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CURRENT APPOINTMENTS

Assistant Professor of Cardiovascular Epidemiology, Division of Epidemiology and Community Health, University of Minnesota School of Public Health

Adjunct Affiliation, Division of Cardiology, Johns Hopkins University School of Medicine

TRAINING AND EXPERIENCE

Education and Training

2024	Postdoctoral Fellowship, Pathophysiology of Myocardial Disease, Johns Hopkins University School of Medicine (Baltimore), NHLBI T32, primary mentors: Wendy S Post, Katherine C Wu
2021	Doctor of Philosophy, Epidemiology, University of Minnesota School of Public Health (Minneapolis), biostatistics minor
2021	Predoctoral Fellowship, Cardiovascular Disease Epidemiology and Prevention, University of Minnesota School of Public Health (Minneapolis), NHLBI T32, primary mentors: Jason V Baker, James S Pankow
2017	Master of Public Health, Epidemiology, University of Minnesota School of Public Health (Minneapolis)
2013	Bachelor of Science, Microbiology, University of Minnesota College of Biological Sciences (Minneapolis), high distinction

Professional Experience

2021–2024	Postdoctoral Research Fellow, Pathophysiology of Myocardial Disease T32, Division of Cardiology, Johns Hopkins University School of Medicine (Baltimore)
2019–2021	Predoctoral Research Fellow, Cardiovascular Disease Epidemiology and Prevention T32, Division of Epidemiology and Community Health, University of Minnesota School of Public Health (Minneapolis)
2017–2019	Research Assistant, Division of Biostatistics, University of Minnesota School of Public Health (Minneapolis)
2016–2017	Research Assistant, Division of Environmental Health, University of Minnesota School of Public Health (Minneapolis)
2013–2015	Junior Virologist, Division of Microbiology and Immunology, University of Minnesota Medical School (Minneapolis)
2011–2013	Research Assistant, Division of Ecology and Evolution, University of Minnesota School of Biological Sciences (Minneapolis)

PUBLICATIONS

Original Research

1. **Peterson TE**, Huppler Hullsiek K, Wyman Engen N, Kumarasamy N, Lebech AM, Liappis A, Papadopoulos A, Polizzotto MN, Schreiner PJ, Duprez D, Baker JV; INSIGHT START (Strategic Timing of AntiRetroviral Treatment) Study Group. Inflammation associates with impaired small arterial elasticity early in HIV disease. *Open Forum Infectious Diseases*. 2018; 5(6):ofy117.

2. Baker JV, Wolfson J, **Peterson TE**, Mooberry M, Gissel M, Mystakelis H, Henderson MW, Garcia-Myers K, Rhame FS, Schacker TW, Brummel-Ziedins K, Sereti I, Key N, Tracy R. Factor X inhibition reduces coagulation activity but not inflammation among persons living with HIV: a randomized clinical trial. *Open Forum Infectious Diseases*. 2020; 7(2):ofaa026. [performed all statistical analyses and visualization; manuscript preparation and editing]

3. **Peterson TE**, Baker JV, Wong LY, Rupert A, Ntusi N, Esmail H, Wilkinson R, Sereti I, Meintjes G, Ntsekhe M, Thienemann F. Elevated N-terminal prohormone of brain natriuretic peptide among persons living with HIV in a South African peri-urban township. *European Society of Cardiology: Heart Failure*. 2020; 7(5):3246-51.

4. Shuldiner SR*, Wong LY*, **Peterson TE**, Wolfson J, Jermy S, Saad H, Mbalabu Lumbamba AJ, Singh A, Shey M, Meintjes G, Ntusi N, Ntsekhe M, Baker JV. Myocardial fibrosis among antiretroviral therapy-treated persons with human immunodeficiency virus in South Africa. *Open Forum Infectious Diseases*. 2021; 8(1):ofaa600. [data management; performed all statistical analyses and visualization; manuscript preparation and editing]

5. **Peterson TE**, Landon C, Haberlen SA, Bhondoekhan F, Plankey MW, Palella FJ, Piggott DA, Margolick JB, Brown TT, Post WS, Wu KC. Circulating biomarker correlates of left atrial size and myocardial extracellular volume fraction among persons living with and without HIV. *BMC Cardiovascular Disorders*. 2022; 22(1).

