

Laura R. Loehr, MD, PhD, MS
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EDUCATION

Doctor of Philosophy: University of North Carolina, 2003-2008, Epidemiology

Masters of Science: The Wake Forest University Graduate School of Arts and Sciences, Clinical Epidemiology and Health Services Research, 2000-2002

Medical Doctorate: Wake Forest University School of Medicine May 1995

Bachelor of Arts Degree: Davidson College, Psychology, May 1988

PROFESSIONAL EXPERIENCE

Research Assistant Professor September 2009- present	Epidemiology University of North Carolina at Chapel Hill
Postdoctoral Fellow September 2008 – Sept 2009	Epidemiology National Institute of Environmental Health Sciences Mentor: Stephanie London, MD, DrPH
Clinical Assistant Professor September 2008 – Sept 2009	Part-time Hospitalist University of North Carolina-Chapel Hill
Staff Physician September 2007 – August 2008	Part-time Hospitalist North Carolina Specialty Hospital Durham, NC
NIH/NRSA Postdoctoral Fellow July 2003 – May 2007	Epidemiology, Cardiovascular Diseases Program University of North Carolina-Chapel Hill
Clinical Assistant Professor July 2002 – June 2003 Part-time	General Internal Medicine Wake Forest University School of Medicine Winston-Salem, NC
NIH/NRSA Fellow July 2000 - June 2002	General Internal Medicine Fellowship Wake Forest University School of Medicine
Staff Physician July 1999 - June 2000	Ardsley Medical Clinic Provided inpatient and outpatient care Northeast Medical Center Concord, North Carolina

Instructor

July 1998 - June 1999

Assistant Chief of Medicine (Chief Resident)

Wake Forest University School of Medicine

Resident

July 1996 - June 1998

Resident in Internal Medicine

Wake Forest University School of Medicine

Intern

July 1995 - June 1996

Intern in Internal Medicine

St. Louis University

St. Louis, MO 63110

HONORS

Program leader, Master of Clinical Research program, UNC-CH, 2016 to present

Program leader, Cardiovascular Diseases Program in Epidemiology, UNC-CH, 2015-present

Finalist for the Sandra Daugherty award, AHA epidemiology meeting, San Diego 2012

Nominated by the Department of Epidemiology for the 2009 Graduate Dean's Distinguished Dissertation Award, UNC-Chapel Hill

University of North Carolina Cardiovascular Disease training grant, 2003-2007

Finalist for the Jeremiah and Rose Stamler award, AHA epidemiology meeting, Honolulu, Hawaii, 2002

Fellow, 27th 10-day Seminar on the Epidemiology and Prevention of Cardiovascular Disease, Tahoe City, CA, 2001

NIH Fellowship for Medical Student Research, Bowman Gray School of Medicine, 1992

MEMBERSHIPS

American Heart Association, Epidemiology Council

Board Certified, American Board of Internal Medicine, 1998, and 2008

Active Medical License, North Carolina Medical Board, 2015

BIBLIOGRAPHY AND PRODUCTS OF SCHOLARSHIP**Peer reviewed published articles (66 total)**

†indicates student led papers in which I was a key mentor, *indicates shared authorship

2016 (10 publications to date)Norby FL, Soliman EZ, Chen LY, Bengtson L, **Loehr LR**, Agarwal SA, Alonso A.
Trajectories of Cardiovascular Risk Factors and Incidence of Atrial Fibrillation over a 25-

year Follow-up: the Atherosclerosis Risk in Communities Study. *Circulation*. @016 Aug 23; 134(8): 599-610. PMID: PMC49999250.

Appiah D, Schreiner P.J., Demerath W.E., **Loehr L.R.**, Chang P.P., and Folsom A.R. Association of Age at Menopause with Incident Heart Failure: A Prospective Cohort Study and Meta-Analysis. *J Am Heart Assoc*. 2016 Jul 28; 5(8). PMID: 27468929. [PubMed – in process].

Magnani J.W., Norby F.L., Agarwal S.K., Soliman E.Z., Chen L.Y., **Loehr L.R.**, and Alonso A. Racial Differences in Atrial Fibrillation-Related Cardiovascular Diseases and Mortality: The Atherosclerosis Risk in Communities (ARIC) Study. *JAMA Cardiol*. 2016 Jul 1; 1(4): 433-41. PMID 27438320 [PubMed – in process].

Oelsner, E. C., **Loehr, L. R.**, Henderson, A. G., Donohue, K. M., Enright, P. L., Kalhan, R., Lo Cascio, C. M., Ries, A., Shah, N., Smith, B. M., Rosamond, W. and Barr, R. G. (2016). Classifying Chronic Lower Respiratory Disease Events in Epidemiologic Cohort Studies. *Annals of the American Thoracic Society*. *Ann Am Thorac Soc*. 2016 April 18. PMID: 27088163.

Loehr, L. R., Meyer, M. L., Poon, A. K., Selvin, E., Palta, P., Tanaka, H., Pankow, J. S., Wright, J. D., Griswold, M. E., Wagenknecht, L. E. and Heiss, G. (2016). Prediabetes and Diabetes Are Associated With Arterial Stiffness in Older Adults: The ARIC Study. *Am J Hypertens*. 2016 April 11. PMID: PMC4978227.

Chen, L. Y., Agarwal, S. K., Norby, F. L., Gottesman, R. F., **Loehr, L. R.**, Soliman, E. Z., Mosley, T. H., Folsom, A. R., Coresh, J. and Alonso, A. (2016). Persistent but not Paroxysmal Atrial Fibrillation Is Independently Associated With Lower Cognitive Function: ARIC Study. *J Am Coll Cardiol*. 2016 Mar 22; 67(11): 1379-80. PMID: PMC4955949.

O'Neal, W. T., Zhang, Z. M., **Loehr, L. R.**, Chen, L. Y., Alonso, A. and Soliman, E. Z. (2016). Electrocardiographic Advanced Interatrial Block and Atrial Fibrillation Risk in the General Population. *Am J Cardiol*. 2016 June 1. PMID: PMC4898264.

Zhang ZM, Rautaharju PM, Prineas RJ, Rodriguez CJ, **Loehr L**, Rosamond WD, Kitzman D, Couper D, Soliman EZ. Race and Sex Differences in the Incidence and Prognostic Significance of Silent Myocardial Infarction in the Atherosclerosis Risk in Communities (ARIC) Study. *Circulation* 2016 May 16. PMID: 4889519.

