

Amanda A. Seyerle, Ph.D.

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EDUCATION

- | | | |
|------|------|---|
| 2016 | PhD | Epidemiology
University of North Carolina at Chapel Hill
Substantive Area: Cardiovascular Disease, Genetics
Dissertation: Pharmacogenomics of Ventricular Conduction in Multi-Ethnic Populations |
| 2013 | MSPH | Epidemiology
University of North Carolina at Chapel Hill
Master's Paper: Evidence of Heterogeneity by Race/Ethnicity in Genetic Determinants of QT Interval: The Population Architecture Using Genomics and Epidemiology (PAGE) Study |
| 2011 | BS | Anthropological and Molecular Genetics, History
University of Michigan – Ann Arbor
Honors Thesis: Scottish Smallpox: The Medical Treatment of Smallpox in Scotland, 1750 – 1850 |

PROFESSIONAL EXPERIENCE

- | | |
|--------------|---|
| 2018-Present | Assistant Professor
Division of Pharmaceutical Outcomes and Policy
UNC Eshelman School of Pharmacy |
| 2018-Present | Core Faculty
Carolina Health Informatics Program (CHIP)
University of North Carolina at Chapel Hill |
| 2016-2018 | Postdoctoral Research Fellow
CVD Epidemiology Program
University of Minnesota School of Public Health |
| 2011-2016 | Graduate Research Assistant
CVD Program
UNC Gillings School of Global Public Health |
| 2011 | Academic Peer Advisor
Honors Department
University of Michigan |

- 2010-2011 Research Assistant
 School of Public Health
 University of Michigan
- 2010 Honors Summer Research Fellow
 Honors Department
 University of Michigan
- 2008-2010 Research Assistant
 Life Sciences Institute
 University of Michigan

AWARDS/HONORS

- 2018 Postdoctoral Association Career Development Award, University of Minnesota
- 2016-2018 Cardiovascular Disease Post-Doctoral Training Grant, University of Minnesota
- 2013-2016 Cardiovascular Disease Program Training Grant, University of North Carolina at Chapel Hill
- 2011 SPH Dean's Research Opportunity Award, University of Michigan – Ann Arbor (declined)
- 2011 Bachelors of Science Awarded with Distinction, University of Michigan – Ann Arbor
- 2010 Grossman Family History Thesis Funding Grant, University of Michigan – Ann Arbor
- 2010 Fine Family Honors Thesis Research Grant, University of Michigan – Ann Arbor
- 2010 Honors Summer Fellowship, University of Michigan – Ann Arbor
- 2007-2011 University Honors, University of Michigan – Ann Arbor
- 2007 Robert J. Byrd Scholarship

PUBLICATIONS

†*First Author is a Pre- or Post-Doctoral Fellow for whom I am the primary mentor*

