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Dual Citizenship: USA and United Kingdom

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POSITION	Assistant Professor of Medicine The Warren Alpert Medical School of Brown University	09/2015 - Present
	Director, Structural and Interventional Echocardiography Associate Director, Echocardiography Laboratory, Rhode Island Hospital	09/2015 - Present
	Attending Cardiologist Rhode Island Hospital and The Miriam Hospital	09/2015 - Present
CURRENT CLINICAL AND ACADEMIC ROLES AT BROWN UNIVERSITY	(1.) Directing the structural imaging program at Brown. Primary operator for all advanced structural echocardiographic imaging support for the TAVR, Mitraclip, WATCHMAN, PVL closure, and other complex structural heart procedures. Training fellows and faculty in advanced structural and interventional and structural echocardiography. Provide logistical support for the Brown structural Program.	09/2015-Present
	(2.) Co-PI on Clinical Translational Research Program Pilot Project Program grant focusing on post-hospitalization community pharmacy medication therapy management and its impact on heart failure outcomes. Co-PI with Prof Tracey Taveira, Professor of Pharmacy, University of Rhode Island and Adjunct Professor of Medicine, Brown Univ.	2017-Present
	(3.) Co-Director (with Dr Frank Sellke) of the Lifespan-Wuhan Union Hospital, Tongji Medical College and Huazhong University of Science and Technology Cardiovascular Academic Program. Focus on cardiac ultrasound and cardiac surgery involving faculty and trainee exchange programs and collaboration on research projects.	2015-Present
	(4.) Developing advanced echocardiography based clinical/research collaborative programs at Brown, Lifespan, and the Providence VA Medical Center. Co-PI on multiple research protocols and leading the imaging sections of clinical/translational research programs.	2015 - Present
	<i><b><u>(a) Left and right ventricular systolic strain as a predictor of outcomes in acute respiratory failure requiring ventilation, Co-PI with Dr Corey Ventetuolo, Assistant Professor of Medicine, Brown University and the Pulmonary Division</u></b></i>	
	<i><b><u>(b) Association of diastolic dysfunction and acute clinical outcomes in patients undergoing Surgical aortic valve replacement, Co-PI with Dr Afshin Ehsan, Associate Professor of Surgery (Cardiothoracic Surgery), Brown University</u></b></i>	
	<i><b><u>(c) The impact of Magnesium supplements on cardiac structure and function assessed with Cardiac MRI, Co-Pi with Prof Hank Wu, Professor of Medicine and Epidemiology, Brown University, Chief of Cardiology, Providence VA Medical Center</u></b></i>	
EDUCATION	<i><b><u>(d) Impact of mitral annular calcification on the echocardiographic evaluation diastolic function and filling pressures, Co-PI with Dr John Dicky, UMass Medical School, Cardiology Division</u></b></i>	
	<i><b><u>(e) Investigating the impact of adolescent obesity and metabolic syndrome on subclinical Myocardial systolic and diastolic structure and function, collaborating with Dr Sarah de Ferranti, Associate Professor of Pediatrics, Boston Childrens Hospital, Harvard Medical School, Pediatric Cardiology Division, Director, Preventive Cardiology</u></b></i>	
	Masters in Science in Translational Research, MTR (MS) Perelman School of Medicine and Institute for Translational Medicine & Therapeutics University of Pennsylvania, Philadelphia, PA. Diploma Date: 12/18/2015	07/2013–06/2015