Mirabelli MC, Preisser JS, **Loehr LR**, Agarwal SK, Barr RG, Couper DJ, Hankinson JL, Hyun N, Folsom AR, London SJ. Lung function decline over 25 years of follow-up among black and white adults in the ARIC study cohort. *Respir Med*. 2016 Feb 11. PMID: PMC4811733.

Agarwal SK, Wruck L, Quibrera M, Matsushita K, **Loehr LR**, Chang PP, Rosamond WD, Wright J, Heiss G, Coresh J. Temporal Trends in Hospitalization for Acute

Decompensated Heart Failure in the United States, 1998-2011. *Am J Epidemiol.* 2016 Mar 1;183(5):462-70. PMID: PMC4772439.

2015 (14 publications)

Alonso A, Yu B, Qureshi WT, Grams ME, Selvin E, Soliman EZ, **Loehr LR**, Chen LY, Agarwal SK, Alexander D, Boerwinkle E. Metabolomics and Incidence of Atrial Fibrillation in African Americans: The Atherosclerosis Risk in Communities (ARIC) Study. *PLoS One.* 2015 Nov 6;10(11):e0142610. doi: 10.1371/journal.pone.0142610. eCollection 2015. PMID: PMC4636390.

Hardy ST, **Loehr LR**, Butler KR, Chakladar S, Chang PP, Folsom AR, Heiss G, MacLehose RF, Matsushita K, Avery CL. Reducing the Blood Pressure-Related Burden of Cardiovascular Disease: Impact of Achievable Improvements in Blood Pressure Prevention and Control. *J Am Heart Assoc.* 2015 Oct 27;4(10). PMID: PMC4845128.

Ricardo AC, Flessner MF, Eckfeldt JH, Eggers PW, Franceschini N, Go AS, Gotman NM, Kramer HJ, Kusek JW, **Loehr LR**, Melamed ML, Peralta CA, Raij L, Rosas SE, Talavera GA, Lash JP. Prevalence and Correlates of CKD in Hispanics/Latinos in the United States. *Clin J Am Soc Nephrol.* 2015 Oct 7;10(10):1757-66. doi: 10.2215/CJN.02020215. Epub 2015 Sep 28. PMID: PMC4594064.

Jones SB, **Loehr L**, Avery CL, Gottesman RF, Wruck L, Shahar E, Rosamond WD. Midlife Alcohol Consumption and the Risk of Stroke in the Atherosclerosis Risk in Communities Study. *Stroke.* 2015 Nov;46(11):3124-30. PMID: PMC4725192.

Misialek JR, Bekwelem W, Chen LY, **Loehr LR**, Agarwal SK, Soliman EZ, Norby FL, Alonso A. Association of White Blood Cell Count and Differential with the Incidence of Atrial Fibrillation: The Atherosclerosis Risk in Communities (ARIC) Study. *PLoS One.* 2015 Aug 27;10(8):e0136219. doi: 10.1371/journal.pone.0136219. eCollection 2015. PMID: PMC4551739.

Kamel H, O'Neal WT, Okin PM, **Loehr LR**, Alonso A, Soliman EZ. Electrocardiographic left atrial abnormality and stroke subtype in the atherosclerosis risk in communities study. *Ann Neurol.* 2015 Nov;78(5):670-8. PMID: PMC4624007.

Soliman EZ, Lopez F, O'Neal WT, Chen LY, Bengtson L, Zhang ZM, **Loehr L**, Cushman M, Alonso A. Atrial Fibrillation and Risk of ST-Segment Elevation versus Non-ST Segment Elevation Myocardial Infarction: The Atherosclerosis Risk in Communities (ARIC) Study. *Circulation.* 2015 Apr 27. PMID: PMC4447576.

Wilsgaard T, **Loehr LR**, Mathiesen EB, Løchen ML, Bønaa KH, Njølstad I, Heiss G. Cardiovascular health and the modifiable burden of incident myocardial infarction: the Tromsø Study. *BMC Public Health.* 2015 Dec;15(1):1573. PMID: PMC4355366.

Lutsey PL, Michos ED, Misialek JR, Pankow JS, **Loehr L**, Selvin E, Reis JP, Gross M, Eckfeldt JH, Folsom AR. Race and Vitamin D Binding Protein Gene Polymorphisms Modify the Association of 25-Hydroxyvitamin D and Incident Heart Failure: The ARIC (Atherosclerosis Risk in Communities) Study. *JACC Heart Fail.* 2015 Mar 30. pii: S2213-1779(15)00126-2. PMID: PMC4426050.

Arguelles W, Llabre MM, Sacco RL, Penedo FJ, Carnethon M, Gallo LC, Lee DJ, Catellier DJ, González HM, Holub C, **Loehr LR**, Soliman EZ, Schneiderman N. Characterization of metabolic syndrome among diverse Hispanics/Latinos living in the United States: Latent class analysis from the Hispanic Community Health Study/Study of Latinos (HCHS/SOL). *Int J Cardiol.* 2015 Feb 27;184C:373-379. PMID: PMC4417385.

Zhang ZM, Rautaharju PM, Prineas RJ, **Loehr L**, Rosamond W, Soliman EZ. Bundle branch blocks and the risk of mortality in the Atherosclerosis Risk in Communities study. *J Cardiovasc Med (Hagerstown).* 2015 Jan 7. [Epub ahead of print] PMID: 25575277 [PubMed - as supplied by publisher].

Zhang Z, Rautaharju PM, Prineas RJ, **Loehr L**, Rosamond WD, Soliman EZ. Ventricular Conduction Defects and the Risk of Incident Heart Failure in the Atherosclerosis Risk in Communities (ARIC) Study. *J of Cardiac Failure,* 2015 Jan 9. [Epub ahead of print] PMID: 25582389

Corrales-Medina VF, Alvarez KN, Weissfeld LA, Angus DC, Chirinos JA, Chang CH, Newman A, **Loehr L**, Folsom AR, Elking MS, Lyles MF, Kronmal RA, Yende S. Association Between Hospitalization for Pneumonia and Subsequent Risk of Cardiovascular Disease. *JAMA.* 2015 Jan 20;313(3):264-74. PMID: 25602997 [PubMed - in process]

Filion KB, Agarwal SK, Ballantyne CM, Eberg M, Hoogeveen RC, Huxley RR, **Loehr LR**, Nambi V, Soliman EZ, Alonso A. High-sensitivity cardiac troponin T and the risk of incident atrial fibrillation: The Atherosclerosis Risk in Communities (ARIC) study. *Am Heart J.* 2015 Jan; 169(1):31-38.e3. PMID: PMC4429290.

