

CURRICULUM VITAE

Justin Matthew Bachmann, MD, MPH

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EDUCATION

08/1996 - 05/2000 B.A., Biology and Political Science, *Magna cum Laude*
Washington University, St. Louis, MO

08/2001 - 05/2006 M.D., *Alpha Omega Alpha*
Vanderbilt University School of Medicine, Nashville, TN

07/2013 - 05/2014 M.P.H., Concentration in Clinical Effectiveness
Harvard School of Public Health, Boston, MA

07/2006 - 06/2009 Osler Residency in Internal Medicine
Johns Hopkins Hospital, Baltimore, MD

07/2009 - 06/2012 Cardiovascular Disease Fellowship
University of Texas-Southwestern Medical Center, Dallas, TX

07/2012 - 06/2013 Research Associate, Institute for Strategy and Competitiveness
Harvard Business School, Boston, MA
Professor Michael Porter, mentor

LICENSURE AND CERTIFICATION

2009-present Texas Medical License, N4269

2014-present Tennessee Medical License, #51475

2009-present Diplomate, Internal Medicine, American Board of Internal Medicine

2013-present Diplomate, Cardiovascular Disease, American Board of Internal Medicine

2015-present Diplomate, Certification Board of Nuclear Cardiology

2015-present Diplomate, Adult Comprehensive Echocardiography, National Board of Echocardiography

2015-present Fellow, American College of Cardiology

ACADEMIC APPOINTMENTS

07/2014-present Instructor
Division of Cardiovascular Medicine, Department of Medicine
Vanderbilt Medical Center, Nashville, TN

12/2015-present Instructor (secondary appointment)
Department of Health Policy
Vanderbilt University School of Medicine, Nashville, TN

EMPLOYMENT

2000-2001 AmeriCorps Emergency Response Team
St. Louis, MO

PROFESSIONAL ORGANIZATIONS

1999 Sigma Xi Research Honorary
1999 Pi Sigma Alpha Political Science Honorary
2000 Mortar Board
2006 Vanderbilt University Medical Alumni Association
2009 Johns Hopkins Medical & Surgical Association
2009 American Heart Association, Associate Member
2009 American College of Cardiology, Fellow
2014 American Association of Cardiovascular and Pulmonary Rehabilitation, Associate Member

PROFESSIONAL ACTIVITIES

2003-2006 Diversity Advisory Committee, Vanderbilt University School of Medicine
2007-2009 Resident representative, Critical Care Committee, Johns Hopkins Hospital
2009-2010 Chair, Legislative Advocacy Committee, American Medical Association Resident and Fellow Section
2010-2012 Fellow-in-Training liaison, Executive Committee, Texas Chapter of the American College of Cardiology
2010-2012 Chair, Fellows-in-Training Committee, American College of Cardiology
2011-2012 Chair, Resident and Fellow Section, American Medical Association
2012-2014 Reviewer, *Circulation*
2012-2014 Reviewer, *Circulation: Quality and Outcomes*
2012-2014 Fellow representative, Cardiovascular Leadership Institute Working Group, American College of Cardiology
2012-2014 Fellow representative, Science and Health Policy Subcommittee, National Cardiovascular Data Registry, American College of Cardiology
2015-2016 Reviewer, *Journal of the American College of Cardiology: Heart Failure*
2015-2016 Reviewer, *American Journal of Medicine*
2015-present Emerging Advocates Program, American College of Cardiology
2015-present Research Committee, American Association of Cardiovascular and Pulmonary Rehabilitation
2015-present Voting member, Institutional Review Board, Veterans Affairs Tennessee Valley Healthcare System
2016-present Early Career Section Leadership Council, American College of Cardiology
2016 Fellow, National Institutes of Health Summer Institute on Randomized Behavioral Clinical Trials
2018-present Reviewer, *Journal of Cardiovascular Rehabilitation and Prevention*

Honors and Awards

1998-2000 Danforth Scholarship, Washington University
2002-2006 Edward and Patricia McGavock Scholarship, Vanderbilt University School of Medicine
2006 Vanderbilt Medical Scholars Program
2012 Northwestern Cardiovascular Young Investigators' Forum Fellow Award Finalist

- 2012 American Heart Association Council on Quality of Care and Outcomes Research Young Investigator Abstract Award Finalist
- 2012 American Heart Association “Best of AHA” Abstract Designation

TEACHING ACTIVITIES

- 2015-present Course director, Vanderbilt Value-based Health Care Delivery Seminar (Melinda Buntin, PhD and Ranga Ramanujam, PhD, co-course directors)

CLINICAL TEACHING

- 2014-2015 Harrison Inpatient Cardiology Service, Vanderbilt University Medical Center (residents and medical students)
- 2015-present Veterans Affairs Echocardiography Laboratory (fellows)
- 2015-present Veterans Affairs Cardiac Intensive Care Unit (residents, fellows, and medical students)