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	<b>Master of Public Health, MPH</b> Harvard School of Public Health, Boston, MA Concentration: Quantitative Methods (Epidemiology and Biostatistics) <b>UK-US Fulbright Scholar</b>	08/2002-06/2003
	<b>Bachelor of Medicine &amp; Bachelor of Surgery, BM BCh (MD)</b> Clinical Studies: Oxford Medical School, New College, Oxford, UK Preclinical Studies: University College London Medical School, London, UK	09/1998-06/2004
	<b>Bachelor of Arts, BA Hons</b> Oxford University, Balliol College, Oxford, UK Major: Physiological Sciences <b><u>First Class</u></b> <i>Research Thesis Focus Area: Cardiovascular Pharmacology and Cellular Electrophysiology</i>	10/1995-06/1998
POSTGRADUATE TRAINING, USA	<b>Cardiovascular Medicine Research Fellowship</b> Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA Translational Research in Heart Failure with Preserved Ejection Fraction	01/2012-06/2015
	<b>Cardiovascular Disease Fellowship</b> Hospital of the University of Pennsylvania, Philadelphia, PA Advanced Imaging Track: Adult Echocardiography (Level 3), Cardiac MRI (Level 3) Nuclear Cardiology (Level 2), Cardiac CT (completed Johns Hopkins training course)	07/2009-06/2015
	<b>Internship and Residency in Internal Medicine, ABIM Research Pathway</b> Hospital of the University of Pennsylvania, Philadelphia, PA	06/2007-06/2009
POSTGRADUATE TRAINING, UK	<b>Residency in Internal Medicine</b> The London Postgraduate Hospitals Medical Rotation, London, UK Hammersmith Hospital, Royal Brompton Hospital, National Hospital for Neurology & Neurosurgery, London, UK	08/2005-04/2007
	<b>Internship in Internal Medicine and General Surgery</b> Internal Medicine: John Radcliffe Hospital, Oxford, UK General Surgery: Royal United Hospital, Bath, UK	08/2004-08/2005
LONGITUDINAL CLINICAL TRAINING & PRACTICE	<b>General Cardiology Continuity Clinic</b> Hospital of the University of Pennsylvania, Philadelphia, PA	07/2009-12/2014
	<b>Cardiovascular Imaging Fellow (echo, cardiac MRI, nuclear cardiology, cardiac CT)</b> Hospital of the University of Pennsylvania, Philadelphia, PA	07/2009-06/2015
	<b>Overnight on-call cardiology moonlighter (general/interventional/heart failure/EP services)</b> Hospital of the University of Pennsylvania, Philadelphia, PA	01/2012-06/2015
BOARDS & QUALIFICATIONS	<b>Cardiac CT Training</b> Completed the SCCT Endorsed Johns Hopkins Cardiac CT Training Course in 06/2015	07/2015
	<b>Cardiac Magnetic Resonance Training, Advanced Level 3</b> Society for Cardiac Magnetic Resonance	07/2015
	<b>Nuclear Cardiology Certification Exam, Level 2</b> Certification Board of Nuclear Cardiology (examination date: 12/2014)	12/2014