2014 (21 publications)

Bengtson LG, Lutsey PL, **Loehr LR**, Kucharska-Newton A, Chen LY, Chamberlain AM, Wruck LM, Duval S, Stearns SC, Alonso, A. Impact of atrial fibrillation on healthcare utilization in the community: the atherosclerosis risk in communities study. *Journal of the American Heart Association.* 2014 Dec 1; 3(6). PMID: PMC4338687.

Bekwelem W, Misialek JR, Konety S, Solomon SD, Soliman EZ, **Loehr LR**, Lopez FL, Fox ER, Mosley TH, Alonso A. Echocardiographic Measures of Cardiac Structure and Function Are Associated with Risk of Atrial Fibrillation in Blacks: The Atherosclerosis Risk in Communities (ARIC) Study. *PLoS ONE,* 2014, 9(10): e110111. PMID: 25330035. PMID: PMC4199625.

Khalid U, Ather S, Bavishi C, Chan W, **Loehr LR**, Wruck LM, Rosamond WD, Chang PP, Coresh J, Virani SS, Nambi V, Bozkurt B, Ballantyne CM, Deswal A. Pre-Morbid Body Mass Index and Mortality After Incident Heart Failure: The ARIC Study. *J Am Coll Cardiol*. 2014 Dec 30;64(25):2743-9. doi: 10.1016/j.jacc.2014.09.067. PMID: 25541126 [PubMed - in process]

Caughey MC†, Avery C, Ni H, Solomon S, Matsushita K, Wruck L, Rosamond W, **Loehr L**. Outcomes of Patients with Anemia and Acute Decompensated Heart Failure with Preserved versus Reduced Ejection Fraction (From the ARIC Study Community Surveillance). *American Journal of Cardiology*, 2014 Dec 15; 114 (12): 1850-4. PubMed PMID: 25438912. [PubMed - in process]

Patel MD†, Kalbaugh CA, Chang PP, Matsushita K, Agarwal SK, Caughey MC, Ni H, Rosamond WD, Wruck LM, **Loehr LR**. Characteristics and Outcomes of Patients with Acute Decompensated Heart Failure Developing After Hospital Admission. *American Journal of Cardiology*. 2014 Aug 27. PMCID: PMC4253688

Gupta DK, Skali H, Claggett B, Kasabov R, Cheng S, Shah AM, **Loehr LR**, Heiss G, Nambi V, Aguilar D, Wruck LM, Matsushita K, Folsom AR, Rosamond WD, Solomon SD. Heart Failure Risk Across the Spectrum of Ankle-Brachial Index: The ARIC Study (Atherosclerosis Risk In Communities). *JACC Heart Fail*. 2014 Aug 27. PMCID: PMC4194157.

Caughey MC†, **Loehr LR**, Key NS, Derebail VK, Gottesman RF, Kshirsagar AV, Grove ML, Heiss G. Sickle Cell Trait and Incident Ischemic Stroke in the Atherosclerosis Risk in Communities Study. *Stroke*. 2014 Aug 19. PMCID: PMC4174726.

Heiss G, Snyder ML, Teng Y, Schneiderman N, Llabre MM, Cowie C, Carnethon M, Kaplan R, Giachello A, Gallo L, **Loehr L**, Avilés-Santa L. Prevalence of metabolic syndrome among Hispanics/Latinos of diverse background: the Hispanic Community Health Study/Study of Latinos. *Diabetes Care*. 2014 Aug;37(8):2391-9. PMCID: PMC4113166.

Chen LY, Lopez FL, Gottesman RF, Huxley RR, Agarwal SK, **Loehr L**, Mosley T, Alonso A. Atrial Fibrillation and Cognitive Decline-The Role of Subclinical Cerebral Infarcts: The Atherosclerosis Risk in Communities Study. *Stroke*. 2014 sept; 45 (9): 2568-74. PMCID: PMC4146651.

Weinberger M, Pusek SN, Esserman DA, **Loehr L**, Miller WC, Orringer EP, Weaver MA. A Model for Developing, Evaluating, and Disseminating Best Practices in Education and Training. *Clin Transl Sci*. 2014 Jul 23. PMCID: PMC4230533.

Smolonska, J., Koppelman, G. H., Wijmenga, C., Vonk, J. M., Zanen, P., Bruinenberg, M., Curjuric, I., Imboden, M., Thun, G. A., Franke, L., Probst-Hensch, N. M., Nürnberg, P., Riemersma, R. A., van Schayck, C. P., Loth, D. W., Brusselle, G. G., Stricker, B. H., Hofman, A., Uitterlinden, A. G., Lahousse, L., London, S. J., **Loehr, L. R.**, Manichaikul,

A., Barr, R. G., Donohue, K. M., Rich, S. S., Pare, P., Bossé, Y., Hao, K., van den Berge, M., Groen, H. J., Lammers, J. W., Mali, W., Boezen, H. M., and Postma, D. S. Common genes underlying asthma and COPD? Genome-wide analysis on the Dutch hypothesis. *The European respiratory journal*. 2014 Oct 1 ; 44(4); : 860-72. PMID: PMC4217133.

Lutsey PL, Alonso A, Michos ED, **Loehr LR**, Astor BC, Coresh J, Folsom AR. Serum magnesium, phosphorus, and calcium are associated with risk of incident heart failure: The Atherosclerosis Risk in Communities Study (ARIC). *Am J Clin Nutr*. 2014 Sep; 100(3):756-64. PMID: PMC4135486.

Rodriguez CJ, Swett K, Agarwal SK, Folsom AR, Fox ER, **Loehr LR**, Ni H, Rosamond WD, Chang PP. Systolic blood pressure levels among adults with hypertension and incident cardiovascular events: The Atherosclerosis Risk in Communities Study. *JAMA Intern Med*. 2014 Aug 1;174(8):1252-61. PMID: PMC4573449.