* *Co-First Author*

#*Co-Senior Author*

Published Peer Reviewed Manuscripts

1. Sofer T, Lee J, Kurniansyah N, Jain D, Laurie CA, Gorgarten SM, Conomos MP, Heavner B, Hu Y, Kooperberg C, Jaessler J, Vasani RS, Cupples LA, Coombes BJ, **Seyerle AA**, Gharib SA, Chen H, O'Connell JR, Zhang M, Gottlieb D, Psaty BM, Longstreth Jr WT, Rotter JI, Tayler KD, Rich SS, Guo X, Boerwinkle E, Morrison AC, Pankow JS, Johnson AD, Pankratz N, NHLBI TOPMed Consortium, Reiner AP, Redline S, Smith NL, Rice KM, and ED Schifano. BinomiRare: A Carriers-Only Test for Association of Rare Genetic Variants with a Binary Outcome for Mixed Models and Any Case-Control Proportion. *HGG Advances*. 2021 [PMID: 34337551; PMCID: PMC8321319].
2. Ntalla I, Weng L-C, Cartwright JH, Hall AW, Sveinbjornsson G, Rucker NR, Choi SH, Chaffin MD, Roselli C, Barnes MR, Mifsud B, Warren HR, Hayward C, Marten J, Cranley JJ, Concas MP, Gasparini P, Boutin T, Kolcic I, Polasek O, Rudan I, Araujo NM, Lima-Costa MF, Ribeiro ALP, Souza RP, Tarazona-Santos E, Giedraitis V, Ingelsson E, Mahajan A, Morris AP, Greco M FD, Foco L, Gögele M, Hicks AA, Cook JP, Lind L, Lindgren CM, Sundström J, Nelson CP, Riaz MB, Samani NJ, Sinagra G, Ulivi S, Kähönen M, Mishra PP, Mononen N, Nikus K, Caulfield M, Dominiczak A, Padmanabhan S, Montasser ME, O'Connell JR, Ryan K, Shuldiner AR, Aeschbacher S, Conen D, Risch L, Thériault S, Huntri-Kähönen N, Lehtimäki T, Lyytikäinen L-P, Raitakari OT, Barnes CLK, Campbell H, Joshi PK, Wilson JF, Isaacs A, Kors JA, van