	<b>Board Certified in Cardiovascular Disease</b> American Board of Internal Medicine	11/2013
	<b>Board Certified in Comprehensive Adult Echocardiography, Advanced Level 3</b> National Board of Echocardiography	12/2013
	<b>Board Certification in Internal Medicine</b> American Board of Internal Medicine, USA	11/2011
	<b>Membership Royal College of Physicians (MRCP), London, UK</b>	05/2007
<b>HONORS, AWARDS &amp; SCHOLARSHIPS</b>	The Physician C.A.R.E. Award (Compassion, Accountability, Respect, Excellence)	03/2018
	Penn Institute for Translational Medicine & Therapeutics Scholarship (provided tuition funding for MTR program)	07/2013-06/2015
	NHLBI T32 Career Development and Research Fellowship	01/2013-06/2015
	Society for Cardiovascular Magnetic Resonance Conference Scholarship	09/2012
	Cardiovascular Medicine Division Vincent and Bonnie Anderson 2012 Award For Outstanding Medical Student Teaching, University of Pennsylvania	06/2012
	<b>The Governments of the United Kingdom and United States of America, The Fulbright Scholarship, Harvard University</b>	08/2002–06/2003
	Harvard School of Public Health Scholarship	08/2002–06/2003
	Royal College of Pathologists Summer Research Scholarship	06/2001–08/2001
	Whittet Prize in Pharmacology, University College London Medical School	06/2000
	Finals Distinction, Pathophysiology, University College London Medical School	06/2000
	Finals Distinction, Neuroscience, University College London Medical School	06/2000
	Wellcome Trust Summer Research Scholarship	06/1999–08/1999
	Radcliffe Pharmacology Prize, Oxford University Finals Prize	07/1998
	Physiological Society Summer Research Scholarship	06/1997–09/1997
<b>RESEARCH TRAINING &amp; EXPERIENCE</b>	<b>Cardiovascular Translational Research Fellowship and Masters in Translational Research (MTR) Program – 2 Phases</b>	01/2012–06/2015
	<b>Perelman School of Medicine and Institute for Translational Medicine &amp; Therapeutics, University of Pennsylvania, Philadelphia, PA</b>	
	Translational Research in Heart Failure with Preserved Ejection Fraction, Myocardial Fibrosis, Diastolic Dysfunction, and Prostanoid Biology	
	MTR Program Supervisor: Tom Cappola, MD	
	Current (Phase II) Research Supervisors: Garret FitzGerald, MD, Rick Assoian, PhD	
	Phase I Research Supervisors: Julio Chirinos, MD PhD, Margaret Redfield, MD (Mayo Clinic)	
	<b>Phase I:</b> Non-invasive characterization and fine phenotyping of left ventricular remodelling, myocardial fibrosis, diastolic function, regional myocardial mechanics/strain, ventricular-vascular coupling in patients with heart failure and preserved ejection fraction (HFpEF), ACC/AHA “Stage B” pre-heart failure patients, and a large animal model of HFpEF using echocardiography, cardiac MRI, exercise testing, arterial tonometry, and fibrosis biomarkers. Acquired skills in advanced echocardiography, cardiac MRI, cardiopulmonary stress testing, arterial tonometry, observational study and pilot clinical trial design/implementation, and database. Acquire skills in performing cardiac MRI phenotyping of a large animal model of hypertensive heart disease and involved in a fibrosis biomarker sub-study in patients with HFpEF through a Mayo Clinic research collaboration.	
	<b>Phase II:</b> Using knowledge and skills acquired during Phase I to develop a research focus and expertise to investigate the role of novel risk factors/pathways in the presence of classical/known risk factors/pathways in causing diastolic dysfunction and HFpEF. A dual small animal model and clinical observational study approach is being employed to investigating the role of COX2 signalling and NSAID exposure in left ventricular and arterial remodelling, fibrosis, stiffness and whether this translates into myocardial and arterial biomechanical dysfunction, subclinical diastolic dysfunction, and heart failure with preserved ejection fraction.	