Zhang ZM, Rautaharju PM, Prineas RJ, **Loehr L**, Rosamond W, Soliman EZ. Usefulness of Electrocardiographic QRS/T Angles With Versus Without Bundle Branch Blocks to Predict Heart Failure (from the Atherosclerosis Risk in Communities Study). *Am J Cardiol*. 2014 Aug 1;114(3):412-8. PMID: PMC4098765.

Alvaro A, Misialek JR, Amiin MA, Hoogeveen RC, Chen LY, Agarwal SK, **Loehr LR**, Soliman EZ, Selvin E. Circulating levels of liver enzymes and incidence of atrial fibrillation: the Atherosclerosis Risk in Communities (ARIC) cohort. *Heart*. 2014 Jun 12. PMID: PMC4225783.

Lutsey PL, Alonso A, Selvin E, Pankow JS, Michos ED, Agarwal SK, **Loehr LR**, Eckfeldt JH, Coresh J. Fibroblast growth factor-23 and incident coronary heart disease, heart failure, and cardiovascular mortality: the atherosclerosis risk in communities study. *J Am Heart Assoc*. 2014 Jun 10;3(3):e000936. PMID: PMC4309096.

Huxley RR, Misialek JR, Agarwal SK, **Loehr LR**, Soliman EZ, Chen LY, Alonso A. Physical Activity, Obesity, Weight Change and Risk of Atrial Fibrillation: The Atherosclerosis Risk in Communities (ARIC) Study. *Circulation: Arrhythmia and Electrophysiology*, 2014 Aug;7(4):620-5. PMID: PMC4230341.

Caughey MC†, **Loehr LR**, Cheng S, Solomon SD, Avery C, Hinderliter AL. Associations Between Echocardiographic Arterial Compliance and Incident Cardiovascular Disease in Blacks: The ARIC Study. *American Journal of Hypertension*, 2014 May 18. PMID: PMC4318950.

Bengtson LG, Kucharska-Newton A, Wruck LM, **Loehr LR**, Folsom AR, Chen LY, Rosamond WD, Duval S, Lutsey PL, Stearns SC, Sueta C, Yeh HC, Fox E, Alonso A. Comparable ascertainment of newly-diagnosed atrial fibrillation using active cohort follow-up versus surveillance of centers for medicare and medicaid services in the atherosclerosis risk in communities study. *PLoS One*. 2014 Apr 11;9(4):e94321. PMID: PMC3984174.

Li J, Agarwal SK, Alonso A, Blecker S, Chamberlain AM, London SJ, **Loehr LR**, McNeill AM, Poole C, Soliman EZ, Heiss G. Airflow obstruction, Lung Function, and Incidence of Atrial Fibrillation: The Atherosclerosis Risk in Communities (ARIC) Study. *Circulation*. 2014 Mar 4;129(9):971-80. PMID: PMC3963836.

Burkart KM, Manichaikul A, Wilk JB, Ahmed FS, Burke GL, Enright, Hansel NH, Haynes D, Heckbert SR, Hoffman EA, Kaufman JD, Kurai J, **Loehr L**, London SJ, Meng Y, O'Connor GT, Oelsner E, Petrini P, Pottinger TD, Powell CA, Redline S, Rotter JI, Smith LJ, Soler Artigas M, Tobin MD, Tsai MY, Watson K, White W, Young TR, Rich SS, R Barr RG. APOM and High-Density Lipoprotein are associated with Lung Function and Percent Emphysema. *Eur Respir J*. 2014 Jan 1; 43(4). PMID: PMC4041087.

2013

Vardeny O, Gupta DK, Claggett B, Burke S, Shah A, **Loehr L**, Rasmussen-Torvik, Selvin E, Chang PP, Aguilar D, Solomon SD. Insulin Resistance and Incident Heart Failure. The Atherosclerosis Risk in Communities Study. *JACC Heart Fail*. 2013 Dec;1(6):531-6. PMID: PMC3893700.

Newman JD, Shimbo D, Baggett C, Liu X, Crow R, Abraham JM, **Loehr LR**, Wruck LM, Folsom A, Rosamond WD. Trends in Myocardial Infarction Anatomic Location and Case Fatality in four US Communities, 1987 to 2008: The Atherosclerosis Risk in Communities (ARIC) Study Community Surveillance. *Am J Cardiology*. 2013 Sept 21.. PMID: PMC3963836.

Mandyam MC, Soliman EZ, Alonso A, Dewland TA, Heckbert SR, Vittinghoff E, Cummings SR, Ellinor PT, Chaitman BR, Stocke K, Applegate WB, Arking DE, Butler J, **Loehr LR**, Magnani JW, Murphy RA, Satterfield S, Newman AB, Marcus GM. The QT Interval and Risk of Incident Atrial Fibrillation. *Heart Rhythm*. 2013 Oct; 10(10): 1562-8. PMID: PMC3787974.

Yende S, Alvarez K, **Loehr L**, Folsom AR, Newman AB, Weissfeld LA, Wunderink RG, Kritchevsky SB, Mukamal KJ, London SJ, Harris TB, Bauer DC, Angus DC. Epidemiology and long-term clinical and biologic risk factors for pneumonia in community-dwelling older Americans: analysis of three cohorts. *Chest*. 2013 Sep; 144(3):1008-17. PMID: PMC3760741.

Loehr LR, Agarwal SK, Baggett C, Solomon S, Chambless L, Chang PP, Miller E, Ni H, Rosamond W, Shahar E, Heiss G. Classification of acute decompensated heart failure (ADHF): an automated algorithm compared to the ARIC physician reviewer panel. The ARIC Study. *Circulation: Heart Failure*. 2013 May 6. PMID: PMC3767124.

Gupta DK, Shah AM, Castagno D, Takeuchi M, **Loehr LR**, Fox E, Butler KR, Mosley TH, Kitzman D, Solomon SD. Heart Failure with Preserved Ejection Fraction in African

Americans: The ARIC study. J Am Coll Cardiol HF 2013 April 1;1(2):156–63. PMID: PMC3650857.

Kantor DB, Palmer CD, Young T, Meng Y, Gajdos ZK, Lyon H, Price AL, Pollack S, London SJ, **Loehr LR**, Smith LJ, Kumar R, Jacobs DR, Petrini MF, O'Connor GT, White WB, Papanicolaou G, Burkart KM, Heckbert SR, RG Barr, Hirschhorn JN. Replication and fine mapping of asthma-associated loci in individuals of African ancestry. Hum Genet. 2013 May 12. PMID: PMC3975655.