- Duijn CM, Huang PL, Gudnason V, Harris TB, Launer LJ, Smith AV, Bottinger EP, Loos RJF, Nadkarni GN, Preuss MH, Correa A, Mei H, Wilson J, Meitinger T, Müller-Nurasyid M, Peters A, Waldenberger M, Mangino M, Spector TD, Rienstra M, van de Vegte YJ, van der Harst P, Verweij N, Kääb S, Schramm K, Sinner MF, Strauch K, Cutler MJ, Fatkin D, London B, Olesen M, Roden DM, Shoemaker MB, Smith JG, Biggs ML, Bis JC, Brody JA, Psaty BM, Rice K, Sotoodehnia N, De Grandi A, Fuchsberger C, Pattaro C, Pramstaller PP, Ford I, Jukema JW, MacFarlane PW, Trompet S, Dörr M, Felix SB, Völker U, Weiss S, Havulinna AS, Jula A, Sääksjärvi K, Salomaa V, Guo X, Heckbert SR, Lin HJ, Rotter JI, Taylor KD, Yao J, de Mutsert R, Maan AC, Mook-Kanamori DO, Noordam R, Cucca F, Ding J, Lakatta EG, Qian Y, Tarasov KV, Levy D, Lin H, Newton-Cheh CH, Lunetta KL, Murray AD, Porteous DJ, Smith BH, Sticker BH, Uitterlinden A, van den Berg ME, Haessler J, Jackson RD, Kooperberg C, Peters U, Reiner AP, Whitsel EA, Alonso A, Arking DE, Boerwinkle E, Ehret GB, Soliman EZ, Avery CL, Gogarten SM, Kerr KF, Laurie CC, **Seyerle AA**, Stilp A, Assa S, Said MA, van der Ende MY, Lambiase PD, Orini M, Ramirez J, Van Duijvenboden S, Arnar DO, Gudbjartsson DF, Holm H, Sulem P, Thorleifsson G, Thorolfsson RB, Thorsteinsdottir U, Benjamin EJ, Tinker A, Stefansson K, Ellinor PT, Jamshidi Y, Lubitz SA, and PB Monroe. Multi-Ancestry GWAS Meta-Analysis of the Electrocardiographic PR Interval Identifies 210 Loci Underlying Cardiac Conduction. *Nature Comm.* 2020 [PMID: 32439900; PMCID: PMC7242331].
3. Baldassari AR, Sitlani CM, Highland HM, Arking DE, Buyske S, Darbar D, Gondalia R, Graff M, Guo X, Heckbert SR, Hindorff LA, Hodonsky CJ, Chen Y-DI, Kaplan RC, Peters U, Post W, Reiner AP, Rotter JI, Shohet RV, **Seyerle AA**, Sotoodehnia N, Tao R, Taylor KD, Yao J, Kenny EE, Lin HJ, Soliman EZ, Whitsel EA, North KE, Kooperberg C and CL Avery. Multi-Ethnic Genome-Wide Association Study of Decomposed Cardiac Conduction Phenotypes Illustrates Strategies to Identify and Characterize Evidence of Shared Genetic Effects for Complex Traits: The PAGE Study. *Circ: Genomics and Precision Medicine.* 2020 [PMID: 32602732; PMCID: PMC750945].
 4. Swenson BR, Louie T, Lin H, Méndez-Giráldez R, Below JE, Laurie CC, Kerr KF, Highland H, Ryckman K, Kooperberg C, Soliman EZ, **Seyerle AA**, Guo X, Taylor KD, Yao J, Heckbert SR, Petty LE, Cheng S, Below N, Whitsel EA, Hanis CL, Rotter JI, Sofer T, Avery C, and N Sotoodehnia. GWAS of QRS Duration Identifies New Loci Specific to Hispanic/Latino Populations. *PLOS ONE.* 2019 [PMID: 31251759; PMCID: PMC6599128].
 5. Almuwaqqat Z, Jokhadar M, Norby FL, Lutsey PL, O'Neal WT, **Seyerle AA**, Soliman EZ, Chen LY, Bremner DJ, Vaccarino V, Shah AJ, and A Alonso. Association of Antidepressant Type with the Incidence of Cardiovascular Disease in the Atherosclerosis Risk in Communities (ARIC) Study. *JAHA.* 2019 [PMID: 31140335; PMCID: PMC6585369].
 6. **Seyerle AA**, Sitlani CM, Noordam R, Gogarten SM, Li J, Li X, Evans DS, Sun F, Laaksonen M, Isaacs A, Kristiansson K, Highland HM, Stewart JD, Harris TB, Trompet S, Bis JC, Peloso G, Brody JA, Broer L, Busch EL, Duan Q, Stilp A, O'Donnell C, MacFarlane P, Floyd JS, Kors JA, Lin H, Li-Gao R, Sofer T, Méndez-Giráldez R, Cummings SR, Heckbert SR, Hofman A, Ford I, Li Y, Launer LJ, Porthan K, Newton-Cheh C, Napier M, Kerr K, Reiner AP, Rice KM, Roach J, Buckley B, Soliman EZ, de Mutsert R, Sotoodehnia N, Uitterlinden AG, North KE, Lee C, Gudnason V, Stürmer T, Rosendaal FR, Taylor KD, Wiggins KL, Wilson JG, Chen Y-DI, Kaplan R, Wilhelmsen KC, Cupples LA, Salomaa V, van Duijn C, Jukema JW, Liu Y, Mook-Kanamori DO, Lange LA, Vasani R, Smith AV, Stricker BH, Laurie CC, Rotter JI, Whitsel EA, Psaty BM, and CL Avery. Pharmacogenomics Study of Thiazide Diuretics and QT Interval in Multi-Ethnic Populations: The Cohorts for Heart and Aging Research in Genomic Epidemiology. *Pharmacogenomics J.* 2018 [PMID: 28719597; PMCID: PMC5773415].
 7. Napier MD, Franceschini N, Gondalia R, Stewart JD, Méndez-Giráldez R, Sitlani CM, **Seyerle AA**, Highland HM, Li Y, Wilhelmsen KC, Yan S, Duan Q, Roach J, Yao J, Guo X, Taylor K, Heckbert S, Rotter JI, North KE, Reiner AP, Zhang Z-M, Tinker LF, Liao D, Laurie C, Gogarten SM, Lin HJ, Brody JA, Bartz T, Psaty BM, Sotoodehnia N, Soliman EZ, Avery CL, and EA Whitsel. Genome-Wide Association Study and

Meta-Analysis Identifies Loci Associated with Ventricular and Supraventricular Ectopy. *Scientific Reports*. 2018 [PMID: 29618737; PMCID: PMC5884864].