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- Penn Cardiovascular Institute, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA.** 11/2007–06/2008  
 Supervisor: Thomas Cappola, MD  
 Project: Involved in a translational research project which focused on the role of transcription factors in mediating myocyte hypertrophy in human heart failure.
- Department of Cardiology, Oxford University Medical School, John Radcliffe Hospital, Oxford, UK.** 08/2004–02/2005  
 Supervisor: Jeremy Dwight, MD  
 Project: Internal audit focusing on comparing percutaneous coronary interventional strategies following thrombolysis for acute ST elevation MI at the John Radcliffe Hospital and comparing these strategies with other major UK teaching hospitals. Presented findings during an Oxford Clinical Governance Meeting in March 2005.
- Cardiovascular Research Center, Harvard Medical School and Massachusetts General Hospital, Boston, MA.** 06/2001 08/2001  
 Supervisor: Calum MacRae, MD  
 Project: Designed and conducted experiments to investigate the role of cholesterol and the HMG-CoA reductase macromolecular enzyme system in the development of the vertebrate cardiovascular system using a zebrafish model.
- MANUSCRIPTS TO BE SUBMITTED** LI Y, Wang T, Haines P, Li M, Li L, Zhang L, LV Q, Wang J, YANG Y, Poppas A, and Xie M. 2019  
*Prognostic value of right ventricular three-dimensional speckle-tracking strain in pulmonary arterial hypertension: Superiority of longitudinal strain over circumferential and radial strain*
- PUBLICATIONS** Arrighi, J, Kilic, S, and Haines, P. *Perspectives on current training guidelines for cardiac imaging and Recommendations for the future*. Accepted for publication in Current Cardiology Reports. 2018.
- Chirinos J, Londono-Hoyos F, Zamani P, Beraun M, Haines P, Vasim I, Varakantam S, Phan T, Cappola T, Margulies K, Townsend RR, Segers P. *Effects of Organic and Inorganic Nitrate on Aortic and Carotid Hemodynamics in Heart Failure and Preserved Ejection Fraction*. Accepted for Publication in European Journal of Heart Failure. Manuscript number: EURJHF-16-914-JCR1
- Zamani, P, Akers S, Soto-Calderon H, Beraun M, Koppula MR, Varakantam S, Rawat D, Shiva-Kumar P, Haines P, Chittams J, Townsend RR, Witschey WR, Segers P, Chirinos JA. *Isosorbide Dinitrate, With or Without Hydralazine, Does not Reduce Wave Reflections, Left Ventricular Hypertrophy, or Myocardial Fibrosis in Patients with Heart Failure with Preserved Ejection Fraction*. J AM Heart Assoc. 2017 Feb 20;6(2).
- Freedman B, Nathan B, Corinne R, Zhang S, Haines P, Ong K, and Janmey P. *The (dys)functional extracellular matrix*. Biochemica et Biophysica Acta. 2015 (Accepted). 2015
- Moulay G, Ohtani T, Ogut O, Guenzel A, Behfar A, Zakeri R, Haines P, Storlie J, Bowen L, PhamL 2015  
 Kaye D, Sandhu G, O'Connor M, Russel S, and Redfield M. *Cardiac AAV9 Gene Delivery Strategies In Adult Canines: Assesment by Long-term Serial SPECT Imaging of Soidum Iodide Symporter Expression*. Molecular Therapy 2015 (Published Ahead of Print).
- McLoughlin, SC, Haines, P, and FitzGerakd, G. *Clocks and Cardiovascular Function*. Methods in ENZYMOLOGY 2015;352:211-229. 2015
- AbouEzzeddine F, Haines P, Stevens S, Nativi-Nicolau J, Felker G, Borlaug B, Chen H, Tracy R, Braunwald E, and Redfield M. *Galectin-3 in Heart failure with Preserved Ejection Frcation: A RELAX Substudy*. Journal of American College of Cardiology;Heart Failure 20153(3):245-52. 2014
- Shiva Kumar P, Medina-Lezama J, Morey-Vargas O, Zamani P, Bolanos-Salazar J, Chirinos D Haines P, Khan Z, Coacalla-Guerra J, Davalos-Robles M, Llerena-Dongo G, Zapata-Ponze M Chirinos, J. *Prospective Risk Factors, for Increased Central Augmentation Index in Men and*
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Putt ME, Hannenhalli S, Lu Y, **Haines P**, Chandrupatia HR, Morrissey EE, Margulies KB, and Cappola TP. Evidence for coregulation of myocardial gene expression by MEF2 and NFAT in human heart failure. *Circulation Cardiovascular Genetics* 2009;2(3):212-9. 2009

**Haines PG**, Crawley C, Chetty MC, Jarvis H, Coles S, Fisher J, Nicolaou A, & Stewart GW. Familial pseudohyperkalaemia Chiswick: a novel congenital thermotropic variant of K<sup>+</sup> and Na<sup>+</sup> transport across the human red cell membrane. *British Journal of Haematology* 2001;112(2):469-74. 2001

**Haines PG**, Jarvis H, King S, Noormohamed F, Chetty M, Fisher J, Hill P, Nicolaou A, and Stewart G. Two further British families with the 'cryohydrocytosis' form of hereditary stomatocytosis. *British Journal of Haematology* 2000;113(4):932-7. 2000

**ABSTRACTS/POSTERS** Abstract Accepted 2010 American Thoracic Society Annual Conference. 2019

Simmons, J, **Haines, P**, Aliotta, J, Extein, J, Grayson, B, and Ventetuolo, C. Right Ventricular Dysfunction by Speckle-Tracking Echocardiography as a Predictor of Outcomes in Acute Respiratory Failure Requiring Mechanical Ventilation.

Abstracts/Posters Accepted ACC 2018 Scientific Sessions

**Haines P**, French K, Shah R, Harrild D, and Abbasi S. Subclinical left ventricular dysfunction in obese Adolescents with and without metabolic syndrome.

Abstracts/Posters Accepted ASE 2014 Scientific Sessions

Zhou N, **Haines P**, and Wang T. Reduction in left coronary artery flow velocity reserve is correlated with diastolic dysfunction in a mouse model of cardiac hypertrophy and fibrosis.