Lopez F, Agarwal SK, Grams ME, **Loehr LR**, Soliman EZ, Lutsey PL, Chen LY, Huxley RR, Alonso A. Serum phosphorus levels and the incidence of atrial fibrillation: the Atherosclerosis Risk in Communities (ARIC) study. American Journal of Cardiology. 2013 Mar 15;111(6):857-62. PMID: PMC3632319.

Oelsner EC, Pottinger TD, Burkart KM, Allison M, Buxbaum SG, Hansel NN, Kumar R, Larkin EK, Lange LA, **Loehr LR**, London SJ, O'Connor GT, Papanicolaou G, Petrini MF, Rabinowitz D, Raghavan S, Redline S, Thyagarajan B, Tracy RP, Wilk JB, White WB, Rich SS, Barr RG. Adhesion molecules, endothelin-1 and lung function in seven population-based cohorts. Biomarkers. 2013 May;18(3):196-203. 2013 Apr 5. PMID: PMC3890095.

2012

Hancock DB*, Artigas MS*, Gharib SA*, Henry A*, Manichaikul A*, Ramasamy A*, Loth DW*, Imboden M, Koch B, McArdle WL, Smith AV, Smolonska J, Sood A, Tang W, Wilk JB, Zhai G, Zhao JH, Aschard H, Burkart KM, Curjuric I, Eijgelsheim M, Elliott P, Gu X, Harris TB, Janson C, Homuth G, Hysi PG, Liu JZ, **Loehr LR** et al. Genome-wide joint meta-analysis of SNP and SNP-by-smoking interaction identifies novel loci for pulmonary function. PLoS Genetics . 2012 Dec;8(12). PMID: PMC3527213.

Franceschini N, van Rooij FJ, Prins BP, Feitosa MF, Karakas M, Eckfeldt JH, Folsom AR, Kopp J, Vaez A, Andrews JS, Baumert J, Boraska V, Broer L, Hayward C, Ngwa JS, Okada Y, Polasek O, Westra HJ, Wang YA, Del Greco M F, Glazer NL, Kapur K, Kema IP, Lopez LM, Schillert A, Smith AV, Winkler CA, Zgaga L; The LifeLines Cohort Study, Bandinelli S, Bergmann S, Boban M, Bochud M, Chen YD, Davies G, Dehghan A, Ding J, Doering A, Durda JP, Ferrucci L, Franco OH, Franke L, Gunjaca G, Hofman A, Hsu FC, Kolcic I, Kraja A, Kubo M, Lackner KJ, Launer L, **Loehr LR**, Li G, Meisinger C, Nakamura Y, Schwienbacher C, Starr JM, Takahashi A, Torlak V, Uitterlinden AG, Vitart V, Waldenberger M, Wild PS, Kirin M, Zeller T, Zemunik T, Zhang Q, Ziegler A, Blankenberg S, Boerwinkle E, Borecki IB, Campbell H, Deary IJ, Frayling TM, Gieger C, Harris TB, Hicks AA, Koenig W, O'Donnell CJ, Fox CS, Pramstaller PP, Psaty BM, Reiner AP, Rotter JI, Rudan I, Snieder H, Tanaka T, van Duijn CM, Vollenweider P, Waeber G, Wilson JF, Witteman JC, Wolffenbuttel BH, Wright AF, Wu Q, Liu Y, Jenny NS, North KE, Felix JF, Alizadeh BZ, Cupples LA, Perry JR, Morris AP. Discovery and Fine Mapping of Serum Protein Loci through

Transethnic Meta-analysis. Am J Hum Genet. 2012 Oct 5;91(4):744-753. Epub 2012 Sep 27. PMID: PMC3484648.

Wilk JB*, Shrine NRG*, **Loehr LR***, Zhao JH*, Manichaikul A*, Lopez LM*, Smith AV*, Heckbert SR, Smolonska J, Tang W, Loth DW, Curjuric I, Hui J, Cho MH, Latourelle JC, Henry AP, Aldrich M, Bakke P, Beaty TH, Bentley AR, Borecki IB, Brusselle GG, Burkart KM, Chen T, Couper D, Crapo JD, Davies G, Dupuis J, Franceschini N, Gulsvik A, Hancock DB, Harris TB, Hofman A, Imboden M, James AL, Khaw K, Lahousse L, Launer LJ, Litonjua A, Liu Y, Lohman KK, Lomas DA, Lumley T, Marcianti KD, McArdle WL, Meibohm B, Morrison AC, Musk AW, Myers RH, North KE, Postma DS, Psaty BM, Rich SS, Rivadeneira F, Roach T, Rotter JI, Artigas MS, Starr JM, Uitterlinden AG, Wareham NJ, Wijmenga C, Zanen P, Province MA, Silverman ES, Deary IJ, Palmer LJ, Cassano PA, Gudnason V, Graham Barr RG, Loos RJJ, Strachan DP, London SJ, H. Boezen M*, Probst-Hensch N*, Gharib SA*, Hall IP*, O'Connor GT*, Tobin M*, Stricker BH*. Genome wide association studies identify CHRNA5/3 and HTR4 in the development of airflow obstruction. Am J Respir Crit Care Med. 2012 Oct 1;186(7):622-32. PMID: PMC3480517. *starred authors contributed equally

Avery CL, **Loehr LR**, Baggett C, Chang PP, Kucharska-Newton A, Matsushita K, Poole C, Rosamond W, Heiss G. The population burden of heart failure attributable to modifiable risk factors: The Atherosclerosis Risk in Communities (ARIC) study. Journal of the American College of Cardiology (JACC), 2012 Oct 23; 60(17):1640-6. PMID: PMC3653309.

Cene C†, **Loehr L**, Lin FC, Hammond WP, Foraker R, Mosley T, Rose K, Corbie-Smith G. Social isolation, vital exhaustion, and incident heart failure: findings from the Atherosclerosis Risk in Communities (ARIC) Study. European Journal of Heart Failure 2012 July; 14(7). PMID: PMC3380545.

Jones CD†, **Loehr LR**, Franceschini N, Rosamond W, Chang PP, Shahar E, Couper DC, Rose KM. Orthostatic Hypotension as a risk factor for incident heart failure. Hypertension, 2012 May; 59(5):913-8. Epub 2012 Mar 19. PMID: PMC3382984.

