

CURRICULUM VITAE
Thomas J. Wang, MD

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DATE & PLACE OF BIRTH: 12/14/1970, Boston, MA

EDUCATION AND TRAINING

9/1988-6/1992 *A.B. summa cum laude*
Harvard College, Cambridge, MA

9/1992-6/1996 M.D.
Harvard Medical School, Boston, MA

7/1996-6/1997 Internship in Medicine
Department of Medicine
Massachusetts General Hospital, Boston, MA

7/1997-6/1999 Residency in Medicine
Department of Medicine
Massachusetts General Hospital, Boston, MA

7/1999-6/2003 Fellowship in Cardiology
Massachusetts General Hospital, Boston, MA

7/2001-6/2003 Research Fellowship
Framingham Heart Study, Framingham, MA

LICENSURE AND CERTIFICATION

Massachusetts, full medical license, 1999-2013
American Board of Internal Medicine, Internal Medicine, 2000
American Board of Internal Medicine, Cardiovascular Disease, 2003
Tennessee, full medical license, 2013-2020
Texas, full medical license, 2020-present

ACADEMIC APPOINTMENTS

6/2003-3/2005	Instructor in Medicine Harvard Medical School, Boston, MA
4/2005-12/2008	Assistant Professor of Medicine Harvard Medical School, Boston, MA
1/2009-4/2013	Associate Professor of Medicine Harvard Medical School, Boston, MA
5/2013-01/2020	Professor of Medicine Division of Cardiovascular Medicine Vanderbilt University School of Medicine, Nashville, TN
5/2013-01/2020	Gottlieb C. Friesinger II, M.D. Chair in Cardiovascular Medicine Vanderbilt University School of Medicine, Nashville, TN
02/2020-present	Professor of Internal Medicine Department of Internal Medicine UT Southwestern Medical Center, Dallas, TX
02/2020-present	Donald W. Seldin Distinguished Chair in Internal Medicine Department of Internal Medicine UT Southwestern Medical Center, Dallas, TX

HOSPITAL AND ADMINISTRATIVE APPOINTMENTS

2002-2003	Graduate Assistant, Medicine Massachusetts General Hospital, Boston, MA
2003-2004	Clinical Assistant, Medicine Massachusetts General Hospital,
2004-2008	Assistant in Medicine Massachusetts General Hospital, Boston, MA
2008-2011	Assistant Physician, Medicine Massachusetts General Hospital, Boston, MA
2011-2013	Associate Physician, Medicine Massachusetts General Hospital, Boston, MA

2004-2013	Director, Heart Failure Disease Management Program Massachusetts General Hospital, Boston, MA
2007-2013	Associate Director, Heart Failure and Transplantation Section Massachusetts General Hospital, Boston, MA
2011-2013	Director, Program in Human Cardiovascular Physiology and Metabolism Massachusetts General Hospital, Boston, MA
2013-2020	Director, Division of Cardiovascular Medicine Vanderbilt University Medical Center, Nashville, TN
2013-2020	Physician-in-Chief Vanderbilt Heart and Vascular Institute, Nashville, TN
2020-present	Chair, Department of Internal Medicine UT Southwestern Medical Center, Dallas, TX

PROFESSIONAL ORGANIZATIONS

- Massachusetts Medical Society, member (1996-1998)
- American College of Cardiology, member (2000-2006), FACC (2006-present)
- American Heart Association, member (2004-2012), FAHA (2012-present)
- American Society of Clinical Investigation (elected), 2010-present
- Association of Professors of Cardiology, member 2013-present, Councilor 2016-2017
- Association of University Cardiologists (elected), 2014-present
- Association of American Physicians (elected), 2017-present
- Association of Professors of Cardiology, President, 2018-2019
- Association of Professors of Medicine, member 2020-present, Councilor 2022-present

PROFESSIONAL ACTIVITIES

Intramural:

- Cardiology Fellowship Selection Committee, Massachusetts General Hospital, 2006-2013
- Harvard Medical School Admissions Committee (sub-committee 3), Harvard Medical School, 2009-2013
- Harvard Catalyst Grant Review Committee, Harvard CTSC, 2009-2010
- Anti-thrombotic Stewardship Committee, Massachusetts General Hospital, 2012-2013
- CCU Council, Massachusetts General Hospital, 2012-2013
- Executive Committee, Department of Medicine, Vanderbilt University, 2013-2020
- Compensation Committee, Department of Medicine, Vanderbilt University, 2013-2020
- Director, Vanderbilt Translational and Clinical Cardiovascular Research Center, 2013-2020

- Medical Center Medical Board, Vanderbilt University Medical Center, 2013-2020
- Southern Community Cohort Study (SCCS) Data and Biospecimen Use Committee, 2013-2017
- Endowed Chair Review Committee, Julia Carell Stadler Chair in Pediatrics, 2014
- BioVU Review Committee, Vanderbilt University Medical Center, 2014-2016
- Committee on Appointments and Promotions, Department of Medicine, Vanderbilt University, 2014-2020
- Selection Committee, Vanderbilt Faculty Scholars Program, 2015-2019
- Endowed Chair Review Committee, Cornelius Vanderbilt Chair in Surgery, 2015
- Endowed Chair Review Committee, Ingram Chair in Surgical Sciences, 2016
- Search Committee, Chair of the Department of Biostatistics, 2016
- Endowed Chair Review Committee, Tracie and Scott Hamilton Chair in Cancer Survivorship, 2017
- Executive Committee, UTSW Medical Group, 2020-present
- UTSW Medical Group Board, 2020-present
- Finance Committee, MSDRP Board, 2020-present
- Ambulatory Services Committee, 2020-present
- Search Committee (Chair), UTSW Chair of Pediatrics, 2021-present

Extramural:

