## CURRICULUM VITAE, MAY 2018 Ross Arena, PhD, PT, FAHA, FESC

### PERSONAL INFORMATION

Name Ross Anthony Arena

Date of birth: June 28, 1970 in Norwalk, Connecticut, USA

Home Address: 100 E. 14<sup>th</sup> 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, Metabetes 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**

2018	Adjunct Proffessor, Department of Cardiac Sciences, Cumming School of Medicine, University of Calgary, Calgary, AB, Canada
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	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.
2014-2018	Adjunct Professor Appointment, Department of Physical Medicine and Rehabilitation, Feinberg School of Medicine, Northwestern University, Chicago, IL
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

**European Society of Cardiology** 

Heart Failure Association of the European Society of Cardiology

### **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 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 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) ACSM President's Lecture: ACSM Annual Conference, San Diego, 2015 CA, May 2015 Personality of the Year Award, Department of Physical Therapy of 2015 the Sao Paolo State Society of Cardiology, Sao Paolo, 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
- 2017 Research Consultant, Arena Pharmaceuticals, San Diego, CA

### **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)

 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)
- UIC Globalization Task Force (2017)

## 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)
- Council on Lifestyle & Cardiometabolic Health Physical Activity Committee (2017)
- Program Planning Chair, Worksite Heath Science and Practice,
   2018 AHA Epi/Lifestyle Scientific Sessions Meeting (2018)

### 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)

The Physical Activity and Health Innovation Collaborative (PA IC), Roundtable on Obesity Solutions (of the Food and Nutrition Board, Health and Medicine Division, National Academies of Sciences, Engineering, and Medicine

Task force member (2017-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, 9<sup>th</sup> International Conference on Diet and Activity Methods, Brisbane, Australia (2015)

Scientific Board Member, International Scientific Conference: Effects of Applying Physical Activity on Anthropological Status of Children, Adolescents and Adults" which took place at the Faculty of Sport and Physical Education, University of Belgrade, Belgrade, Serbia (2017)