Agarwal SK, Heiss G, Barr RG, Chang PP, **Loehr LR**, Chambless LE, Shahar E, Kitzman DW, Rosamond WD. Airflow Obstruction, Lung Function and Risk of Incident Heart Failure: The Atherosclerosis Risk In Communities (ARIC) Study. European Journal of Heart Failure, 2012 Apr; 14(4):414-22. Epub 2012 Feb 25. PMID: PMC3530346.

Imboden M, Bouzigon E, Curjuric I, Ramasamy A, Kumar A, Hancock DB, Wilk JB, Vonk JM, Thun GA, Siroux V, Nadif R, Monier F, Gonzalez JR, Wjst M, Heinrich J, **Loehr LR**, Franceschini N, North KE, Altmüller J, Koppelman GH, Guerra S, Kronenberg F, Lathrop M, Moffatt MF, O'Connor GT, Strachan DP, Postma DS, London SJ, Schindler C, Kogevinas M, Kauffmann F, Jarvis DL, Demenais F, Nicole M Probst-Hensch NM. Genome-wide association study of lung function decline 1 in adults with

and without asthma. *Journal of Allergy and Clinical Immunology* 2012 May; 129(5): 1218-28. PMID: PMC3340499.

2011

Artigas MS, Loth DW, Wain LV, Gharib SA, Obeidat M, Tang W, Zhai G, Zhao JH, Smith AV, Huffman JE, Albrecht E, Jackson CM, Evans DM, Cadby G, Fornage M, Manichaikul A, Lopez LM, Johnson T, Aldrich MC, Aspelund T, Barroso I, Campbell H, Cassano PA, Couper DJ, Eiriksdottir G, Franceschini N, Garcia M, Gieger C, Gislason GK, Grkovic I, Hammond CJ, Hancock DB, Harris TB, Ramasamy A, Heckbert SR, Heliövaara M, Homuth G, Hysi PG, James AL, Jankovic S, Joubert BR, Karrasch S, Klopp N, Koch B, Kritchevsky SB, Launer LJ, Liu Y, **Loehr LR** et al. Genome-wide association and large-scale follow up identifies 16 new loci influencing lung function. *Nature Genetics*, 2011, Sept 25th. PMID: PMC3267376.

Huxley RR, Alonso A, Lopez FL, Filion KB, Agarwal SK, **Loehr LR**, Soliman EZ, Pankow JS, Selvin E. Diabetes, glucose homeostasis and risk of subsequent atrial fibrillation: the Atherosclerosis Risk in Communities Study (ARIC). *Heart* 2011, Sept 19th. PMID: PMC3237721.

Bekwelem W, Lutsey PL, **Loehr LR**, Agarwal SK, Astor BC, Guild C, Ballantyne CM, Folsom AR: White blood cell count, C-reactive protein and incident heart failure in the Atherosclerosis Risk in Communities (ARIC) Study. *Ann Epidemiol* 2011 Oct; 21(10): 739-48. PMID: PMC3166412.

Alonso A, Lopez FL, Matsushita K, **Loehr LR**, Agarwal SK, Chen LY, Soliman EZ, Astor BC, Coresh J. Chronic kidney disease is associated with the incidence of atrial fibrillation: the ARIC study. *Circulation*, 2011 June 28; 123 (25): 2946-53. PMID: PMC3139978.

Blecker S, Matsushita K, Kottgen A, **Loehr LR**, Bertoni AG, Boulware LE, Coresh J. High Normal Albuminuria and Risk of Heart Failure in the Community. *American Journal of Kidney Disease*, 2011 Jul; 58 (1); 47-55. PMID: PMC3119712.

Huxley R, Lopez FL, Folsom AR, Agarwal SK, **Loehr LR**, Soliman EZ, Macle hose R, Kunety S, Alonso A. Absolute and attributable risks of atrial fibrillation in relation to optimal and borderline risk factors: The Atherosclerosis Risk in Communities (ARIC) Study. *Circulation*, 2011; 123(14): 1501-1508. PMID: PMC3181498.

Loehr LR, Rosamond WD, Poole C, McNeill AM, Chang PP, Deswal A, Folsom A, Heiss G. The potentially modifiable burden of incident heart failure due to obesity: The Atherosclerosis Risk in Communities (ARIC) Study. *American Journal of Epidemiology* 2011 Apr 12; 123(14): 1501-8. PMID: PMC3025653.

2010

Morrison AC*, Felix JF*, Cupples LA*, Glazer NL*, **Loehr LR**, Dehghan A, Demissie S, Bis JC, Rosamond WD, Aulchenko YS, Wang YA, Haritunians T, Folsom AR, Rivadeneira F, Benjamin EJ, Lumley T, Couper D, Stricker BH, O'Donnell CJ, Rice KM, Chang PP, Hofman A, Levy D, Rotter JI, Fox ER, Uitterlinden AG, Wang TJ, Psaty BM, Willerson JT, van Duijn CM, Boerwinkle E**, Wittteman JCM**, Vasani RS**, Smith NL** (Denotes lead (*) and senior (**) authors for each cohort who equally contributed to the manuscript.) Genomic variation associated with mortality among adults of European and African ancestry with heart failure: the CHARGE consortium. Circulation: Cardiovascular Genetics, 2010 April 17th. PMID: PMC3033765.

Smith NL*, Felix JF*, Morrison AC*, Demissie S*, Glazer NL, **Loehr LR**, Cupples LA, Dehghan A, Lumley T, Rosamond W, Lieb W, Rivadeneira F, Bis JC, Folsom AR, Benjamin E, Aulchenko YS, Haritunians T, Couper D, Murabito J, Stricker BH, Gottdiener JS, Chang PP, Wang TJ, Rice KM, Hofman A, Heckbert SR, Fox ER, O'Donnell CJ, Uitterlinden AG, Rotter JI, Willerson JT, Levy D, van Duijn CM, Psaty BM**, Wittteman JCM**, Boerwinkle E**, Vasani RS**. (Denotes lead* authors for each cohort who equally contributed to the manuscript.) The association of genome-wide variation with the risk of incident heart failure in adults of European and African ancestry: a prospective meta-analysis from the CHARGE Consortium. Circulation: Cardiovascular Genetics, 2010 May 5th. PMID: PMC3025695.