Abstracts/Posters Accepted ACC 2014 Scientific Sessions:

Omar F AbouEzzeddine, **Philip Haines**, Susanna Stevens, Monica R Shah, Marc Semigran, Martin LeWinter, Jean Rouleau, David Bull, G Michael Felker, Barry A Borlaug, Horng H Chen, Margaret M Redfield. Galectin-3 in Heart Failure with Preserved Ejection Fraction: A RELAX Substudy.

Sanjal Desai, **Philip Haines**, Payman Zamani, Prasad Konda, Prithvi Shiva-Kumar, Shivapriya Peddireddy, Rahul Chandra Shekhar, Snigdha Jain, Scott Akers, Victor Ferrari, Julio A. Chirinos. Diffuse Myocardial Fibrosis in Heart Failure and Preserved Ejection Fraction and Heart Failure with Reduced Ejection Fraction.

Abstracts/Posters Accepted at AHA 2013 Scientific Sessions:

Ravi V Shah, Siddique A Abbasi, Steven McNulty, Adrian Hernandez, Tomas G Neilan, **Philip G Haines**, Mark Semigran, Barry A Borlaug, Gregory Lewis, Michael Jerosch-Herold, Raymond J Kim, Margaret Redfield, and Raymond Y Kwong. Left Atrial Function is Associated With Cardiopulmonary Performance in Heart Failure With Preserved Ejection Fraction: A Relax Substudy.

Julio A. Chirinos, Prithvi Shiva-Kumar, Salvatore Geraci, Sanjal Desai, Rahul Chandrashekhar, Snigdha Jain, Hassam Saif, **Philip Haines**, Preston Broderick, Amin Vakili-pour, Deepa Rawat, Walter Witschey, Victor F. Ferrari, Scott Akers. Relationship Between Effective Arterial Elastance and Specific Measures of Left Ventricular Afterload.

Julio A. Chirinos, Prithvi Shiva-Kumar, Rahul Chandrashekhar, Sanjal Desai, Walter Witschey, Snigdha Jain, Hassam Saif, **Philip Haines**, Preston Broderick, Salvatore Geraci, Amin Vakili-pour, Deepa Rawat, Victor F. Ferrari, Scott Akers. Assessment of Age-Related Arterial Stiffness with Magnetic Resonance Imaging.

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**Abstract accepted at ASE 2013 Scientific Sessions:**

**Haines P**, Shiva-Kumar P, Geraci S, Chandrashekhar R, Jain S, Vakilipour A, Ferrari V, Akers S, and Chirinos J. *Favorable Effect of Nitroglycerine on Left Ventricular Pulsatile Load in Heart failure with Preserved Ejection Fraction*.

**Abstracts accepted at ACC 2013 Scientific Sessions:**

Chandrashekhar R, Akers S, Vakilipour A, Shiva-Kumar P, **Haines P**, Saif H, Witschey W, Ferrari V, and Chirinos J. *Time-Resolved Left Ventricular Myocardial Stress in Heart Failure with Reduced Ejection Fraction Reveals a Marked Increase in Late Systolic Myocardial Load*.

Chirinos J, Shiva-Kumar P, Chandrashekhar R, **Haines P**, Vakilipour A, Saif H, Witschey W, Segers P, Ferrari V, and Akers S. *Relationship Between Arterial Load and MRI-Determined LV Concentric Hypertrophy*.

**Abstract accepted at Physiological Meeting 2000, UK**

**Haines PG**, Crawley C, Chetty MC, Coles SE, and Stewart GW. A novel congenital thermotropic anomaly of K<sup>+</sup> transport across the human red cell membrane. *Journal of Physiology* 2000; 523.P. [Oral Presentation at the annual Physiological Society Meeting at Birmingham Medical School, 2000, abstract]

**PUBLICATIONS  
(other)**

**Book Chapters**

“*Evidenced-Based Cardiology Consult*” Editors: Kathleen Stergiopoulos and David L. Brown. Springer-Verlag London, 2014. Primary author on chapter 14: “*The Role of Echocardiography in Cardiology Consultation*” **Philip Haines**, Nidhi Mehta, and James N. Kirkpatrick. ISBN 978-14471-4440-3.