### 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, placebocontrolled, 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 (Coinvestigator)
- 2012 Exercise therapy to reduce heart failure symptoms; sorting mechanisms and benefits. VA Merit Award, \$1,100,000 (Coinvestigator)
- 2012 Soft-hard technologies to assist the accessibility in patients with heart failure: The effect of a five week electrical myostimulation program. Brasilian 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
- Co-Investigator: Therapeutic strategies to delay/prevent
   cardiovascular complications in subjects with pre-diabetes and type
   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. UIC Human Augmentics Seminar, Chicago, IL, April 2018.
- The Role of Exercise Assessments in Pulmonary Arterial Hypertension: From Research to Clinical Practice, Arena Pharmaceuticals, San Diego, CA, December 2017.
- Clinical Utility of Cardiorespiratory Fitness, Malcom X Community College, Chicago, IL, September 2017.
- Creating the Healthy Living Healthcare System to Combat Chronic Disease. Cardiology Grand Rounds, Heart and Vascular Institute, University of Pittsburg, Pittsburg, PA. August 2017.
- 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 Paolo, Brazil, May 2016.
- Revisiting CPX Applications: Aligning Evidence with Clinical Practice. Brazilian Society of Cardiology Annual Meeting, Sao Paolo, 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. 4<sup>th</sup> 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. 13<sup>th</sup> 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. 9<sup>th</sup> International Conference on Diet and Activity Methods, Brisbane, Australia, September 2015.
- Emerging Assessments of Cardiopulmonary Fitness: Respiratory Muscle Performance. 9<sup>th</sup> 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 Paolo, 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 Paolo, 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. 30<sup>th</sup> Uruguayan Cardiology Congress, Montevideo, Uruguay, December 2014.
- New Indications for Cardiac Rehabilitation Programs. 30<sup>th</sup>
   Uruguayan Cardiology Congress, Montevideo, Uruguay, December 2014.
- Worksite Health and Wellness Programs as a Model for Primary Prevention Cardiac Rehabilitation. 30<sup>th</sup> 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 Noncardiologist, 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. Precolloquium 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. 7<sup>th</sup> Cardiopulmonary Rehabilitation Workshop in conjunction with 18<sup>th</sup> 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 2<sup>nd</sup> world cardiovascular, diabetes, and obesity online conference, September 2012.
- Exercise guidelines for heart failure in nursing homes. Heart Failure Society of American 16<sup>th</sup> 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. 1<sup>st</sup> 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? 16<sup>th</sup> International Symposium of Respiratory and Intensive Care Physical Therapy, Rio De Janeiro, Brasil, May 2012
- Clinical indications and utility of cardiopulmonary exercise testing.
   16<sup>th</sup> 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. 16<sup>th</sup> International Symposium of Respiratory and Intensive Care Physical Therapy, Rio De Janeiro, Brasil, May 2012
- Cardiopulmonary exercise testing in patients with left ventricular dysfunction. 16<sup>th</sup> International Symposium of Respiratory and Intensive Care Physical Therapy, Rio De Janeiro, May 2012
- International colloquium session. 16<sup>th</sup> 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 1<sup>st</sup> 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 (9<sup>th</sup> 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: 14º International symposium of respiratory physiotherapy and physiotherapy intensive care. Recife, Brazil, September 2008
- Measurement of ventilatory efficiency during exercise.
   Preconference symposium: 14º International symposium of respiratory physiotherapy and physiotherapy intensive care.
   Recife, Brazil, September 2008
- The prognostic value of cardiopulmonary exercise testing. Preconference symposium: 14º International symposium of respiratory physiotherapy and physiotherapy intensive care. Recife, Brazil, September 2008
- Functional capacity assessment in the clinical setting. 14°
   International symposium of respiratory physiotherapy and physiotherapy intensive care. Recife, Brazil, September 2008
- The prognostic value of cardiopulmonary exercise testing. 14° International symposium of respiratory physiotherapy and physiotherapy intensive care. Recife, Brazil, September 2008
- International Colloquium: International perspectives of cardiopulmonary physical therapy. 14º 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 Paolo, Pulmonary Function and Clinical Exercise Physiology Unit, Department of Medicine, Respiratory Division, Sao Paolo, Brazil, October 2007
- General Concepts of Aerobic Exercise Training and Prescription.
   17<sup>th</sup> Brazilian Physical Therapy Conference, Sao Paolo, Brazil,
   October 2007
- The Clinical Importance of Cardiopulmonary Exercise Testing and Exercise Training in Patients with Heart Failure. 17<sup>th</sup> Brazilian Physical Therapy Conference, Sao Paolo, Brazil, October 2007

- The Clinical Value of Cardiopulmonary Exercise Testing in Patients with Heart Failure. Federal University of Sao Paolo, Surgical Cardiology, Department of Cardiology, Sao Paolo, 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.
- 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

- The moderating role of perceived barriers in predicting the impact of intention on cardiac rehabilitation participation. Society of Behavioral Medicine, 39<sup>th</sup> Annual Meeting and Scientific Sessions. New Orleans, LA, April 2018 (S).
- Adoption of workplace policies to improve heart health: results from the first and second year of the American Heart Association's Workplace Health Achievement Index. AHA Epi/Lifestyle, New Orleans, LA, March 2018 (S).
- Interleukin-I blockade reduces NT-PROBNP levels in patients with stable heart failye with preserved ejection fraction. ACC Scientific Sessions, Orlando, FL, March 2018 (S).