Hancock DB*, Eijgelsheim M*, Wilk JB*, Gharib SA*, **Loehr LR**, Marcianti KD, Franceschini N, van Durme YMTA, Chen T, Barr RG, Schabath MB, Couper DJ, Brusselle GG, Psaty BM, van Duijn CM, Rotter JI, Uitterlinden AG, Hofman A, Punjabi NM, Rivadeneira F, Morrison AC, Enright PL, North KE, Heckbert SR, Lumley T[†], Stricker BHC[†], O'Connor GT[†], London SJ[†]. Meta-analyses of genome-wide association studies identify multiple loci associated with pulmonary function. Nature Genetics, 2010 Jan; 42(1):45-52. *These authors contributed equally to this work. [†]These authors jointly directed the work. PMID: PMC2832852

2009

Loehr LR, Rosamond WD, Poole C, McNeill AM, Chang PP, Folsom AR, Chambless LE, Heiss G. The association of multiple anthropometrics of overweight and obesity with incident heart failure: the Atherosclerosis Risk in Communities (ARIC) study. Circulation: Heart Failure, 2009; 2: 18-24. PMID: PMC2748859

2008

Nettleton JA, Steffen LM, **Loehr LR**, Rosamond WD, Folsom AR. Incident Heart Failure is associated with lower whole-grain intake and greater high-fat dairy and egg intake in the Atherosclerosis Risk in Communities (ARIC) Study. Journal of the American Dietetic Association, 2008 Nov; 108 (11): 1881-1887. PMID: PMC2650810

Loehr LR, Rosamond WD, Chang PP, Folsom AR, Chambless LE. Heart failure incidence and survival (From the Atherosclerosis Risk in Communities [ARIC] study). American Journal of Cardiology, 2008;101 (7):1016-22.

2007 and earlier

Kottgen A, Russell SD, **Loehr LR**, Crainiceanu CM, Rosamond WD, Chang PP, Chambless LE, Coresh J. Reduced kidney function as a risk factor for incident heart failure: The Atherosclerosis Risk in Communities (ARIC) Study. Journal of the American Society of Nephrology, 2007; 18 (4): 1307-1315.

Loehr LR, Espeland MA, Sutton-Tyrrell K, Burke GL, Crouse JR 3rd, Herrington DM. Racial Differences in endothelial function in postmenopausal women. American Heart Journal, 2004 Oct; 148 (4): 606-11.

Wofford JL, **Loehr LR**, and Schwartz E. Acute Cognitive Impairment in Elderly ED patients: Etiologies and Outcomes. American Journal of Emergency Medicine, 14(7): 649-53, November 1996.

Peer reviewed published abstracts, not shown

Presentations

The paradox of low prevalence of atrial fibrillation in African Americans, CVD Seminar at UNC, 2013

Invited speaker at a symposium entitled, "Cardiovascular Health and Disease in Women: Prevention across the Lifespan" on April 20th, 2010. My talk is entitled, "Race-ethnic Disparities in Cardiovascular Disease: A Crisis for African-American Women."

Genome wide association study of pulmonary function: the Charge consortium.

Seminar in Cardiovascular Disease Research, UNC-Chapel Hill, 2009.

The association of maternal physical activity with incident asthma among offspring: the ALSPAC study, NIEHS, reproductive epidemiology seminar, December, 2008

The association of obesity and overweight with incident heart failure: the ARIC study, NIEHS, May, 2008

Waist hip ratio as a predictor of incident hospitalized heart failure: The ARIC study, NHLBI trainee session, AHA epidemiology and prevention meeting, Orlando, 2006.

Hospitalized heart failure incidence and survival: The ARIC study, NHLBI trainee session, AHA epidemiology and prevention meeting, Phoenix, 2006

End of life care for heart failure patients, Seminar in Cardiovascular Disease Research, UNC-Chapel Hill, 2005.

Black-White differences in endothelial function in MESA (the Multi-ethnic Study of Atherosclerosis), Seminar in Cardiovascular Disease Research, UNC-Chapel Hill, 2005.

Black-White differences in endothelial function in women with coronary disease, AHA Scientific Sessions 2002, November, 2002.

Black-White Differences in endothelial function in postmenopausal women, Cardiology Conference, Wake Forest University School of Medicine, September 2001.

Thesis/Dissertation

Epidemiology Doctoral students

Doctoral academic advisor for Melissa Caughey. Dissertation title: “Is sickle cell trait a risk factor for stroke and cerebral small vessel disease?”. Graduated Spring 2015.

Dissertation research advisor for Corey Kalbaugh. Dissertation title: “Burden Estimates and Temporal Patterns Associated with Clinically Diagnosed Peripheral Artery Disease: Linkage of Center for Medicare Services Claims with the ARIC Study”. Awarded R36 through AHRQ and Sheps fellowship. Graduated Spring, 2016.

Dissertation committee member for Sara Jones. Dissertation title: “The Association of Alcohol with Stroke and Cognitive Decline in the Atherosclerosis Risk in Communities Study.” Graduated Spring, 2016.

Dissertation committee member for Ada Al Qunaibet. Dissertation title: “Arterial Stiffness and Peripheral Arterial Disease as Indicators of Abdominal Aorta Diameters.” Graduated Spring, 2016.

Dissertation committee member for Jennifer Jones. Title of dissertation proposal, “Pattern of antihypertensive use among new users of antihypertensive drugs”. Dissertation defense scheduled for Dec 2016.

Dissertation Committee member for Ricky Camplain. Title of dissertation proposal, “Non-Hospitalized Heart Failure in the Community”.

MSCR students (11 current students)

Academic advisor for the following prior MSCR students: Angie Smith, Tom Bice, Matthew Seidhoff, Rachel Peragallo Urratia, Jennifer Law, Emily K, Adam Kuykendal, Christine Delong Jones, Matt Neilsen, Ralf Schmid, Adam Kuykendal, Yashashwi Pokharel, Tyler Buckner, Janelle Moulder, Eveline Wu, Susan Hupp, Dolly Penn, Jennifer Nelson, Jessica Mcpherson, Christine Horton,

Academic advisor for the following current or entering MSCR students: Natalie Crawford, Michelle Louie, O’Rese Knight, Damon Houghton, Emma Barber, Nicholas Wise, Kamal Henderson, Shanthi Ramesh, Michelle Louie, Emma Barber, Sarah Linnstaedt

Medical student

Audrey Lan, Co-mentored with Jennifer Nelson, faculty in pediatric cardiothoracic surgery. The project is “Assessing Feasibility of a UNC Tetralogy of Fallot Patient Registry”, funded by the Carolina Medical Student Research Program. Also funded by an NC Tracs 2K pilot grant, and private donations.