6. **Peterson TE**, Shey M, Wong LY, Shuldiner SR, Wolfson J, Jermy S, Saad H, Mbalabu Lumbamba AJ, Singh A, Meintjes G, Ntusi N, Ntsekhe M, Baker JV. Myocardial extracellular volume fraction is positively associated with activated monocyte subsets among cART-treated persons living with HIV in South Africa. *International Journal of Cardiology*. 2023; 392:131332.

7. Mustapha A*, **Peterson TE***, Haberlen S, Plankey M, Palella F, Piggott DA, Margolick JB, Post WS, Wu KC. Association between left ventricular scar and ventricular ectopy in people living with and without HIV. *Journal of the American College of Cardiology: Advances*. 2023; 2(10):100722.

8. Hahn VS, Knutsdottir H, **Peterson TE**, Kikuchi D, Vungarala S, Kass DA, Sharma K. Determinants of serum and myocardial natriuretic peptide variability in heart failure with preserved ejection fraction. *Journal of the American College of Cardiology: Heart Failure*. 2024; 12(7):1306-1308. [statistics consulting; manuscript editing]

9. Goldberg RL*, **Peterson TE***, Haberlen SA, Witt MD, Palella FJ, Magnani JW, Brown TT, Lake JE, Lima JAC, Budoff MJ, Ndumele CE, Wu KC, Post WS. The relationship between visceral, ectopic and subcutaneous adipose tissue with subclinical diastolic dysfunction in men living with and without HIV. *AIDS*. 2024; 38(10):1485-1493.

10. **Peterson TE**, Mychaleckyj J, Rich S, Rotter J, Johnson C, Shah S, Bertoni A, Varadarajan V, Liu Y, Clish C, Durda P, Bluemke D, Ganz P, Lima J, Post WS, Pankow J. Proteomics of left ventricular structure in the Multi-Ethnic Study of Atherosclerosis. *ESC Heart Failure*. 2024; 10.1002/ehf2.15073.

Review Articles

1. **Peterson TE**, Baker JV. Assessing inflammation and its role in comorbidities among persons living with HIV. *Current Opinion in Infectious Diseases*. 2019; 32(1):8-15.

Letters, Correspondence

1. Goldberg RL*, **Peterson TE***, Haberlen SA, Witt MD, Palella FJ, Magnani JW, Brown TT, Lake JE, Lima JAC, Budoff MJ, Ndumele CE, Wu KC, Post WS. Response to "Epicardial fat tissue and diastolic dysfunction in both men and women with HIV. *AIDS*. 2024; 38(13):1895.

Under Review

1. **Peterson TE**, Hahn VS, Moaddel R, Haberlen SA, Palella FJ, Plankey M, Bader JS, Lima JAC, Gerszten RE, Rotter JI, Rich SS, Heckbert SR, Kirk GD, Piggott DA, Ferrucci L, Margolick JB, Brown TT, Wu KC, Post WS. Proteomic signature of HIV-associated subclinical left atrial remodeling and incident heart failure. medRxiv preprint. 2024; 14:2024.02.13.24302797.

2. Suzuki T, Haberlen SA, **Peterson TE**, Palella FJ, Budoff M, Witt MD, Magnani JW, Post WS. Coronary artery calcium and all-cause mortality in the Multicenter AIDS Cohort Study.