RESEARCH SUPERVISION

- 2015-present Aditi Desai, MD, Radiology Breast Imaging Fellow – Time-driven activity based costing in breast imaging
- 2016-present Devin Patel, MD, Cardiovascular Disease Fellow – Post-discharge outcomes after urgent coronary artery bypass grafting

RESEARCH PROGRAM

Cardiac rehabilitation is profoundly underutilized in the United States. My research program focuses on (1) Characterizing cardiac rehabilitation utilization patterns across geography, ethnicity and race; (2) Identifying psychosocial barriers to participation in cardiac rehabilitation programs; and (3) Using these insights to develop behavioral interventions to increase cardiac rehabilitation participation. Additionally, I have a deep interest in patient-reported outcomes and the operationalization of these measures into routine clinical practice.

PUBLICATIONS AND PRESENTATIONS

Research articles (peer reviewed)

1. **Bachmann JM**, Willis BL, Ayers CR, Khera A, Berry JD. [Association between family history and coronary heart disease death across long-term follow-up in men: the Cooper Center Longitudinal Study](#). *Circulation*. 2012 Jun 26;125(25):3092-8. doi: 10.1161/CIRCULATIONAHA.111.065490. Epub 2012 May 23. PubMed PMID: 22623718; PubMed Central PMCID: PMC3631594.
2. **Bachmann JM**, DeFina LF, Franzini L, Gao A, Leonard DS, Cooper KH, Berry JD, Willis BL. [Cardiorespiratory Fitness in Middle Age and Health Care Costs in Later Life](#). *J Am Coll Cardiol*. 2015 Oct 27;66(17):1876-85. doi: 10.1016/j.jacc.2015.08.030. Erratum in: *J Am Coll Cardiol*. 2015 Nov 17;66(20):2269. PubMed PMID: 26493659.
3. Willis BL, DeFina LF, **Bachmann JM**, Franzini L, Shay CM, Gao A, Leonard D, Berry JD. [Association of Ideal Cardiovascular Health and Long-term Healthcare Costs](#). *Am J Prev Med*. 2015 Nov;49(5):678-85. doi: 10.1016/j.amepre.2015.03.034. Epub 2015 Jun 30. PubMed PMID: 26141912.
4. **Bachmann JM**, Goggins KM, Nwosu SK, Schilderout JS, Kripalani S, Wallston KA. [Perceived health competence predicts health behavior and health-related quality of life in patients with](#)