TEACHING ACTIVITIESUniversity of North Carolina at Chapel Hill

Lead Instructor: EPID 735, CVD Epidemiology, Fall 2015

Lead Instructor: Epid 804, Design of Clinical Research, 2010, 2011, 2012, 2013, 2014, 2015, 2016

Co-instructor: Special Topics in CVD Epidemiology, 1 hour module, 2012, 2013 (spring only)

Faculty Leader: Epid 896, Clinical Research and Professional Development Seminar, I lead the K seminar for institutional K awardees, and co-lead the clinical trials small group, 2010, 2011, 2012, 2013 (Spring only)

Small group leader: Epid 806, Grant writing course, 2012, 2013 (spring only), 2014, 2015

Summer short course on study design and data analysis (one week): July 2011, 2012, 2013, 2014, 2015

Small group leader: K seminar, 2012, 2013, 2014, 2015, 2016

University of Ulm

Summer course, Clinical Epidemiology, one week, July 2012, July 2016

GRANTS

3UL1TR000083-05S1 (Buse) 05/19/2008-04/30/2018

NIH/NCRR

UNC Clinical and Translational Science Award (CTSA). This application provides 5 years of support for UNC's CTSA award. Dr. Loehr works in the epidemiology core as a consultant and teacher of epidemiology for the Masters of Clinical Research program.

Role: Investigator

HHSN268201100007C (Heiss) 11/15/2010-11/14/2016

NIH/NHLBI

Atherosclerosis Risk in Communities (ARIC)-Field Center. Goals examine the determinants and population-correlates of non-invasively ascertained atherosclerosis, its clinical manifestation in a cohort of middle-aged men and women, and the community burden and geographic and temporal variation of fatal and non-fatal ischemic heart disease and heart failure.

Role: Investigator

HHSN268201100005C (Couper) 11/15/2010 – 11/14/2016

NIH/NHLBI

Atherosclerosis Risk in Communities Coordinating Center

The major goals of this project are to provide a central statistical and data coordinating center for the Atherosclerosis Risk in Communities (ARIC) study.

Role: Investigator

N01 HC 65233 (Cai)

09/30/2006-5/31/2020

NIH/NHLBI

Hispanic Community Health Study: Coordinating Center

The objectives of this study are to identify the prevalence of and risk factors for diseases, disorders, and conditions in Hispanic populations and to determine the role of acculturation and disparities in the prevalence and development of these conditions.

Role: Investigator

1R01HL116900-01A1 (Loehr)

08/01/2013-07/30/2017

NIH/NHLBI

The Race-Specific Prevalence of Atrial Fibrillation Measured by 48-Hour Holter

This project is focused on investigating the racial paradox of low atrial fibrillation in African Americans despite their adverse cardiovascular profile, and high rates of stroke, for which atrial fibrillation is a known risk factor.

Role: Principal Investigator

P01-HD031921 (Core A, Harris; Project 4: Biology, Whitsel / Dole) 04/01/14-03/31/19

NIH/ NICHD

Title: The National Longitudinal Study of Adolescent Health: Wave V

Aim: The objective of this study to conduct a fifth follow-up of participants in the National Longitudinal Study of Adolescent Health. Role: Investigator

1R01HL126637-01A1 (Chen)

03/01/2016-01/31/2017

NIH/NHLBI (Subcontract with Univ of MN)

Significance of Atrial Fibrillation and Atrial Fibrillation Burden Detected by Novel ECG Monitoring in Community-Dwelling Elderly

This proposal will comprehensively define the prevalence, frequency burden, risk factors, and clinical impact of arrhythmias in a bi-racial community-dwelling elderly cohort.

Role: Principal Investigator (Subcontract)

Completed Research:

R01HL096814 (Heiss)

07/07/2010-04/30/2014

NIH/NHLBI

ARIC Neurocognitive Study (ARIC-NCS)

The proposed study will focus on prediction of cognitive impairment from mid-life vascular risk factors and marker through a 5 center R01 ancillary study to the large, bi-ethnic prospective ARIC cohort study. The aims are to estimate prevalence of dementia/MCI by race and sex in participants aged 70-89, determine whether midlife vascular factors predict dementia, MCI and cognitive change, determine whether the associations between midlife vascular factors and dementia/MCI differ by dementia/MCI, identify cerebral markers associated with cognitive change, and identify genomic regions containing susceptibility loci for cognitive decline.

Role: Investigator

Pending Research:

RFP: NHLBI-ECB-HV-2017-03-TK (Heiss) 11/15/16-11/14/21
NIH/NHLBI
Atherosclerosis Risk in Communities – Field Center
Role: Investigator

PROFESSIONAL SERVICE

UNC-CH Epidemiology Admissions Committee, 2016-2017

UNC-CH Faculty Council 2014-2016

UNC-CH Hearings Committee, serve as a faculty member on university-wide hearings on student misconduct, 2015-2016

Journal reviews for 2015-2016: Circulation Heart Failure (2), Circulation (1), Epidemiology (1), Environmental Research (1)

Invited moderator for the NHLBI Trainee Session at the AHA Epidemiology meeting 2012

Abstract reviewer for heart failure-related abstracts for the AHA epidemiology meeting, 2012-2016

Heart failure surveillance committee, the ARIC study, development of an abstraction form for the surveillance of hospitalized heart failure in the ARIC study and physician reviewer for the study, 2007- present.

Cardiovascular disease research seminar, UNC-CH, scheduling and introducing speakers, 2005-2006 academic year

Validation of coronary heart disease deaths in New York City. Chart review for the CDC funded by ORISE (Oak Ridge Institute for Science and Education).

Peer-led workshop, Peer leader, UNC-CH, Cardiovascular diseases program

Updated and edited the module for Deep Venous Thrombosis (DVT) for the Physicians Information and Education Resource, (PIER), 2001. Available at <http://pier.acponline.org/index.html>