**Educational Materials**

American College of Cardiology EchoSAP (Echocardiography Self-Assessment Program) Version 8 Syllabus and Cases (In Press, expected release summer 2018) – Physical Principles, Instrumentation, Examination Principles – **Primary author** for “Transesophageal Echocardiography” Chapter and Case.

American College of Cardiology EchoSAP (Echocardiography Self-Assessment Program) Version 8 Question Writing Committee (In Press, expected release Summer 2018) – authored and reviewed examination questions and participated in question writing and review committee on-site meetings at the American College of Cardiology in Washington DC in 2017.

American College of Cardiology EchoSAP (Echocardiography Self-Assessment Program) Version 7 (Released 2013) – Basic Principles and Techniques Section Cases (authored TTE and TEE cases)

**CONFERENCES &  
TRAINING ATTENDED**

Abbott MitraClip Echo Course and Training Program (2 days, Phoenix, AZ)	06/2018
Abbott MitraClip Course 202 Training Program (2 days, Piedmont, Atlanta)	03/2018
Philips Comprehensive 3D Imaging and Interventions of the Mitral Valve, Phoenix, AZ (2 day)	10/2017
Duke Cardiac MRI Practicum, Duke University, North Carolina, NC, (1 week)	09/2017
Edward’s Valve-in-Valve Training Program (Sapien 3 in MV), 1 day, New York, NY	08/2017
WATCHMAN Physician Training Program Phase 1+2, Boston Scientific, Atlanta, GA (1 day)	03/2017
American College of Cardiology Scientific Sessions 2016	04/2016
Abbott Vascular Mitra Clip Course 101 Training Program 2016 (2 days)	03/04/2016
Structural Heart Intervention and Imaging 2016: A Practical Approach, Scripps (3 days)	02/2016
Johns Hopkins Cardiac CT Practicum: The Total Experience (5 day Level 2 course)	06/2015
Structural Heart Intervention and Imaging 2015: A Practical Approach, Scripps (3 days)	02/2015
American Society of Echocardiography Scientific Sessions 2014	06/2014
Atomic Force Microscopy (AFM) Workshop, Los Angeles (1 week)	07/2013
Mayo Cardiovascular Review Course for Cardiology Boards 2013 (1 week)	09/2013

