion of doctoral degree

University of Brasilia

- Faculty Advisor, Vinicius Z. M. da Silva (2011-2014)
 - Variable degree of contract that is ongoing (weekly to monthly)
 - Provide mentorship in generating research questions, data analysis and abstract/manuscript preparation.

Student Advisor Responsibilities

- Primary advisor to ~15 students per year within the Physical Therapy Program at Virginia Commonwealth University (2002-2011)
 - Variable degree of contact (weekly to monthly)
 - Provide guidance on achieving success within the physical therapy program and advice on career choices
 - Provide laboratory/clinical experience for students interested in cardiopulmonary rehabilitation
- Significant advisory role with students within Division of Physical Therapy at the University of New Mexico (2011-2013)
 - Variable degree of contact (weekly to monthly)
 - Initiated Director Lunches on a monthly basis in September 2011
 - Provide guidance on achieving success within the physical therapy program and advice on career choices

Mentorship of Faculty and Peers

- Heather Hettrick, PT, PhD, Assistant Professor, Department of Physical Therapy, New York University (2001-2002)
 - Weekly contact over specified time period
 - Assisted Dr. Hettrick with guidance on dissertation
 - Outcome: Successful completion of doctoral degree
- Emmy Wheeler, PT, DPT, MS, Assistant Professor, Department of Physical Therapy, Virginia Commonwealth University (2006-2009)
 - Weekly contact over specified time period
 - Primary responsibilities for Mrs. Wheeler is teaching but expressed interest in research
 - Provided mentorship in generating research questions, data analysis and scientific writing
 - Outcome: Two peer reviewed publications and several abstracts/scientific presentations at national conferences; Mrs. Wheeler now working on several new projects independently
- Lori Michener, PT, PhD, Associate Professor, Department of Physical Therapy, Virginia Commonwealth University (2009-2010)

- Daily to weekly contact over specified period of time
- Provided guidance on applying for promotion to professor with tenure
- Served as chair of Dr. Michener's promotion committee
- Outcome: Promotion review in progress; has successfully passed through the department committee, department chair and school committee

- Paul Chase, MEd, LeBauer Cardiovascular Research Foundation, Greensboro, NC (2006-2013)
 - Weekly to monthly contact that is ongoing
 - Providing guidance on research projects related to clinical exercise testing and rehabilitation
 - Outcome: Thirty collaborative peer-reviewed publications to date; several new collaborative projects in development; Mr. Chase is now enrolled in a PhD program

- Daniel Forman, MD, Brigham and Women's Hospital, Cardiovascular Division (2008-2014)
 - Weekly to monthly contact that is ongoing
 - Providing guidance on research projects related to clinical exercise testing and rehabilitation
 - Outcome: Six collaborative peer-reviewed publications to date; several new collaborative projects in development

- Gerson Cipriano Jr, PhD, PT, Physical Therapy Division, University of Brasilia, Brazil; Ergometry Division, Cardiology (2009-2014)
 - Weekly to monthly contact that is ongoing
 - Providing guidance on research projects related to clinical exercise testing and rehabilitation
 - Successfully completed a post-doctoral experience under my guidance at the University of New Mexico from 2012-2013
 - Outcome: Six collaborative peer-reviewed publications to date; several new collaborative projects in development

- Bart Cox, MD, Assistant Professor, Division of Cardiology, University of New Mexico (2011-2013)
 - Weekly to monthly contact that is ongoing
 - Assists Dr. Cox in exercise testing interpretation
 - Outcome: Dr. Cox has demonstrated a significant improvement in comfort level in cardiopulmonary exercise test interpretation

- Physical Therapy Faculty and Staff, University of New Mexico (2011-2013)
 - As director/chief, weekly contact with all faculty that was ongoing
 - Guidance in professional development and promotion

- Outcome: Successful promotion of all three administrators from 2011-2012 and one faculty member to professor with tenure
- Luciana Maria Malosá Sampaio, PhD, PT, Rehabilitation Sciences Master's Program, Nove de Julho University, Sao Paulo, Brazil (2014)
 - Primary Advisor: Fulbright Scholar
 - Daily to monthly contact that is ongoing
 - Providing guidance for new research projects
 - Outcome: Several collaborative research projects in development; several original research papers submitted and in review
- Audrey Borghi Silva, PhD, PT, Professor, Federal University of Sao Carlos, Sao Paulo, Brazil (2009-2015)
 - Weekly to monthly contact that is ongoing
 - Providing guidance on research projects related to clinical exercise testing and rehabilitation
 - Outcome: More than 50 collaborative peer-reviewed publications to date; several new collaborative projects in development
- Larry Cahalin, PT, PhD, Assistant Professor, Department of Physical Therapy, Northeastern University (2009-2015)
 - Weekly to monthly contact that is ongoing
 - Providing guidance for new research projects
 - Provided guidance on applying for promotion to associate professor with tenure
 - Outcome: Several collaborative research projects in development; preparing to apply for promotion with tenure
- Department of Physical Therapy Faculty and Staff, University of Illinois Chicago (2013-Present)
 - As Head, weekly contact with all faculty that is ongoing
 - Guidance in professional development and promotion
- Department of Kinesiology and Nutrition Faculty and Staff, University of Illinois Chicago (2015-Present)
 - As Interim Head, weekly contact with all faculty that is ongoing
 - Guidance in professional development and promotion
- Karen Vuckovic, PhD, RN, Clinical Assistant Professor, College of Nursing, University of Illinois Chicago (2014-2015)
 - Monthly contact that is ongoing
 - Providing guidance for new research projects
 - Provided guidance on career track
- Dejana Popovic, MD, PhD, Associate Professor, College of University of Belgrade (2016-Present)

- Monthly contact that is ongoing
- Providing guidance for current and new research projects

Special Appointments with Significant Mentorship Role

- Special Volunteer, Intramural Branch of the National Heart, Lung and Blood Institute, Bethesda, Maryland (2007-2013)
 - Weekly to monthly contact that is ongoing
 - Provided mentorship with respect to functional assessments in clinical trials to several researchers
 - Primary mentorship role with Kevin Smith, RN, MS who runs the cardiopulmonary exercise testing laboratory at NHLBI
 - Outcome: Four collaborative peer-reviewed publications to date; two collaborative projects are currently being conducted
- International Associate Professor, Interdisciplinary Graduate Program, University of Brasilia, Brasilia, Brasil (2010-2014)
 - Weekly to Monthly contact that is ongoing
 - Provided mentorship in generating research questions, data analysis and scientific writing to several researchers
 - Outcome: Nine collaborative peer-reviewed publications to date; several new collaborative projects in development
- Associate Director of Research, Cardiac Wellness Institute of Calgary, Calgary, Canada (2010-Present)
 - Weekly contact that is ongoing
 - Provided mentorship in generating research questions, data management and analysis and scientific writing to several researchers
 - Outcome: Numerous collaborative abstracts and national/international scientific presentations to date; Numerous manuscripts published with others in review/preparation; several new collaborative projects in development