- Interleukin-1 blockade improves left ventricular performance in decompensated heart failure without increasing myocardial work. ACC Scientific Sessions, Orlando, FL, March 2018 (S).
- Interleukin-1 blockade reduces patient perceptions of exertion and dyspnea among patients with recently decompensated systolic heart failure: A subgroup analysis of the REDHART trial. ACC Scientific Sessions, Orlando, FL, March 2018 (S).
- Independent valiation of a cardiorespiratory fitness prediction model. ACC Scientific Sessions, Orlando, FL, March 2018 (S).
- Addressing outcome prediction in heart failure using contemporary equations for maximal oxygen consumption. AHA Scientific Sessions, Anaheim, CA, November 2017 (S).
- Interleukin-1 blockade in heart failure with preserved ejection fraction: the diastolic heart failure anakinra response trial (DHART2). AHA Scientific Sessions, Anaheim, CA, November 2017 (S).
- Mortality in coronary artery disease following cardiac rehabilitation: focus on weight management or lean mass? AHA Scientific Sessions, Anaheim, CA, November 2017 (S).
- Cardiac rehabilitation in premature coronary artery disease. AHA Scientific Sessions, Anaheim, CA, November 2017 (S).
- Predicting cardiorespiratory fitness at cardiac rehabilitation completion: patient factors that deserve special attention. AHA Scientific Sessions, Anaheim, CA, November 2017 (S).
- A flattening oxygen consumption trajectory reflects higher disease severity and poor prognosis in patients with heart failure.
   Circulation. AHA Scientific Sessions, Anaheim, CA, November 2017 (S).
- BMI is an independent determinant of exercise intolerance in obese patients with HFpEF. Obesity Week 2017, American Society for Metabolic and Bariatric Surgery. Washington, DC, November 2017 (S).
- Serial assessment of peak oxygen consumption in patients with heart failure undergoing cardiac resynchronization therapy: predicting and tracking level of echocardiographic improvement. Venice Arrhythmias, Venice, Italy, October 2017 (S).

- Utilization and impact of cardiac rehabilitation in premature and non-premature coronary artery disease. Canadian Cardiovascular Congress, 70th Annual Meeting of the Canadian Cardiovascular Society, Vancouver, BC, October 2017 (S).
- Predicting cardiorespiratory fitness improvement at cardiac rehabilitation completion: patient factors that deserve special attention. Canadian Cardiovascular Congress, 70th Annual Meeting of the Canadian Cardiovascular Society, Vancouver, BC, October 2017 (S).
- Incorporating competitive endurance event training in cardiac rehabilitation: Is it safe? Canadian Cardiovascular Congress, 70th Annual Meeting of the Canadian Cardiovascular Society, Vancouver, BC, October 2017 (S).
- 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).
- An Interpretable Data-Driven Approach for the Stratification of the Cardiorespiratory Fitness. 19th International Conference on Applied Machine Intelligence and Informatics, Bangkok, Thailand, August 2017 (S).
- A non-exercise based VO2Max prediction using FRIEND database with a neural network. 39th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), Jeju Island, South Korea, July 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 cardiorespirartory 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 betablockade 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 VO₂max 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 centerbased 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. 12<sup>th</sup> 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 failue: 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 16<sup>th</sup> 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. 16<sup>th</sup> 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. 35<sup>th</sup> 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-1α 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-inhinition: 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 percentpredicted 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 indicatory 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 31<sup>st</sup> 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. 15<sup>th</sup> 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. 15<sup>th</sup> 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 VO<sub>2</sub>:
   Additive value of heart rate recovery and the VE/VCO<sub>2</sub> 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 69<sup>th</sup> National Congress, Rome. Italy,
   December 2008. (S)
- Exercise oscillatory breathing in diastolic heart failure: prevalence and prognostic insights. Society of Cardiology 69<sup>th</sup> 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 69<sup>th</sup> 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 69<sup>th</sup> 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 69<sup>th</sup> 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 69<sup>th</sup> 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 nonarrhythmic 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/VCO<sub>2</sub> 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 13<sup>th</sup> annual meeting, Richmond, VA, March 2008. (S)
- Does Peak Oxygen Pulse Complement Peak VO<sub>2</sub> 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 CO<sub>2</sub> 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 Friedriech's Ataxia and is correlated with clinical rating scales and GAA repeat length. 3<sup>rd</sup> 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-terminalproB-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 66<sup>th</sup> 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 66<sup>th</sup> National Congress, Rome. Italy, December 2005. (S)