Study groups and study sections

- Study section, Epidemiology and Prevention, American Heart Association, 2006-2009
- Study section, Ancillary Studies in Clinical Trials (R01), Special Emphasis Panel, NIH, 2007-2015
- Study section, Mentored Patient-Oriented Research Awards (K23, K24), NHLBI, 2008-2012
- Atherosclerosis Working Group, Biomarker Consortium, Foundation for the NIH, 2008-2009
- NHLBI Working Group on Target Organ Damage, NIH, 2008
- NHLBI Working Group on Model-Guided Design and Analysis of Genetic and Pharmacogenetic Clinical Trials to Foster Translational Research, NIH, 2010
- Atherosclerosis Modeling Project, Biomarker Consortium, Foundation for the NIH, 2010-present
- Review Panel, Quebec Consortium for Drug Discovery (CQDM), 2010
- Expert Review Panel, Academy of Finland, 2010
- Chair, Genomics, Translational Biology and Observational Epidemiology study section, American Heart Association, 2010-2012
- Study section, Life After Linkage: the Future of Family Studies, Special Emphasis Panel, 2011
- Study section, Translational Research in Diabetes, Obesity, and Endocrine Disorders, Special Emphasis Panel, NIH, 2012
- Program Project Review Panel, HLBP-1, NHLBI, 2012
- Reviewer, Genomics, Translational Biology and Observational Epidemiology study section, American Heart Association, 2010-2012

- Reviewer, Strategically Focused Research Network (SFRN) – Racial Disparities Network, American Heart Association, 2015
- Reviewer, Joint Biomedical Laboratory Research and Development and Clinical Science Research and Development Services Scientific Merit Review Board, Department of Veterans Affairs, 2015
- Reviewer, Ancillary Studies to Major Ongoing Clinical Research Studies to Advance Areas of Scientific Interest within the Mission of the NIDDK (R01), 2015-2016
- Reviewer, Strategically Focused Research Network (SFRN) – Heart Failure Network, American Heart Association, 2016
- Member, Cardiovascular Genome-Phenome Study (CVGPS) Review Panel, American Heart Association, 2016-present
- Member, NHLBI Working Group on Heart Failure with Preserved Ejection Fraction, 2017
- Standing Member, Mentored Patient-Oriented Research (MPOR) Study Section, NHLBI, 2016-present
- Study section, Human Studies of Diabetes and Obesity (HSDO), CSR, NIH, 2021

Editorial boards

- Ad hoc reviewer, multiple journals, 2003-present
- Senior Associate Editor, *Journal of the American Heart Association*, 2012-2020
- Editorial Board, *Circulation*, 2016-present

Oversight and advisory committees

- Framingham Heart Study, DNA Committee, 2008-2013
- Food and Drug Administration, Endocrinology and Metabolic Drug Advisory Committee (Ad hoc consultant), 2009
- Data and Biospecimen Use Committee, Southern Community Cohort Study, 2013-2017
- Observational Safety and Monitoring Board, Atherosclerosis Risk in Communities Study (ARIC), NHLBI/NIH, 2013-present
- Observational Safety and Monitoring Board, nuMoM2b Heart Health Study, NHLBI/NIH, 2013-2019
- Food and Drug Administration, Endocrinology and Metabolic Drug Advisory Committee (ad hoc consultant), 2015-present
- National Academy of Medicine, Roundtable on Aligning Incentives for Open Science, 2019-present

National societies and private organizations

- Membership and Communications Committee, Functional Genomics and Translational Biology Council, American Heart Association, 2011-present
- Program Committee, American Heart Association Epidemiology and Prevention Scientific Sessions, 2012-2019
- Leadership Committee, Functional Genomics and Translational Biology Council, American Heart Association, 2011-present
- Vice Chair, Molecular Determinants of Health Scientific Subcommittee, American Heart Association, 2014-15

- Reviewer, Cardiovascular Genome-Phenome Study (CVGPS) Heart Failure Discovery Grant, American Heart Association, 2015
- Chair, Molecular Determinants of Health Scientific Subcommittee, American Heart Association, 2015-2019
- Vice Chair, Council on Functional Genomics and Translational Biology, American Heart Association, 2016-2018
- Member, National Research Committee, American Heart Association, 2016-present
- Member, Strategic Value Proposition for Science Working Group, American Heart Association, 2017-2018
- Councilor, Association of Professors of Cardiology, 2016-2017
- Chair, AHA Open Science Committee, 2017-2020
- President-elect, Association of Professors of Cardiology, 2017-2018
- Member, Board of Directors, American Heart Association of Middle TN, 2018-2020
- Member, Science and Advisory Coordinating Committee, American Heart Association, 2018-2020
- Chair, Council on Genomic and Precision Medicine, American Heart Association, 2018-2020
- President, Association of Professors of Cardiology, 2018-2019
- Member, Scientific Committee, Sarnoff Foundation, 2020-present
- Member, Nomination Committee, Sarnoff Foundation, 2021-present
- Member, Program Committee, Sarnoff Foundation, 2022-present
- Program Committee, Association of Professors of Medicine, 2020-present
- Elected to Council, Association of Professors of Medicine, 2022-present

Honors and Awards

John Harvard Scholarship, Harvard College, 1988-1992

Detur Prize, Harvard College, 1988

Phi Beta Kappa, Harvard College, 1991

Roman DeSanctis Clinical Scholar, Massachusetts General Hospital, 2000-2001

American College of Cardiology/Merck Fellowship Award, 2002-2003

American Society for Clinical Investigation, 2010

Partners Outstanding Mentor Award, 2012

Clarivate/Web of Science Highly Cited Researchers, 2014, 2015, 2016, 2017, 2018, 2019, 2020

Association of University Cardiologists, 2014

Association of American Physicians, 2017

CLINICAL TEACHING

- Patient-Doctor II, Harvard Medical School, 1995-1996
- Patient-Doctor II, Harvard Medical School, 2000
- Core Medicine II, Harvard Medical School, 2003-2004
- Core Medicine ECG Lecture, Harvard Medical School, 2003-2006

- Cardiology Consult service attending (2 weeks/year), MGH, 2003-2010
- CCU attending (2 weeks/year), MGH, 2003-present
- Heart Failure Transplant attending (4-6 weeks/year), MGH, 2003-2013
- Paul Dudley White Cardiology Clinic preceptor (4 sessions/year), MGH, 2003-2013
- Cardiology Fellows Core Curriculum (2 sessions/year), MGH, 2005-2013
- Tools of Human Investigation (2 sessions/year), MGH, 2006-2013
- Heart Failure attending (2-4 weeks/year), Vanderbilt, 2013-2019
- Monday noon resident didactic series (2 sessions/year), Vanderbilt, 2014-2017
- Cardiology consult service attending (2-4 weeks/year), 2016-2020
- Parkland Coronary Care Unit, UT Southwestern, 2020-present