3. Dharan NJ, Sharma S, Arenas-Pinto A, Duprez D, **Peterson TE**, Estrada V, Ha K, Kundro MA, Mngqibisa R, Mugerwa H, Munroe D, Nasreddin R, Sereti I, Trevillyan JM, Baker JV, Matthews GV, Phillips AN. Early vs. deferred antiretroviral therapy initiation and long-term cardiovascular disease outcomes in people with HIV: the START study**.**

In Preparation

1. **Peterson TE**, Liu Y, Hahn VS, Rotter J, Venkatesh BA, Varadarajan V, Lohman K, Ding J, Doyle P, Olson N, Durda P, Tracy R, Lima JAC, Wu KC, Post WS. Gene expression in circulating monocytes and left ventricular structure and function: the Multi-Ethnic Study of Atherosclerosis.

2. **Peterson TE**, Hahn VS, Moaddel R, Haberlen SA, Palella FJ, Plankey M, Bader JS, Lima JAC, Gerszten RE, Rotter JI, Rich SS, Heckbert SR, Kirk GD, Piggott DA, Ferrucci L, Margolick JB, Brown TT, Post WS, Wu KC. Proteomic signature of HIV-associated myocardial fibrosis and incident heart failure.

3. **Peterson TE**, Hahn VS, Moaddel R, Haberlen SA, Palella FJ, Plankey M, Bader JS, Kirk GD, Piggott DA, Ferrucci L, Margolick JB, Brown TT, Post WS, Wu KC. Plasma proteomic signatures capture unique clinical risk phenotypes among persons living with and without HIV in the United States.

ADDITIONAL RESEARCH WORKS

Posters (first and presenting author only)

March 2018. Inflammation associates with impaired small arterial elasticity early in HIV disease. *Conference on Retroviruses and Opportunistic Infections* (Boston, MA).

February 2020. Inflammation associates with lower myocardial function among antiretroviral-treated persons living with HIV in South Africa. *American Heart Association EPI Lifestyle Scientific Sessions* (Phoenix, AZ).

February 2022. Activated monocytes and myocardial fibrosis among persons with HIV in South Africa. *Conference on Retroviruses and Opportunistic Infections* (virtual).

November 2023. Proteomic signature of HIV-associated subclinical left atrial dilation. *American Heart Association Scientific Sessions* (Philadelphia, PA).

March 2024. Proteomic signature of HIV-associated myocardial fibrosis and incident heart failure. *Conference on Retroviruses and Opportunistic Infections* (Denver, CO).

Oral/Podium Presentations (first and presenting author only)

October 2022. Gene expression in circulating monocytes and left ventricular structure and function: the Multi-Ethnic Study of Atherosclerosis. *The Johns Hopkins University School of Medicine Research Retreat* (Baltimore, MD).

May 2023. Proteomic signatures of HIV-associated cardiac remodeling. *The MACS/WIHS Combined Cohort Study Steering Committee Meeting* (Baltimore, MD).

October 2023. Proteomic signature of HIV-associated subclinical left atrial remodeling and incident heart failure. *Cohorts for Heart and Aging Research in Genomic Epidemiology Scientific Meeting* (San Antonio, TX).

October 2023. Plasma proteomic signatures capture unique cardiovascular risk phenotypes among persons living with and without HIV in the United States. *International Workshop on HIV & Aging* (Washington, DC).

April 2024. Plasma proteomic signature of HIV-associated subclinical left atrial remodeling and incident heart failure. *The Johns Hopkins University School of Medicine Research Retreat* (Baltimore, MD).

May 2024. Plasma proteomic signature of HIV-associated subclinical left atrial remodeling and incident heart failure. *The Multi-Ethnic Study of Atherosclerosis Steering Committee Meeting* (Bethesda, MD).