	American Society of Echocardiography Scientific Sessions 2013	06/2013
	American College of Cardiology Scientific Sessions 2013	03/2013
	Society for Cardiovascular Magnetic Resonance (SCMR) (2 days)	09/2012
	CMR State of the Art Course	
	Duke Cardiac MRI Practicum (1 week)	09/2012
	Mayo Echocardiography Review Course for Boards and Recertification, 2012 (4 days)	06/2012
	Society for Cardiac Magnetic Resonance (SCMR) Scientific Sessions (3 days)	02/2012
	American Heart Association Scientific Sessions 2011, AHA (5 days)	11/2011
	Live Intraoperative 3D TEE (2 days)	11/2011
	Live 3D TEE Practical Applications (2 days)	11/2011
	Live 3D Echo Fundamentals, Philips, Boston, (3 days)	09/2011
	Hemodynamic Transesophageal Echo (hTEE), ImaCor, (1 day)	09/2011
	Washington DC Internal Medicine Board Review Course, ACP (5 days)	07/2011
	Penn Nuclear Medicine Physics Course (2 weeks)	02/2011
	CVI's "3 <sup>rd</sup> Annual" Echocardiography Update – 2011 Assessment of Diastolic Heart Disease, CVI Philadelphia and Drexel University (1 day)	01/2011
	43 <sup>rd</sup> Annual New York Cardiovascular Symposium, ACCF (3 days)	12/2010
	How to Be Cardiovascular Investigator, ACCF (2 days)	12/2010
	American Society of Echocardiography Board Review Course, ASE (3 days)	09/2010
	American Heart Association Scientific Sessions 2009, AHA (5 days)	11/2009
	Medical Student Teaching Workshop, Oxford University Medical School, UK	06/2003
INVITED LECTURES & GRAND ROUNDS	Invited Speaker: The 5 <sup>th</sup> Wuhan International Conference of Cardiovascular Disease	6/2018
	Union Hospital of Tongji Medical College, Huazhong University of Science and technology	
	"Structural and Interventional Echocardiography: An Emerging Advanced Subspecialty and a Paradigm Shift in Cardiovascular Medicine"	
	The Cardiovascular Physical Exam, Brown University Internal Medicine Residency Lecture	2016-17
	Imaging in Non-Coronary Interventions (Structural Imaging), Brown University Cardiovascular Disease Fellowship Program	2017
	Diastolic Function and Heart Failure with Preserved Ejection Fraction – Core Echocardiography Lecture, Brown University Cardiovascular Disease Fellowship Program	2016
	2016 Wuhan Union International Forum on Ultrasound in Medicine, Wuhan Union Hospital and Tongji Medical College, Wuhan, China, Invited Speaker	11/2016
	"Structural and Interventional Echocardiography – Necessary or Just Pretty Pictures?"	
	American College of Cardiology 2016 Scientific Sessions – Interventional Cardiology Session 602 – Imaging for Transcatheter Mitral Intervention – "Strengths and Limitations of TEE Assessment and Guidance of Mitral Procedures	04/2016
	Brown University, Division of Cardiology, Grand Rounds – Sub-Phenotyping in HFpEF: Strategies and Novel Pathways	10/2016
	University of Michigan: Subphenotyping in HFpEF – Innovative Research Strategies and Novel Pathways	01/2015
	George Washington University - Subphenotyping in HFpEF – Innovative Research Strategies and Novel Pathways	01/2015
	Mayo Clinic – Arizona: Subphenotyping in HFpEF – Innovative Research Strategies and Novel Pathways	02/2015
GRANTS SUBMITTED <u>SUCCESSFUL &amp; UNSUCCESSFUL</u>	Advanced-CTR (Clinical Translational Research Program) Pilot Projects Program	02/2017
	Post Hospitalization Community Pharmacy Medication Therapy Management for Heart Failure Outcomes – <u>Successful</u>	
	RI-CCTS (Rhode Island Center for Clinical Translational Science) Pilot Project Grant	09/2016
	Post Hospitalization Community Pharmacy Medication therapy Management for Heart Failure Role: Co-PI. Outcome: <u>Unsuccessful</u>	
	Great Rivers Affiliate Mentored Clinical and Population Research Award Winter 2015: The COX-2 in Cardiac and Vascular Remodeling, Stiffness, Diastolic Dysfunction, and HFpEF Role: PI. Outcome: <u>Unsuccessful</u>	01/2015

	National Mentored Clinical and Population Research Award Winter 2015: The Role of COX-2 in Cardiovascular Remodeling and HFpEF. Role: PI. Outcome: <u>Unsuccessful</u> .	01/2015
	Institute for Translational Medicine and Therapeutics (ITMAT), Perelman School of Medicine, 12/2013 University of Pennsylvania, Translational Biomedical Imaging Center Collaborative Pilot Grant Program, TAPITMAT-TBIC: Impact of global and cardiac-specific deletion of COX-2 on heart failure: a comprehensive in vivo cardiac MRI evaluation of extracellular matrix remodeling, myocyte size, and coronary microvascular dysfunction. Role: Co-PI. Outcome <u>Unsuccessful</u>	
	National Mentored Clinical and Population Research Award Summer 2015: A Randomized Placebo Controlled Trial of Isosorbide Mononitrate to Reduce Late Systolic and Reverse LV Remodeling. Role: PI. Outcome: <u>Unsuccessful</u> .	07/2012
<b>PROFESSIONAL MEMBERSHIPS (Past and Present)</b>	American Society of Echocardiography (ASE) Society of Cardiovascular Computed Tomography (SCCT) American Heart Association (AHA) Society for Cardiac Magnetic Resonance (SCMR) American College of Cardiology (ACC) Royal College of Physicians, London, UK, (MRCP) British Fulbright Scholars Association (BFSA)	2013 2015 2012 2011 2009 2007 2002
<b>MEDICAL EDUCATION AND MENTORING</b>	<b>Structural and interventional advanced echocardiography training for fellows</b>  Core Echocardiography Curriculum Lectures (Diastolic Function) for Brown Cardiology Fellows and Ultrasonographers  Research mentor for James Simmons, Brown Pulmonary Fellow. Association of right and left ventricular diastolic function and strain and acute clinical outcomes in medical intensive care patients, Co-PI on approved IRB.  Research mentor for Syed Naeem, Brown Research Resident. Association of diastolic function and acute outcomes in patients undergoing surgical aortic valve replacement. Co-PI on approved IRB.  Research mentor for Sandeep Ghosalkar, Brown Medical Stents. Impact of female sex, hypertension, and diabetes on echocardiographic and invasive hemodynamic markers of diastolic dysfunction. PI on approved IRB.  Brown University Faculty Mentor for a Brown Medical Student (David Hernandez) Scholarly Concentrations Program. Project Title: The effect of sex and comorbidities on the clinical and echocardiographic markers of severity of Heart Failure with a Preserved Ejection Fraction (HFpEF).  Site preceptor, Cardiology, Community Based Teaching Program, Brown University Precepting Brown medicine resident (Dr Esseim Sharma) in cardiology clinic  Cardiovascular Pathophysiology Course, Brown University, Small Group Leader  Core Echocardiography Curriculum Lectures for Penn Cardiology Fellows  Research Mentor for Brown Fellows, Residents, and Medical Students Hospital of the University of Pennsylvania	2015 – Present  2015 - Present  2017-Present  2016-Present  2015-Present  Summer 2017  2016-2018  2016 and 2018  2011–2016  2015-2016
	University of Pennsylvania School of Medicine MSII Cardiovascular Block 2011	08/2011–09/2011