Research Supervision (selected trainees, period of mentorship, and current position)

Annabel Chen-Tournaux, MD, 2004-2006, Assistant Professor (McGill University)

Abigail May Khan, MD, 2006-2010, Assistant Professor (Oregon Health and Science University)

Aaron Baggish, MD, 2006-2013, Associate Professor (Mass General Hospital)

Gregory Lewis, MD, 2006-2013, Associate Professor (Mass General Hospital)

Erin Coglianesi, MD, 2007-2011, Assistant Professor (Mass General Hospital)

Susan Cheng, MD, 2008-2013, Assoc Professor, Endowed chair (Cedars-Sinai Medical Center)

Michael Fradley, MD, 2010-2011, Associate Professor (University of Pennsylvania)

Pankaj Arora, MD, 2010-present, Assistant Professor (University of Alabama Birmingham)

Jennifer Ho, MD, 2011-2017, Associate Professor (Mass General Hospital)

Shweta Motiwala, MD, 2011, Instructor (Beth Israel Deaconess Hospital)

Yin Ge, MD, 2011-2013, Cardiology Fellow (University of Toronto)

S. Saad Mahmood, MD, 2012-2013, Assistant Professor (Weill Cornell Medical Center)

Deepak Gupta, MD, 2013-2020, Assistant Professor (Vanderbilt University)

Jane Ferguson, PhD, 2014-2020, Assistant Professor (Vanderbilt University)

Daniel Muñoz, MD, 2014-2020, Associate Professor (Vanderbilt University)

Katherine Bachmann, MD, 2015-present, Assistant Professor (Vanderbilt University)

Candace McNaughton, MD, 2017-2019, Assistant Professor (Vanderbilt University)

RESEARCH PROGRAM

Active Grants:

- 2016-2022 NIH R01-DK108159
Metabolite Profiles and the Risk of Diabetes in Asians
Role: MPI (with Shu, Gerszten)
\$2,529,672
- 2008-2026 NIH R01-DK081572
Metabolomic Predictors of Insulin Resistance and Diabetes
Role: MPI (with Gerszten, Wilson, Clish)
\$2,950,900
- 2021-2026 Leducq Foundation Transatlantic Network of Excellence
Brown Fat and Cardiovascular Health
Role: Network Member
\$627,195 (UTSW component)
- 2022-2026 NIH R01-MD017529
Polypill strategy for the evidence-based management of heart failure
with reduced ejection fraction in an underserved population
Role: MPI (with Pandey)
\$3,240,315

Inactive Grants (federal):

- 2016-2021 NIH R01-HL133860
Tissue Sodium, Inflammation, and Blood Pressure in MESA
Role: MPI (with Titze, Gupta)
\$2,742,135
- 2016-2021 NIH R01-HL132320
Proteomic Pathway Discovery in Cardiovascular Disease
Role: MPI (with Gerszten, Ramachandran)
\$2,573,711
- 2016-2021 NIH R01-HL128983
PDE5 Inhibition for Obesity-Related Cardiometabolic Dysfunction
Role: MPI (with Brittain)
\$2,928,671

2017-2021	NIH R01-HL133870 Aptamer Proteomics of Cardiometabolic and Renal Traits in African Americans Role: Co-I (PI, Wilson, Gerszten) \$3,022,292
1994-2020	NIH T32-HL007411 Training in Cardiovascular Research Role: PI \$2,482,885
2016-2020	NIH K12-HL133117 The Vanderbilt Emergency Care Research Training Program Role: MPI (with Storrow) \$1,844,271
2012-2017	NIH R01-HL112746 Impact of Vitamin D Supplementation on Cardiac Structure and Function Role: PI (with Thadhani) \$1,209,851
2011-2016	NIH R01-HL102780 Obesity, Salt-Sensitivity, and the Natriuretic Peptides Role: PI \$1,759,920
2010-2014	NIH R01-HL098283 Physiologic Effects of Natriuretic Peptide Genetic Variation Role: MPI (with Newton-Cheh) \$2,182,113
2007-2012	NIH R01-HL086875 Natriuretic Peptides, the Renin-Angiotensin System, and Metabolic Risk in Obesity Role: PI \$1,732,875
2006-2011	NIH R01-HL083197 Endothelial Progenitor Cells: Clinical Correlates and Prognosis in the Community Role: PI \$1,855,055

2003-2007 NIH K23-HL074044
Natriuretic Peptides, Genes, and Diastolic Heart Failure
Role: PI
\$539,229

2014-2015 PCORI R-1306-04869
The Mid-South Clinical Data Research Network
Role: Co-I (PI, Rothman)

2010-2013 NIH R24-DK083838
Retinoid Biology, Insulin Resistance, and Cardiac Dysfunction
Role: Co-I (PI, Kahn)

Inactive Grants (non-federal):

2014-2018 AHA 14SFRN20420046
Vanderbilt Strategically Focused Prevention Research Center
Role: Project PI (Center Director, Harrison)

2014-2017 NSBRI CA03801
Improving Cardiovascular Risk Prediction – Biomarkers and Beyond
Role: Co-I (PI, De Lemos)

2010-2013 Diasorin, Inc.
Vitamin D Therapy in Individuals at High Risk of Hypertension
(DAYLIGHT trial, NCT01240512)
Role: PI
\$1,000,000

2010-2011 Harvard Catalyst
Acute Metabolic Influences on the Natriuretic Peptide System
Role: PI
\$50,000

2007-2010 AHA
Investigation of Vitamin D Status and Cardiovascular Structure and
Function
Role: PI
\$180,000

PATENTS AND PATENT APPLICATIONS

Detection of Angiotensin-1 and Thrombospondin-2 in connection with diagnosing acute heart failure (Co-inventor)

U.S. Patent (11,079,394), awarded August 2021

Arginine vasopressin pro-hormone as predictive biomarker for diabetes (Co-inventor)

U.S. Patent (9,116,153), awarded August 2015, licensed to ThermoFisher

Inhibitors of microRNAs that regulate atrial natriuretic peptide as therapeutics and uses thereof (Co-inventor)

U.S. Patent (9,388,412), awarded June 2016

Multiplexed biomarkers of insulin resistance (Co-inventor)