FUNDING

2023–2025 Loan Repayment Program Award: *Multi-omic signatures of subclinical myocardial disease among the aging general population and persons living with HIV in the United States*
1L30HL170327-01
National Heart, Lung, and Blood Institute
Principal Investigator

2022 Johns Hopkins Center for AIDS Research Scholar Award: *Proteomic Signatures of HIV-Associated Cardiac Remodeling*
P30AI094189
National Institute of Allergy and Infectious Diseases
$50,000
Co-Principal Investigator with Virginia S Hahn

2022 Johns Hopkins MACS/WIHS Combined Cohort Study Development Award: *Proteomic Signatures of HIV-Associated Cardiac Remodeling*
U01HL146201
National Heart, Lung, and Blood Institute
$31,000
Awardee; Principal Investigators: Joseph B Margolick and Todd T Brown

2021–2024 Training Award: *Pathophysiology of Myocardial Disease*
T32HL007227
National Heart, Lung, and Blood Institute
Postdoctoral Research Fellow; Principal Investigators: Wendy S Post and David A Kass

2019–2021 Training Award: *Cardiovascular Disease Epidemiology and Prevention*
T32HL007779
National Heart, Lung, and Blood Institute
Predoctoral Research Fellow; Principal Investigator: Aaron R Folsom

EDUCATIONAL ACTIVITIES

Teaching

Classroom Instruction

2020 Guest Lecturer, graduate level, Pathophysiology of Human Disease, *University of Minnesota School of Public Health*

2019 Guest Lecturer, graduate level, Pathophysiology of Human Disease, *University of Minnesota School of Public Health*

2019 Teaching Assistant and Laboratory Lead, graduate level, Fundamentals of Epidemiology, *University of Minnesota School of Public Health*

2019 Guest Lecturer, graduate level, Public Health Aspects of Cardiovascular Disease, *University of Minnesota School of Public Health*

Workshops/Seminars

June 2024	Immune mechanisms of myocardial disease among the aging general population and people with HIV, *University of Minnesota School of Public Health*
April 2023	Proteomic signatures of HIV-associated myocardial disease: a need for novel hypotheses, *The MACS/WIHS Combined Cohort Study Genomics Working Group*
December 2022	Proteomic signatures of HIV-associated myocardial disease: a need for novel hypotheses, *Workshop on Long-Term Complications of HIV*
February 2022	Proteomic signatures of HIV-associated myocardial disease: a need for novel hypotheses, *Johns Hopkins Center for AIDS Research HIV and Aging Meeting*

ORGANIZATIONAL ACTIVITIES

Journal Peer Review (beginning year)

2024 Reviewer, *Circulation*

2024 Reviewer, *Nature Communications*

2023 Reviewer, *Journal of Clinical Investigation Insight*

2022 Mentored Co-Reviewer, *Journal of the American Heart Association*

2021 Mentored Co-Reviewer, *Journal of Infectious Diseases*

2019 Mentored Co-Reviewer, *Open Forum Infectious Diseases*

Review Committees/Working Groups

2024–Present	Multi-Ethnic Study of Atherosclerosis Laboratory Committee
2023–Present	International Network of Strategic Initiatives in HIV Trials Cardiovascular Writing Group
2021–Present	Trans-Omics for Precision Medicine (TOPMed) Multi-Omics Working Group
2021–Present	Johns Hopkins Center for AIDS Research HIV and Aging Working Group
2021–Present	Trainee Observer, Multi-Ethnic Study of Atherosclerosis Proposals & Publications Committee

Professional Societies

2019–Present	Member, American Heart Association
2019–Present	Member, Society of Epidemiologic Research

RECOGNITION

Awards, Honors

2023-2025	Loan Repayment Program Award, National Heart Lung and Blood Institute
2024	New Investigator Award, Conference on Retroviruses and Opportunistic Infections
2023	Young Investigator Award, International Workshop on HIV & Aging
2022	Research Scholar Award, Johns Hopkins Center for AIDS Research
2022	Research Development Award, Johns Hopkins MACS/WIHS Combined Cohort Study
2022	First Place Blumenthal Research Award, cardiology trainee research recognition, Johns Hopkins University School of Medicine
2022	New Investigator Award, Conference on Retroviruses and Opportunistic Infections
2018	New Investigator Award, Conference on Retroviruses and Opportunistic Infections