8. Méndez-Giráldez R, Gogarten SM, Below JE, Yao J, **Seyerle AA**, Kooperberg C, Soliman EZ, Rotter JI, Kerr KF, Rickman K, Taylor KD, Petty LE, Shah SJ, Conomos MP, Sotoodehnia N, Cheng S, Heckbert SR, Sofer T, Guo X, Whitsel EA, Lin HJ, Hanis CL, Laurie CC, and CL Avery. GWAS of QT Interval in Hispanic/Latinos Generalizes Previously Identified Loci and Identifies Population-Specific Signals. *Scientific Reports*. 2017 [PMID: 29213071; PMCID: PMC5719082].
9. **Seyerle AA**, Lin HJ, Gogarten SM, Stilp A, Méndez-Giráldez R, Soliman EZ, Baldassari A, Graff M, Heckbert SR, Kerr KF, Kooperberg C, Rodriguez CJ, Guo X, Yao J, Sotoodehnia N, Taylor KD, Whitsel EA, Rotter JI, Laurie CC, and CL Avery. Genome-Wide Association Study of the PR Interval in Hispanic/Latinos Identifies Novel Association at *ID2*. *Heart*. 2017 [PMID: 29127183; PMCID: PMC6946379].
10. Noordam R, Sitlani CM, Avery CL, Stewart JD, Gogarten SM, Wiggins KL, Trompet S, Warren HR, Sun F, Evans DS, Li X, Li J, Smith AV, Bis JC, Brody JA, Busch EL, Caulfield MJ, Chen Y-DI, Cummings SR, Cupples LA, Duan Q, Franco OH, Méndez-Giráldez R, Harris TB, Heckbert SR, van Heemst D, Hofman A, Floyd JS, Kors JA, Launer LJ, Li Y, Li-Gao R, Lange LA, Lin HJ, de Mutsert R, Napier MD, Newton-Cheh C, Poulter N, Reiner AP, Rice KM, Roach J, Rodriguez CJ, Rosendaal FR, Sattar N, Sever P, **Seyerle AA**, Slagboom PE, Soliman EZ, Sotoodehnia N, Stott DJ, Stürmer T, Taylor KD, Thornton TA, Uitterlinden AG, Wilhelmsen KC, Wilson JG, Gudnason V, Jukema JW, Laurie CC, Liu Y, Mook-Kanamori DO, Munroe PB, Rotter JI, Vasani R, Psaty BM, Stricker BH, and EA Whitsel. A Genome-Wide Interaction Analysis of Tri/Tetracyclic Antidepressants and RR and QT Intervals: A Pharmacogenomics Study from the Cohorts for Heart and Aging Research in Genomic Epidemiology (CHARGE) Consortium. *J Med Genetics*. 2017. 54(5). 313-323. [PMID: 28039329; PMCID: PMC5406254].
11. Avery CL, Wassel CL, Richard MA, Highland HM, Bien S, Zubair N, Soliman EZ, Fornage M, Bielinski SJ, Tao R, **Seyerle AA**, Shah SJ, Lloyd-Jones DM, Buyske S, Rotter JI, Post WS, Rich SS, Hindorf LA, Shohet RV, Sotoodehnia N, Lin DY, Whitsel EA, Peters U, Haiman CA, Crawford DC, Kooperberg C, and KE North. Fine-Mapping of QT Regions in Global Populations Refines Previously Identified QT Loci and Identifies Signals Unique to African and Hispanic Descent Populations. *Heart Rhythm*. 2017. 14(4). 572-580. [PMID: 27988371; PMCID: PMC5448160].
12. Floyd JS, Sitlani CM, Avery CL, Noordam R, Li X, Smith AV, Li J, Broer L, Evans DS, Trompet S, Brody JA, Stewart JD, Eicher J, **Seyerle AA**, Roach J, Lange LA, Lin H, Kors JA, Harris TB, Li-Gao R, Sattar N, Cummings SR, Wiggins K, Napier M, Stürmer T, Bis JC, Kerr KF, Uitterlinden AG, Taylor KD, Stott DJ, de Mutsert R, Launer LJ, Busch EL, Méndez-Giráldez R, Sotoodehnia N, Soliman EZ, Li Y, Duan A, Rosendaal FR, Slagboom E, Wilhelmsen KC, Reiner AP, Chen Y-D, Heckbert SR, Kaplan R, Rice KM, Jukema JW, Johnson A, Liu Y, Mook-Kanamori DO, Gudnason V, Wilson JG, Rotter JI, Laurie CC, Psaty BM, Whitsel EA, Cupples LA, Stricker BH, and SM Gogarten. Large-scale Pharmacogenomic Study of Sulfonylureas and the QT, JT, and QRS Intervals: CHARGE Pharmacogenomics Working Group. *Pharmacogenomics J*. 2016. [PMID: 27958378; PMCID: PMC5468495].
13. Fernández-Rhodes L, Graff M, Hodonsky CJ, Love SM, **Seyerle AA**, Avery CL, Chittoor G, Franceschini N, Howard AG, Voruganti VS, Young K, North KE, and AE Justice. Comparison of 2 Models for Gene-Environment Interactions: An Example of Simulated Gene-Medication Interactions on Systolic Blood Pressure in Family-Based Data. *BMC Proceedings*. 2016. 10(7). 371-377. [PMID: 27980664; PMCID: PMC5133512].
14. Conomos MP, Laurie CA, Stilp AM, Gogarten SM, McHugh CP, Nelson SC, Sofer T, Fernández-Rhodes L, Justice AE, Graff M, **Seyerle AA**, Avery CL, Taylor KD, Rotter JI, Talavera GA, Daviglus ML, Wassertheil-