U.S. Patent Application (conversion of provisional application 61/134,154), filed July 2009

Use of adrenomedullin for cardiovascular risk prediction (Co-inventor)

U.S. Patent Application (EP 08166038.3), filed October 2008, licensed to ThermoFisher

Lipid biomarkers of diabetes (Co-inventor)

U.S. Patent Application (conversion of provisional application 61/435049), filed January 2011

Detection of CLC1B and PDGFR-B in connection with diagnosing atherosclerosis and atherosclerotic disease (Co-inventor)

U.S. Patent Application (provisional application 62/562174), filed September 2017

PUBLICATIONS AND PRESENTATIONS

Publications

Peer-Reviewed Articles:

1. Wang TJ, Sangha O, Phillips CB, Wright EA, Lew R, Fossel AH, Fossel K, Shadick NA, Liang MH, Sundel RP. Outcomes of children treated for Lyme disease. **J Rheum.** 1998;25:2249-53.
2. Sangha O, Phillips CB, Fleischmann KE, Wang TJ, Fossel AH, Lew R, Liang MH, Shadick NA. A lack of cardiac manifestations among patients with prior treated Lyme disease. **Ann Intern Med.** 1998;128:346-53.
3. Wang TJ, Stafford RS. National patterns and predictors of beta blocker use in patients with coronary artery disease. **Arch Intern Med.** 1998;158:1901-6.
4. Wang TJ, Ausiello JC, Stafford RS. Trends in antihypertensive drug advertising, 1985-1996. **Circulation.** 1999;99:2055-57.

5. Wang TJ, Liang MH, Sangha O, Phillips CB, Lew RA, Wright EA, Berardi V, Fossel AH, Shadick NA. Coexposure to borrelia burgdorferi and babesia microti does not worsen the long-term outcome of Lyme disease. **Clin Infect Diseases**. 2000;31:1149-54.
6. Wang TJ, Stafford RS, Ausiello JC, Chaisson CE. Randomized clinical trials and recent patterns in the use of statins. **Am Heart J**. 2001;14:957-63.
7. Wang TJ, Larson MG, Levy D, Leip EP, Benjamin EJ, Wilson PW, Sutherland P, Omland T, Vasani RS. Impact of age and sex on plasma natriuretic peptide levels in healthy adults. **Am J Cardiol**. 2002;90:254-58.
8. Wang TJ, Larson MG, Levy D, Benjamin EJ, Kupka MJ, Manning WJ, Clouse ME, D'Agostino RB, Wilson PW, O'Donnell CJ. C-reactive protein is associated with subclinical epicardial coronary calcification in men and women: the Framingham Heart Study. **Circulation**. 2002;106:1189-91.
9. Wang TJ, Mort EA, Nordberg P, Chang Y, Cadigan ME, Mylott L, Ananian LV, Thompson BT, Fessler M, Warren W, Wheeler A, Jordan M, Fifer MA. A utilization management intervention to reduce unnecessary testing in the coronary care unit. **Arch Intern Med**. 2002;162:1885-90.
10. Vasani RS, Benjamin EJ, Larson MG, Leip EP, Wang TJ, Wilson PW, Levy D. Plasma natriuretic peptides for community screening for left ventricular hypertrophy and dysfunction in the community: the Framingham Heart Study. **JAMA**. 2002;288:1252-59.
11. Wang TJ, Nam BH, Wilson PW, Wolf PA, Levy D, Polak JF, D'Agostino RB, O'Donnell CJ. Association of C-reactive protein with carotid atherosclerosis in men and women: the Framingham Heart Study. **Arterioscler Thromb Vasc Biol**. 2002;22:1662-67.
12. Frietag MH, Larson MG, Levy D, Benjamin EJ, Wang TJ, Leip EP, Wilson PW, Vasani RS. Plasma brain natriuretic peptide levels and blood pressure tracking in the Framingham Heart Study. **Hypertension**. 2003;41:978-83.
13. Wang TJ, Levy D, Benjamin EJ, Vasani RS. The epidemiology of "asymptomatic" left ventricular systolic dysfunction: implications for screening. **Ann Intern Med**. 2003;138:907-16.
14. Wang TJ, Larson MGH, Levy D, Vasani RS, Leip EP, Wolf PA, D'Agostino RB, Murabito JM, Kannel WB, Benjamin EJ. Temporal relations of atrial fibrillation and congestive heart failure and their joint influence on mortality: the Framingham Heart Study. **Circulation**. 2003;107:2920-25.
15. Wang TJ, Larson MG, Levy D, Benjamin EJ, Corey D, Leip EP, Vasani RS. Heritability and genetic linkage of plasma natriuretic peptide levels. **Circulation**. 2003;108:13-6.

16. Wang TJ, Nam BH, D'Agostino RB, Wolf PA, Lloyd-Jones DM, MacRae CA, Wilson PW, Polak JF, O'Donnell CJ. Carotid intima-media thickness is associated with premature parental coronary heart disease: the Framingham Heart Study. **Circulation**. 2003;108:572-76.
17. Wang TJ, Evans JC, Benjamin EJ, Levy D, LeRoy EC, Vasani RS. Natural history of asymptomatic left ventricular systolic dysfunction in the community. **Circulation**. 2003;108:977-82.
18. Wang TJ, Massaro JM, Levy D, Vasani RS, Wolf PA, D'Agostino RB, Larson MG, Kannel WB, Benjamin EJ. A risk score for predicting stroke or death in individuals with new-onset atrial fibrillation in the community: the Framingham Heart Study. **JAMA**. 2003;290:1049-56.
19. Wang TJ, Larson MG, Levy D, Benjamin EJ, Leip EP, Wilson PW, Vasani RS. The impact of obesity on plasma natriuretic peptide levels: the Framingham Heart Study. **Circulation**. 2004;109:594-600.
20. Wang TJ, Larson MG, Levy D, Benjamin EJ, Leip EP, Wolf PA, Omland T, Vasani RS. Plasma natriuretic peptide levels and the risk of cardiovascular events and death. **N Engl J Med**. 2004; 350:655-63.
21. Lloyd-Jones DM, Nam BH, D'Agostino RB Sr, Levy D, Murabito JM, Wang TJ, Wilson PW, O'Donnell CJ. Parental cardiovascular disease as a risk factor for cardiovascular disease in middle-aged adults: a prospective study of parents and offspring. **JAMA**. 2004;291:2204-11.
22. Fox CS, Parise H, D'Agostino RB, Lloyd-Jones DM, Vasani RS, Wang TJ, Levy D, Wolf PA, Benjamin EJ. Parental atrial fibrillation as a risk factor for atrial fibrillation in offspring. **JAMA**. 2004;291:2851-55.
23. Lloyd-Jones DM, Wang TJ, Leip EP, Larson MG, Levy D, Vasani RS, D'Agostino RB, Massaro JM, Wolf PA, Benjamin EJ. Lifetime risk for development of atrial fibrillation: the Framingham Heart Study. **Circulation**. 2004;110:1042-46.
24. Wang TJ, Parise H, Levy D, D'Agostino RB, Wolf PA, Vasani RS,* Benjamin EJ.* Obesity and the risk of new-onset atrial fibrillation. **JAMA**. 2004;292:2471-77. (*senior authors, equal contribution)
25. Dhingra R, Nam BH, Benjamin EJ, Wang TJ, Larson MG, D'Agostino RB, Levy D, Vasani R. Cross-sectional relations of electrocardiographic QRS duration to left ventricular dimensions: the Framingham Heart Study. **J Am Coll Cardiol**. 2005;45:685-89.