- [cardiovascular disease](#). Patient Educ Couns. 2016 Dec;99(12):2071-2079. doi: 10.1016/j.pec.2016.07.020. Epub 2016 Jul 15. PubMed PMID: 27450479.
5. Freiberg MS, Chang CH, Skanderson M, Patterson OV, DuVall SL, Brandt CA, So-Armah KA, Vasan RS, Oursler KA, Gottdiener J, Gottlieb S, Leaf D, Rodriguez-Barradas M, Tracy RP, Gibert CL, Rimland D, Bedimo RJ, Brown ST, Goetz MB, Warner A, Crothers K, Tindle HA, Alcorn C, **Bachmann JM**, Justice AC, Butt AA. [Association Between HIV Infection and the Risk of Heart Failure With Reduced Ejection Fraction and Preserved Ejection Fraction in the Antiretroviral Therapy Era: Results From the Veterans Aging Cohort Study](#). JAMA Cardiol. 2017 Apr 5. doi: 10.1001/jamacardio.2017.0264. [Epub ahead of print] PubMed PMID: 28384660.
 6. **Bachmann JM**, Shah AS, Duncan MS, Greevy RA Jr, Graves AJ, Ni S, Ooi HH, Wang TJ, Thomas RJ, Whooley MA, Freiberg MS. [Cardiac rehabilitation and readmissions after heart transplantation](#). J Heart Lung Transplant. 2017 May 23. pii: S1053-2498(17)31798-9. doi: 10.1016/j.healun.2017.05.017. [Epub ahead of print] PubMed PMID: 28619383.
 7. Heerman WJ, Jackson N, Roumie CL, Harris PA, Rosenbloom ST, Pulley J, Wilkins CH, Williams NA, Crenshaw D, Leak C, Scherdin J, Muñoz D, **Bachmann J**, Rothman RL, Kripalani S. [Recruitment methods for survey research: Findings from the Mid-South Clinical Data Research Network](#). Contemp Clin Trials. 2017 Aug 17;62:50-55. doi: 10.1016/j.cct.2017.08.006. [Epub ahead of print] PubMed PMID: 28823925.
 8. **Bachmann JM**, Klint ZW, Jagoda AM, McNatt JK, Abney LR, Huang S, Liddle DG, Frontera WR, Freiberg MS. [Group Enrollment and Open Gym Format Decreases Cardiac Rehabilitation Wait Times](#). J Cardiopulm Rehabil Prev. 2017 Sep;37(5):322-328. doi: 10.1097/HCR.000000000000255. PubMed PMID: 28858032.
 9. **Bachmann JM**, Huang S, Gupta DK, Lipworth L, Mumma MT, Blot WJ, Akwo EA, Kripalani S, Whooley MA, Wang TJ, Freiberg MS. [Association of Neighborhood Socioeconomic Context With Participation in Cardiac Rehabilitation](#). J Am Heart Assoc. 2017 Oct 11;6(10). pii: e006260. doi: 10.1161/JAHA.117.006260. PubMed PMID: 29021267.
 10. **Bachmann JM**, Duncan MS, Shah AS, Greevy RA Jr., Lindenfeld J, Keteyian SJ, Thomas RJ, Whooley MA, Wang TJ, Freiberg MS. [Association of Cardiac Rehabilitation With Decreased Hospitalizations and Mortality After Ventricular Assist Device Implantation](#). JACC Heart Fail. 2018 Feb;6(2):130-139. doi: 10.1016/j.jchf.2017.11.002. PubMed PMID: 29413368.
 11. **Bachmann JM**, Mayberry LS, Wallston KA, Huang S, Roumie CL, Muñoz D, Patel NJ, Kripalani S. [Relation of Perceived Health Competence to Physical Activity in Patients With Coronary Heart Disease](#). Am J Cardiol. 2018 May 1;121(9):1032-1038. doi: 10.1016/j.amjcard.2018.01.024. Epub 2018 Feb 7. PubMed PMID: 29602441.
 12. Beatty AL, Truong M, Schopfer DW, Shen H, **Bachmann JM**, Whooley MA. [Geographic Variation in Cardiac Rehabilitation Participation in Medicare and Veterans Affairs Populations: An Opportunity for Improvement?](#) Circulation. 2018 Jan 5. pii: CIRCULATIONAHA.117.029471. doi: 10.1161/CIRCULATIONAHA.117.029471. [Epub ahead of print] PubMed PMID: 29305529.
 13. Akwo EA, Kabagambe EK, Harrell FE Jr., Blot WJ, **Bachmann JM**, Wang TJ, Gupta DK, Lipworth L. [Neighborhood Deprivation Predicts Heart Failure Risk in a Low-Income Population of Blacks and Whites in the Southeastern United States](#). Circ Cardiovasc Qual Outcomes. 2018 Jan;11(1):e004052. doi: 10.1161/CIRCOUTCOMES.117.004052. PubMed PMID: 29317456; PubMed Central PMCID: PMC5769153.
 14. Roumie CL, Patel NJ, Muñoz D, **Bachmann J**, Stahl A, Case R, Leak C, Rothman R, Kripalani S. [Design and outcomes of the Patient Centered Outcomes Research Institute coronary heart disease cohort study](#). Contemp Clin Trials Commun. 2018 Mar 9;10:42-49. doi: 10.1016/j.conctc.2018.03.001. eCollection 2018 Jun. PubMed PMID: 29696157; PubMed Central PMCID: PMC5898539.

Review articles and case reports (peer reviewed)

1. **Bachmann JM**, Brownlee NA, Schiffer JT. [Multisystem mystery](#). Am J Med. 2008 May;121(5):387-9. doi: 10.1016/j.amjmed.2008.01.024. PubMed PMID: 18456032.
2. **Bachmann JM**, Majmudar M, Tompkins C, Blumenthal RS, Marine JE. [Lipid-altering therapy and atrial fibrillation](#). Cardiol Rev. 2008 Jul-Aug;16(4):197-204. doi: 10.1097/CRD.0b013e318177271d. Review. PubMed PMID: 18562810.
3. Majmudar MD, Tompkins C, **Bachmann JM**, Blumenthal RS, Marine JE. [Effects of lipid-altering therapies on ventricular arrhythmias and sudden cardiac death](#). Cardiol Rev. 2009 Mar-Apr;17(2):60-9. doi: 10.1097/CRD.0b013e3181861be8. Review. PubMed PMID: 19367147.
4. Yehia BR, **Bachmann JM**, Traill TA. [Scimitar syndrome: a rare cause of dyspnea in adults](#). South Med J. 2010 Jun;103(6):578-80. doi: 10.1097/SMJ.0b013e3181dfd59e. PubMed PMID: 20710146.

Business school cases

1. Porter, Michael E., and **Justin M. Bachmann**. "Texas Children's Hospital: Congenital Heart Care," HBS No. N1-714-507 Boston: Harvard Business School Publishing, 2014.