- The prognostic value of cardiopulmonary exercise testing in patients with diastolic heart failure. Italian Society of Cardiology 66<sup>th</sup> National Congress, Rome. Italy, December 2005. (S)
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- Impact of beta-blockade use on the prognostic value of cardiopulmonary exercise testing in patients with heart failure.
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- VE/VCO<sub>2</sub> 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/VCO<sub>2</sub> 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 VO<sub>2</sub> and VE/VCO<sub>2</sub> slope in patients with heart failure. AACVPR National Meeting, Kansas City, MO, October 2003. (S)
- Technical Considerations Related to the VE/VCO<sub>2</sub> Slope in Patients with Heart Failure. ACSM National Meeting, San Francisco, CA, June 2003. (S)
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- Relationship between Rating of Perceived Exertion and Quality of Life in Heart Failure. AACVPR National Meeting. Charlotte, North Carolina, September 2002. (S)
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- Difference between ventilatory expired gas measures during maximal and sub-maximal exercise in heart failure. International Academy of Cardiology: 8<sup>th</sup> World Congress on Heart Failure – Mechanisms and Management. Washington, DC, July 2002. (S)
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- Comparison of peak VO<sub>2</sub> to VE/VCO<sub>2</sub> slope in assessing prognosis in chronic heart failure. ACSM National Meeting, Baltimore, MD, June 2001. (S)
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### Web of Science Citation Metrics

Citations: 9,171

Citing Articles: 5,695

Avg Citations per Article: 18.25

H-index: 45

# Google Scholar Citation Metrics

Citations: 34,300 H-index: 63 G-Index: 262

### ResearchGate

Citations: 12,388 H-index: 52

RG Score: 50.31 (99.76% publications, 0.24% followers)

## **UICollaboratory Research Profiles**

Citations: 9,831 H-index: 47

Co-Author Collaborations: 1,047

## Papers published

Non-Refereed Publications

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

## Role: MAGGIC Investigator

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## **Book Chapters**

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- Popvic D, <u>Arena R</u>, Bjelobrk M. The significance and types of surgical tests in the examination of functional status and diagnosis of certain cardiovascular diseases. In: Assessment of functional abilities and principles of cardiac rehabilitation. Academy of Science and Arts of Bosnia and Herzegovina, April 2018.

- Sagner M, McNeil A, <u>Arena R</u>. The next chapter: the future of healthcare and lifestyle intervention. In: Preventive Medicine – Lifestyle in the Prevention and Treatment of Chronic Disease, 3<sup>rd</sup> Edition. Elsevier, June 2017.
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- 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-3<sup>rd</sup> 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 manunscripts 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 Advisor, Technology in Rebailitation Sciences, Samantha Bond (2018)
  - o Mentorship role: monthly communication over specified time period
  - Provide primary mentorship in generating research questions, scientific writing, course sequencing within program
- Dissertation Committee, Exercise Testing and Training for Cardiometabolic Health, Ahmad Sabbahi (2016-Present)
  - Mentorship role: monthly communication over specified time period
  - Provide mentorship in generating research questions, scientific writing, future career considerations

- Dissertation Committee, Rehabilitation in Bariatric Patients, Richard Severin (2016-Present)
  - Mentorship role: communication over specified time period as needed
  - Provide 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 (2016-2017)
  - 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.
- Dissertation Committee, Ahmad Sabbahi (2017-Present)
  - Mentorship role: monthly communication over specified time period
  - Provide mentorship in generations research questions, data analysis, scientific writing, future career considerations
  - Outcome: As of October 2017, Mr. Sabbahi has 2 peer-reviewed publications.
- Dissertation Committee, Richard Severin (2017-Present)
  - Mentorship role: monthly communication over specified time period
  - Provide mentorship in generations research questions, data analysis, scientific writing, future career considerations

# University of Calgary

- Dissertation Committee, George Hongwei Liu (2017-Present)
  - Variable degree of contact that is ongoing (weekly to monthly)
  - Provided mentorship in generating research questions and data analysis

## 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)
  - o 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
  - o 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 form 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
  - o 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
  - o 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