26. Wang TJ, Evans JC, Meigs JB, Rifai N, Fox CS, D'Agostino RB, Levy D, Vasani RS. Low-grade albuminuria and the risks of hypertension and blood pressure progression. **Circulation**. 2005;111:1370-76.
27. Arnlöv J, Evans JC, Meigs JB, Wang TJ, Fox CS, Levy D, D'Agostino RB, Vasani RS. Low-grade albuminuria and incidence of cardiovascular disease events in non-hypertensive and non-diabetic individuals: The Framingham Heart Study. **Circulation**. 2005;112:969-75.
28. Murabito JM, Pencina MJ, Nam BH, D'Agostino RB, Wang TJ, Lloyd-Jones DM, Wilson PW, O'Donnell CJ. Sibling cardiovascular disease as a risk factor for cardiovascular disease in middle-aged adults: the Framingham Offspring Study. **JAMA**. 2005;294:3117-23.
29. Kathiresan S, Gona P, Larson MG, Vita JA, Mitchell GF, Tofler GH, Levy D, Newton-Cheh C, Wang TJ, Benjamin EJ,* Vasani RS.* Cross-sectional relations of multiple biomarkers from distinct biologic pathways to brachial artery endothelial function. **Circulation**. 2006; 113:938-45.
30. Dhingra R, Pencina MJ, Wang TJ, Nam BH, Benjamin EJ, Levy D, Larson MG, Kannel WB, D'Agostino RB, Vasani RS. Electrocardiographic QRS duration and the risk of congestive heart failure. The Framingham Heart Study. **Hypertension**. 2006;47:861-67.
31. Lee DS, Pencina MJ, Benjamin EJ, Wang TJ, Levy D, O'Donnell CJ, Nam BH, Larson MG, D'Agostino RB, Vasani RS. Association of parental heart failure with heart failure risk in offspring. **N Engl J Med**. 2006;355:138-47.
32. Ärnlov J, Pencina MJ, Amin S, Nam BH, Benjamin EJ, Murabito JM, Wang TJ, Knapp PE, D'Agostino RB, Bhasin S, Vasani RS. Endogenous sex hormones and cardiovascular disease incidence in men: the Framingham Heart Study. **Ann Intern Med**. 2006;145:176-84.
33. Ärnlov J, Evans JC, Benjamin EJ, Larson MG, Levy D, Sutherland P, Siwik DA, Wang TJ, Colucci WS, Vasani RS. Clinical and echocardiographic correlates of plasma osteopontin in the community: the Framingham Heart Study. **Heart**. 2006;92:1514-15.
34. Patwardhan AA, Larson MG, Levy D, Benjamin EJ, Leip EP, Keyes MJ, Wang TJ, Gottlieb DJ, Vasani RS. Obstructive sleep apnea and natriuretic peptide levels in a community-based sample. **Sleep**. 2006;29:1301-06.
35. Lee D, Evans JC, Robins, SJ, Wilson PW, Albano I, Fox CS, Wang TJ, Benjamin EJ, D'Agostino, RB, Vasani RS. Gamma glutamyl transferase concentration and metabolic Syndrome, cardiovascular disease and mortality Risk: the Framingham Heart Study. **Arterioscler Thromb Vasc Biol**. 2007;27:127-33.

36. Wang TJ, Gona P, Larson MG, Tofler GH, Levy D, Newton-Cheh C, Jacques PF, Rifai N, Selhub J, Robins SJ, Benjamin EJ, D'Agostino RB, Vasani RS. Multiple biomarkers for the prediction of first major cardiovascular events and death. **N Engl J Med**. 2006; 355:2631-39.
37. Wang TJ, Gona P, Larson MG, Levy D, Benjamin EJ, Tofler GH, Jacques PF, Meigs JB, Rifai N, Selhub J, Robins SJ, Newton-Cheh C, Vasani RS. Multiple biomarkers and the risk of incident hypertension. **Hypertension**. 2007;49:432-38.
38. Mitchell GF, Vasani RS, Keyes MJ, Parise H, Wang TJ, Larson MG, D'Agostino RB, Kannel WB, Levy D, Benjamin EJ. Pulse pressure and risk of new onset atrial fibrillation: the Framingham Heart Study. **JAMA**. 2007;297:709-15.
39. Parikh NI, Pencina MJ, Wang TJ, Lanier KJ, Fox CS, D'Agostino RB, Vasani RS. Increasing trends in incidence of overweight and obesity over 5 decades. **Am J Med**. 2007;120:242-50.
40. Wang TJ, Larson MG, Keyes MJ, Levy D, Benjamin EJ, Vasani RS. Association of plasma natriuretic peptide levels with metabolic risk factors in ambulatory individuals. **Circulation**. 2007;115:1345-53.
41. Newton-Cheh C, Guo C*, Gona P*, Larson MG, Benjamin EJ, Wang TJ, Kathiresan S, O'Donnell CJ, Musone SL, Camargo AL, Drake JA, Levy D, Hirschhorn JN, Vasani RS. Clinical and genetic correlates of aldosterone to renin ratio and relations to blood pressure in a community sample. **Hypertension**. 2007;49:846-56.
42. Dhingra R, Sullivan LM, Fox CS, Wang TJ, D'Agostino RB, Gaziano JM, Vasani RS. Relations of serum phosphorus and calcium levels to the incidence of cardiovascular disease in the community. **Arch Intern Med**. 2007;167:879-85.
43. Thakore AH, Guo CY, Larson MG, Corey D, Wang TJ, Vasani RS, D'Agostino RB, Sr, Lipinska I, Keaney JF, Jr., Benjamin EJ,* O'Donnell CJ.* Association of multiple inflammatory markers with carotid intimal medial thickness and stenosis: from the Framingham Heart Study. **Am J Cardiol**. 2007;99:1598-1602.
44. Ingelsson E, Larson MG, Vasani RS, O'Donnell CJ, Yin X, Hirschhorn JN, Newton-Cheh C, Drake JA, Musone SL, Heard-Costa NL, Benjamin EJ, Levy D, Atwood LD, Wang TJ,* Kathiresan S.* Heritability, Linkage and Genetic Associations of Exercise Treadmill Test Performance Measures. **Circulation**. 2007;115:2917-24. (*senior authors, equal contribution)
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Letters