Abstracts (peer reviewed)

1. **Bachmann, J.M.**, Ehtesham, M., and R.C. Thompson. (2007). "Overexpression of the stem cell marker Bmi1 in a subpopulation of human gliomas." Poster presentation, American Association of Neurological Surgeons 75th Annual Meeting, Washington, DC. Winner, Best Basic Science/Translational Poster.
2. **Bachmann, J.M.**, Garibaldi, B., and S.S. Sisson. (2007). "Chylothorax as a complication of thymectomy." Poster presentation, American College of Physicians Regional Associates Meeting, Baltimore, MD.
3. Suresh, K., **Bachmann, J.M.**, and S.S. Sisson. (2009). "'We had no ice in the house:' a case of non-typhoidal salmonellosis." Poster presentation, Society of General Internal Medicine, Miami, FL.
4. Marsh, J., **Bachmann, J.M.**, and L. Feldman. (2009). "Mycobacterium avium intracellulare infection in a tuberculosis outbreak." Poster presentation, Society of General Internal Medicine, Miami, FL.
5. **Bachmann, J.M.**, Willis, B., Ayers, C., Khera, A. and J. Berry. (2011). "Association of family history of premature coronary heart disease with coronary heart disease death: the Cooper Center Longitudinal Study." Poster presentation, American Heart Association Scientific Sessions, Orlando, FL.
6. **Bachmann, J.M.**, Willis, B., DeFina, L., Leonard, D., Gao, A., and J.D. Berry. (2012). "Association of midlife fitness with healthcare charges in later life: the Cooper Center Longitudinal Study." Poster presentation, American Heart Association Quality of Care and Outcomes Research, Atlanta, GA. QCOR Travel Award. Designated "Best of AHA" (top 10% of scored abstracts).
7. **Bachmann, J.M.**, Willis, B., DeFina, L., Leonard, D., Gao, A., and J.D. Berry. (2012). "Association of midlife fitness with healthcare costs in later life." Oral presentation, Northwestern Cardiovascular Young Investigators' Forum, Chicago, IL. Young Investigator Award finalist.
8. **Bachmann, J.M.**, Lipworth, L., Wang, T.J., Mumma, M.T., Whooley, M.A., and M.S. Freiberg. (2015). "Neighborhood socioeconomic context is associated with cardiac rehabilitation

- participation above and beyond individual socioeconomic status.” American Heart Association Quality of Care and Outcomes Research Annual Meeting, Orlando, FL.
9. **Bachmann, J.M.**, Wallston, K., Roumie, C.R., Munoz, D., Patel, N., and S. Kripalani. (2015). “Health self-efficacy is associated with increased physical activity in patients with coronary heart disease.” American Heart Association Scientific Sessions, Orlando, FL.
 10. **Bachmann, J.M.**, Graves, A.J., Ni, S., Shah, A., Wang, T., Whooley, M., and M.S. Freiberg. (2016). “Cardiac rehabilitation is underutilized after heart transplantation.” Oral presentation. 2016 American College of Cardiology Scientific Sessions, Chicago, IL.
 11. **Bachmann JM**, Kundu S., So-Armah A, Sico J, Marconi V, Warner A, Butt A, Oursler K, McGinnis K, Freiberg M. (2017). “Cardiac rehabilitation is associated with decreased mortality in HIV patients with cardiovascular disease.” Poster presentation. 2017 American Heart Association EPI|Lifestyle Scientific Sessions, Portland, OR.
 12. **Bachmann J.M.**, Duncan M.S., Greevy R.S., Beatty A.L., Thomas R.J., Whooley M.A., Freiberg M.S. (2017). “Geographic variation in cardiac rehabilitation access.” Poster presentation. 2017 American Heart Association Scientific Sessions, Anaheim, CA.
 13. Desai A., Shah M., Kurita S., Grooms R., Pierce R, **Bachmann J.M.** (2017). “A Comparison of Time-Driven Activity-Based Costing to RVU-Based Absorption Costing in Breast Imaging Services.” 2017 Radiological Society of North American Annual Meeting. Chicago, IL.

Invited talks

1. Grand Rounds, Department of Physical Medicine & Rehabilitation, Vanderbilt University Medical Center, Nashville, TN. “Cardiovascular Rehabilitation: Current Utilization and Future Challenges.” February 2, 2015.
2. Keynote speaker, Tennessee Association of Cardiovascular and Pulmonary Rehabilitation, Nashville, TN. “Cardiovascular Rehabilitation: Current Utilization and Future Challenges.”
3. Grand Rounds, Division of Cardiovascular Medicine, Department of Medicine, Vanderbilt University Medical Center, Nashville, TN. “Cardiovascular Rehabilitation: Current Utilization and Future Challenges.” January 20, 2016.
4. Grand Rounds, Division of Epidemiology, Department of Medicine, Vanderbilt University Medical Center, Nashville, TN. “Geographic Variation in Cardiac Rehabilitation Access and Utilization.” January 9, 2018.