Smoller S, Schneiderman N, Heiss G, Kaplan RC, Kerr KF, Browning SR, Browning BL, Weir BS, Avilés-Santa ML, Papanicolaou GJ, Lumley T, Szpiro AA, North KE, Rice K, Thorton TA, and CC Laurie. Genetic Diversity and Association Studies in U.S. Hispanic/Latino Populations: Applications in the Hispanic Community Health Study/Study of Latinos. *AJHG*. 2016. 98(1). 165-84. [PMID: 26748518; PMCID: PMC4716704].

15. **Seyerle AA**, Young AM, Jeff JM, Melton PE, Jorgensen NW, Lin Y, Carty CL, Deelman E, Heckbert SR, Hindorff LA, Jackson RD, Martin LW, Okin PM, Perez MV, Psaty BM, Soliman EZ, Whitsel EA, North KE, Laston S, Kooperberg C, and CL Avery. Evidence of heterogeneity by race/ethnicity in genetic determinants of QT interval. *Epidem*. 2014. 25(6). 790-8. [PMID: 25166880, PMCID: PMC4380285].

Invited Manuscripts

1. **Seyerle AA** and CL Avery. Genetic epidemiology: The potential benefits and challenges of genetic information to improve human health. [Invited Commentary]. *N C Med J*. 2013. 74(6). 505-508. [PMID: 24316778, PMCID: PMC4041482].