1. Wang TJ, Ausiello JC, Stafford RS. Trends in antihypertensive drug treatment. **Circulation**. 2000;101:e209.
2. Wang TJ, Larson MG, Levy D, Benjamin EJ, Leip EP, Wilson PW, Vasani RS. Plasma brain natriuretic peptide and N-terminal proatrial natriuretic peptide levels in obese patients: a cause or result of hypertension? **Circulation**. 2004;110:e76.
3. Wang TJ, Evans JC, Meigs JB, Rifai N, Fox CS, D'Agostino RB, Levy D, Vasani RS. Low grade albuminuria and the risks of hypertension and blood pressure progression. **Circulation**. 2005;112:e121.
4. Wang TJ, Larson MG, Vasani RS. Biomarkers for prediction of cardiovascular events. **N Engl J Med**. 2007;356:1474-75.
5. Wang TJ, Kathiresan S, Lloyd-Jones DM. Algorithms for assessing cardiovascular risk in women. **JAMA**. 2007;298:176.
6. Bajaj NS, Patel N, Prabhu SD, Arora G, Wang TJ, Arora P. Effect of NT-proBNP-Guided Therapy on All-Cause Mortality in Chronic Heart Failure With Reduced Ejection Fraction [research letter]. **J Am Coll Cardiol**. 2018;71(8):951-952.

Thesis

1. Wang TJ. Determinants of the supply and geographic distribution of physicians [Bachelor of Arts Thesis]. Harvard University Archives, Cambridge, MA, June 1992.

Invited External Presentations (selected)

- 2005 Screening for Asymptomatic LV Dysfunction, Heart Failure Society of America, Annual Meeting, Boca Raton, Florida
- 2006 Natriuretic Peptides and Cardiovascular Disease, Cardiology Division, Tufts-NEMC
- 2006 Obesity, the Natriuretic Peptides, and CV Disease, Department of Medicine, Boston University
- 2006 Screening for Asymptomatic LV Dysfunction, Heart Failure Society of America, Annual Meeting, Seattle, Washington
- 2007 Biomarkers of Cardiovascular Disease, Molecular Diagnostics Tri-conference, San Francisco
- 2007 Biomarkers for the Prediction of CV Events, NIH/NCI Early Detection Research Network
- 2007 From Risk Factors to Serum Markers, ACC West Coast Cardiovascular Forum, San Francisco
- 2007 Cardiovascular Biomarkers, NIH/NHBLI Clinical Proteomics Steering Committee Meeting
- 2007 Biomarkers for Risk Stratification, University of Texas Health Science Center, San Antonio
- 2007 Multiple Biomarkers and Risk of CV Disease, AHA Scientific Sessions: Ground-Breaking Studies, Circulation Editors' Choices
- 2007 Is There a Clinical Role for Inflammatory Markers?, AHA Scientific Sessions, Orlando, Florida
- 2007 Obesity, the Natriuretic Peptides, and CV Disease, University of Massachusetts, Cardiology Grand Rounds
- 2007 EPCs: cell-based biomarkers of CV disease?, Harvard Stem Cell Institute
- 2008 Short-term Risk Assessment with Biomarkers, AHA Scientific Sessions, New Orleans, Louisiana
- 2008 Update on Heart Transplantation, University of Texas Health Science Center, San Antonio
- 2008 Biomarkers of Cardiovascular Disease, Grand Rounds, Lankenau Hospital, Pennsylvania

- 2008 Natriuretic Peptides in Health and Disease, Brigham and Women's Hospital, Cardiology Grand Rounds
- 2009 Vitamin D and Cardiovascular Disease, Tufts Health Nutrition Research Center Grand Rounds
- 2009 Natriuretic Peptides in Health and Disease, Tufts Medical Center, Cardiology Grand Rounds
- 2009 Multiple Biomarker Panels for Cardiovascular Risk Assessment, Vascular Medicine conference (Keynote presentation), Netherlands
- 2009 Biomarkers as Tools for Evaluation of Cardiovascular Risk in Hypertension, AHA Annual High Blood Pressure Conference, Chicago, Illinois
- 2009 Vitamin D and Cardiovascular Disease, AHA Industry Nutrition Advisory Panel, Orlando Florida
- 2010 Natriuretic Peptides, Obesity, and the Heart, Center for Life Sciences, Beth Israel Deaconess Medical Center
- 2010 The Natriuretic Peptides in Health in Disease, Inter-hospital Endocrine Grand Rounds, Brigham and Women's Hospital and Children's Hospital
- 2010 Natriuretic Peptides and Cardiometabolic Risk, Mayo Clinic, Rochester, Minnesota
- 2010 Should We Measure CRP for Risk Stratification?, Toronto Heart Summit, Toronto, Canada
- 2010 Genetic Determinants of Vitamin D Status, American Society of Bone and Mineral Research, Toronto, Canada
- 2010 Reclassification Using Biomarkers, AHA Scientific Sessions, Chicago, Illinois
- 2010 Vitamin D Deficiency and Cardiovascular Disease, Penn State Heart and Vascular Institute Grand Rounds
- 2011 Lessons from Framingham, Gordon Conference on Atherosclerosis, Newport, Rhode Island
- 2011 Vitamin D: Is it Really the Key to Cardiovascular Health?, ACC Scientific Sessions (Symposium Co-Chair), New Orleans, Louisiana
- 2011 Vitamin D and Myocardial Function, ACC Scientific Sessions, New Orleans, Louisiana