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	and 2012 Small Group Workshop Leader (5 weeks)	08/2012–09/2012
	Instructed Imperial College London Medical School students during their medicine clerkship	02/2006 – 05/2006
COMMITTEES	Lifespan and Brown University Faculty Member Search Committee Member of a faculty search committee for a “Multimodality Imager” Clinical and Academic Cardiologist	2018-2019
OTHER LEADERSHIP POSITIONS	Co-Director for the “Brown Heart Valve Symposium – Structural Heart Team Approach to Aortic & Mitral Valve Disease: Closing Gaps and Expanding Opportunities” Alpert Medical School of Brown University and Lifespan	4/2019
CURRENT & PRIOR INTERESTS	Yoga – Vinyasa Flow and Hatha Yoga  Volcanology Visited several volcanoes around the world and climbed Mount St. Helens, WA, USA  A Cappella Singing (Baritone) “Out of the Blue” Oxford University all male a cappella singing group “The Arrhythmics” University College London Medical School Barber Shop Octet  College and Medical School Rowing Balliol and New College, Oxford University, Oxford, UK. Oxford Medical School and the Osler-Green Boat Club	2000-2002 1999–2000  1995-1997 & 2001-2002

#### REFERENCES/MENTORS (Current and Prior)

##### CURRENT:

Wen-Chih (Hank) Wu, MD, MPH  
Chief of Cardiology  
Providence VA Medical Center  
Professor of Medicine and Epidemiology, Brown University  
401-273-7100  
[Wen-Chih.Wu@va.gov](mailto:Wen-Chih.Wu@va.gov)

Athena Poppas, MD, FACC, FASE  
Chief of Cardiology, Brown University  
Director, Lifespan Cardiovascular Institute  
Director, Cardiovascular Imaging CVI  
Professor of Medicine, Brown University  
401-444-8041  
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##### PRIOR:

##### Cardiology Fellowship, Echocardiography, and Structural Imaging:

Frank Silvestry  
Director, Cardiovascular Disease Fellowship Program  
Hospital of the University of Pennsylvania  
Associate Professor of Medicine, University of Pennsylvania  
215-615-5236  
[Fsilvest@mail.med.upenn.edu](mailto:Fsilvest@mail.med.upenn.edu)

##### Echocardiography and Cardiac MRI:

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Victor Ferrari  
Director, Cardiovascular Imaging  
Hospital of the University of Pennsylvania  
Professor of Medicine, University of Pennsylvania  
215-662-2912  
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Chief, Cardiovascular Imaging Section, Department of Radiology  
Hospital of the University of Pennsylvania  
Professor of Medicine, University of Pennsylvania  
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Research:

Garret FitzGerald  
Associate Dean for Translational Research  
Director, Institute for Translational Medicine & Therapeutics  
Chair, Department of Pharmacology  
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215-573-1184  
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Margaret Redfield  
Professor of Medicine  
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