- 2011 Vitamin D and cardiovascular disease, Research Colloquium, University of Colorado, Boulder, Colorado
- 2011 Vitamin D and cardiovascular disease, Diasorin Annual Scientific Meeting, Turin, Italy
- 2011 Novel Biomarkers, AHA Cardiovascular Epidemiology Scientific Sessions (Co-moderator), Atlanta, Georgia
- 2011 Biomarkers of cardiovascular disease, Case-oriented symposium on coagulation and cardiovascular disease, Newport Beach, California
- 2011 Coronary Artery Calcium Scoring is Superior to Biomarkers for Stratification of Intermediate-risk Asymptomatic Patients, Controversies and Advances in the Treatment of Cardiovascular Disease, Los Angeles, California
- 2011 Natriuretic Peptides in Health and Disease, University of Utah, Salt Lake City, Utah
- 2011 Natriuretic Peptides in Health and Disease, University of Maryland, Baltimore, Maryland
- 2011 Vitamin D and cardiovascular disease, Diasorin Annual Scientific Meeting, Turin, Italy
- 2011 Predicting cardiovascular event in apparently healthy patients, ProCardio Symposium, Paris, France
- 2011 Vitamin D and Cardiovascular Disease, Endocrine Grand Rounds, Emory University School of Medicine
- 2011 Novel Biomarkers and Cardiovascular Disease, AHA Scientific Sessions (Moderator, Discussant), Orlando, Florida
- 2011 Metabolite Profiles and Risk of Diabetes, AHA Scientific Sessions: Ground-Breaking Studies, Circulation Editors' Choices, Orlando, Florida
- 2011 Natriuretic Peptides in Health and Disease, University of Chicago, Chicago, Illinois
- 2012 Vascular Biomarkers, 17th International Vascular Biology Meeting (Plenary), Wiesbaden, Germany
- 2012 Stage A Heart Failure, Symposium, American College of Cardiology 2012, Chicago, Illinois
- 2012 The Genome Comes Home: GWAS for Dummies, Heart Failure Society of America, Seattle, Washington

- 2012 Metabolomics and Cardiometabolic Disease, Department of Nutrition, Harvard School of Public Health
- 2012 Vitamin D and Cardiovascular Disease, Hartford Hospital, Cardiology Grand Rounds
- 2012 Acute Phase Proteins and Cardiovascular Risk Prediction, AHA Scientific Sessions, Los Angeles, California
- 2012 Metabolites and Me: Predicting Diabetes, AHA Scientific Sessions (Plenary), Los Angeles, California
- 2012 Vitamin D Supplementation: Why, When, and How?, AHA Scientific Sessions, Los Angeles, California
- 2013 Inflammatory Biomarkers in Risk Prediction for Stroke and Vascular Cognitive Impairment, AHA International Stroke Conference, Honolulu, Hawaii
- 2013 The Natriuretic Peptides and Cardiometabolic Disease, Cardiology Grand Rounds, Beth Israel Hospital, Boston, MA
- 2013 The Natriuretic Peptides in Health and Disease, Cardiology Grand Rounds, University of Massachusetts Medical Center, Worcester, MA
- 2013 The Natriuretic Peptides and Cardiometabolic Disease, Endocrine Grand Rounds, Brigham and Women's Hospital, Boston, MA
- 2013 Genetic and Other Biomarkers of Cardiovascular Risk: Putting it Together, NSBRI Cardiovascular Team Symposium, Houston, TX
- 2013 miR-425: A Novel Regulator of Natriuretic Peptide Production and Blood Pressure, AHA Scientific Sessions, Dallas, TX
- 2014 Biomarkers of Cardiovascular Disease, Anesthesiology Grand Rounds, Johns Hopkins University, Baltimore, MD
- 2014 Biomarkers in Clinical Practice, University of California San Diego, San Diego, CA
- 2014 Natriuretic Peptides in Health and Disease, Cardiovascular Medicine Grand Rounds, Case Western University, Cleveland, OH
- 2014 Natriuretic Peptides in Health and Disease, Feinberg Cardiovascular Research Institute (FCVRI) seminar, Northwestern University, Chicago, IL
- 2014 MicroRNAs, Salt, and Hypertension, ISN Nexus Symposium: Hypertension and the Kidney, Brisbane, Australia

- 2014 The Mid-South Clinical Data Research Network, American Heart Association Scientific Sessions, Chicago, IL
- 2015 The Natriuretic Peptides and Cardiometabolic Health: From Base Pairs to Bedside, Association of University Cardiologists Annual Meeting, Carmel, CA
- 2015 The Natriuretic Peptides and Cardiometabolic Health, Special Session, Japanese Circulation Society Annual Scientific Meeting, Osaka, Japan
- 2015 The Spirit of Cooperation in Cardiac and Cancer Care is Vital for the Future, Global Cardio-oncology Summit, Nashville, TN
- 2015 The Natriuretic Peptides: From Base Pairs to Bedside, Cardiology Grand Rounds, University of Maryland, Baltimore, MD
- 2015 Navigating a Successful Clinical and Academic Career, American Heart Association Scientific Sessions, Orlando, FL
- 2016 New Perspectives on the Natriuretic Peptides and Cardiovascular Health, Cardiology Grand Rounds, University of Illinois, Chicago, IL
- 2016 The Natriuretic Peptides and Cardiometabolic Health: From Base Pairs to Bedside, Sanford-Burnham-Prebys Institute, Orlando, FL
- 2016 New Perspectives on the Natriuretic Peptides, Cardiology Grand Rounds, University of Utah, Salt Lake City, UT
- 2016 New Perspectives on the Natriuretic Peptides, Cardiology Grand Rounds, University of Chicago, Chicago, IL
- 2016 The Natriuretic Peptides and Cardiometabolic Health, Cardiology Grand Rounds, Mayo Clinic, Rochester, MN.
- 2016 Newer perspectives on the natriuretic peptides and cardiovascular health, Cardiology Grand Rounds, Emory University, Atlanta, GA.
- 2016 Newer Perspectives on the Natriuretic Peptides and Cardiovascular Health, Cardiology Grand Rounds, Northwestern University, Chicago, IL.
- 2016 Metabolomic Profiles of Diabetes Mellitus, COMETS Scientific Meeting, National Cancer Institute, Rockville, MD.
- 2016 Newer Perspectives on the Natriuretic Peptides and Cardiovascular Health, Cardiology Grand Rounds, Grady Hospital, Morehouse School of Medicine, Atlanta, GA.

- 2016 The Natriuretic Peptides and Cardiometabolic Health: From Base Pairs to Bedside, Cardiovascular Research Institute, Morehouse School of Medicine, Atlanta, GA.
- 2017 Newer Perspectives on the Natriuretic Peptides in Health and Disease, Medicine Grand Rounds, Jay M. Sullivan, MD Lecture, University of Tennessee, Memphis, TN.
- 2017 Natriuretic Peptides and Cardiometabolic Disease: From Base Pairs to Bedside, Frontiers Lecture, Stanford Cardiovascular Research Institute, Palo Alto, CA.
- 2017 Metabolomics and other -omics of diabetes, Nutrition Omics Conference, Harvard School of Public Health, Boston, MA.
- 2017 Novel Approaches to Biomarker Discovery, AHA Research Leaders Academy, Rapid Fire Science, Denver, CO.
- 2017 New Approaches to Biomarker Discovery in HFpEF, NHLBI Working Group on HFpEF, Bethesda, MD.
- 2017 Newer Perspectives on the Natriuretic Peptides: From Base Pairs to Bedside. Cardiology Grand Rounds, Medical College of Wisconsin, Milwaukee, WI.
- 2018 The Heart as an Endocrine Organ: From Base Pairs to Bedside. Cardiovascular Research Seminar, Beth Israel-Deaconess Medical Center, Boston, MA.
- 2018 The Heart as an Endocrine Organ: From Base Pairs to Bedside. Cardiovascular Medicine Grand Rounds, Brigham and Women's Hospital, Boston, MA.
- 2018 Biomarkers, Precision Medicine, and Cardiovascular Prevention. Cardiology Grand Rounds, Beth Israel-Deaconess Medical Center, Boston, MA.
- 2018 Predicting Incident Heart Failure: Is There a Role for Biomarkers? American College of Cardiology Scientific Sessions, Orlando, FL.
- 2018 The Heart as an Endocrine Organ: From Base Pairs to Bedside. Boren Lectureship, UCLA, Los Angeles, CA.
- 2018 Biomarkers, Precision Medicine, and Cardiovascular Prevention. Cardiology Grand Rounds, Wake Forest, Winston-Salem, NC.
- 2018 Success in Mentoring, AHA Research Leaders Academy, Salt Lake City, UT.
- 2018 Heart Failure and the Cardiac Endocrine System. Featheringill Keynote Lecture, CCVC Symposium, University of Alabama-Birmingham, AL.

- 2018 The Heart as an Endocrine Organ: From Base Pairs to Bedside. Great Wall International Congress of Cardiology. Beijing, China.
- 2018 Biomarkers in Heart Failure. Great Wall International Congress of Cardiology. Beijing, China.
- 2019 What I Learned and Did Not Learn From My Research Mentors. University of Pittsburgh, Annual VMI/VHI Research Retreat, Keynote Address. Pittsburgh, PA.
- 2019 Cardiovascular Prevention in the Era of Precision Medicine. Cardiology Grand Rounds, Houston Methodist Hospital. Houston, TX.
- 2019 Conversation about Open Science, AHA Research Leaders Academy, Baltimore, MD.
- 2019 The Polypill, Precision Medicine, and the Future of Cardiovascular Prevention (Keynote session). Great Wall International Congress of Cardiology. Beijing, China.
- 2019 Biomarkers, Omics, and the Pursuit of Precision Medicine. Jeremiah Stamler 100th Birthday Symposium. Northwestern University, Chicago, IL.
- 2019 Cardiovascular Prevention in the Era of Precision Medicine. Cardiology Grand Rounds. University of Arizona, Tucson, AZ.
- 2020 The Polypill in the U.S. Annual ASPC Debate, AHA Epidemiology/Lifestyle Scientific Sessions. Phoenix, AZ.
- 2020 Cardiovascular Prevention in the Era of Precision Medicine. Internal Medicine Grand Rounds [Virtual]. Baylor, Scott, & White, Dallas, TX.
- 2021 Identifying Research Opportunities for Asian American, Native Hawaiian, and Pacific Islander Health: A Virtual Workshop [moderator]. NIH.
- 2021 Will the Future of Cardiovascular Prevention Look More Precise – or Less? Kenneth L. Baughman Master Clinician Lecture [Virtual]. Brigham and Women’s Hospital, Boston, MA.
- 2022 Cardiovascular Prevention: Past, Present, and Future. Medicine Grand Rounds [Virtual]. UT Austin, Austin, TX.
- 2022 Natriuretic Peptide Deficiency and Heart Failure: When There is Too Little of a Good Thing. Plenary Session [Virtual]. Southern Society of Clinical Investigation. New Orleans, LA.

- 2022 Natriuretic Peptide Deficiency and Heart Failure: When There is Too Little of a Good Thing. Plenary Session [Virtual]. Southern Society of Clinical Investigation. New Orleans, LA.
- 2022 Will the Future of Cardiovascular Prevention Be More Precise – or Less? Cardiology Grand Rounds [Virtual]. Yale School of Medicine, New Haven, CT.
- 2022 Will the Future of Cardiovascular Prevention Be More Precise – or Less? Cardiology Grand Rounds [Virtual]. Yale School of Medicine, New Haven, CT.
- 2022 Cardiovascular Prevention: Past, Present, and Future [Virtual]. Mount Sinai School of Medicine – Morningside. New York, NY.
- 2022 Integrated Omics for the Prevention and Management of Cardiovascular Diseases in People with Diabetes [Virtual]. American Diabetes Association, Scientific Sessions. New Orleans, LA.