EXTRAMURAL FUNDING

Ongoing Research Support

Industry Sponsored Fellowship
AESARA Post-doctoral Fellowship
Description: The AESARA/UNC Market Access and Health Informatics fellowship offers PharmD graduates the opportunity to understand market access, informatics and communication of evidence to population decision makers to prepare the fellow for a successful market access career in consulting, academic, or biopharmaceutical industry.
Role: Principal Investigator (with Sachiko Ozawa, Division of Practice Advancement and Clinical Education).
Total Costs: \$337,205
Seyerle, Ozawa (MPI)
07/01/2020 – 06/30/2023

Completed Research Support

HHSN268201600004C – Sub-Contract WFUHS 330332 (NHLBI)
Women’s Health Initiative Extension 2015-2020
Description: To launch the next generation of cardiovascular health research projects that target older women in the Women’s Health Initiative
Role: Co-Investigator
Total Costs: \$453,487
Whitsel (Sub-Contract PI)
10/15/15 – 10/31/2019

UNC Office of the Vice Chancellor for Research (OVCR)
Heterogeneity in Obesity Creativity Hub: Transdisciplinary
Approaches for Precision Research and Treatment
Description: The obesity hub is a large collaborative project focused on understanding why two people who consume the same diets and exercise equally can have very different susceptibility to weight gain, with the aim of developing treatment approaches that go far beyond the “one-size-fits-all” approach.
Role: Co-Investigator
Total Costs: \$250,000
Gordon-Larsen (PI)
7/1/2018 – 10/31/2020

TOPMed Program for Distributed Analysis Support (NHLBI) Seyerle, Coombes (MPI)
Whole Genome Analysis of Venous Thromboembolism 4/1/2017 – 3/31/2019
Description: Leverage the considerable whole genome sequence investment to extend the resource with genetic association studies of venous thromboembolism (VTE) and investigate the underlying mechanisms in the etiology of VTE.
Role: Principle Investigator (with Brandon Coombes, Mayo Clinic Division of Biomedical Statistics and Informatics)
Total Costs: \$100,000

Project # 15GPSPG239 (AHA) Avery (PI)
Pharmacogenomics of Risk Factors for Cardiac Arrhythmias in Global Populations 2/1/2015 – 1/31/2017
Description: Evaluate common SNPs influencing arrhythmogenic adverse drug reactions in European American, African American, and Hispanic/Latino populations.
Role: Graduate Research Assistant (Aided in grant preparation, submission, and project completion)
Total Costs: \$500,000

PRESENTATIONS

†First Author is a Pre- or Post-Doctoral Fellow for whom I am the primary mentor

** Co-First Author*

Invited Presentations

- 2022 An Integrated Pharmaco-Omics Approach to Detect Hormone Related Susceptibility to CVD, Department of Pharmaceutical Outcomes and Policy Seminar, University of North Carolina at Chapel Hill, Chapel Hill, NC, January 12
- 2021 Bringing Equity to Precision Medicine: Incorporating Diverse Populations in Genetic Epidemiology Research, Bringing a Racial Equity Focus to Health Informatics Workshop, Carolina Health Informatics Program, Virtual, March 30
- 2018 The Genetics of Venous Thromboembolism, CVD Epidemiology Seminar Series, University of North Carolina at Chapel Hill, Chapel Hill, NC, November 13
- 2018 Large-Scale Pharmacogenomic Analyses of QT-Prolonging Medications: The Cohorts for Heart and Aging Research in Genomic Epidemiology, Division of Epidemiology, Vanderbilt University, February 27
- 2018 Utilizing Big Data to Study Pharmacogenomics, Department of Pharmaceutical Outcomes and Policy Seminar, University of North Carolina at Chapel Hill, Chapel Hill, NC, February 13
- 2017 The Genetics of Venous Thromboembolism (And A Brief Crash Course on Genetics in Epidemiology), CVD Epidemiology Seminar Series, University of Minnesota, Minneapolis, MN, December 8
- 2017 Large-Scale Pharmacogenomic Analyses of QT-Prolonging Medications: The Cohorts for Heart and Aging Research in Genomic Epidemiology, Department of Pharmaceutical Outcomes and Policy Seminar, University of North Carolina at Chapel Hill, Chapel Hill, NC, September 18

- 2017 Whole Genome Sequencing of Venous Thromboembolism (VTE) in the NHLBI TOPMed Program, TOPMed All-Hands Conference Call, June 8
- 2016 Pharmacogenomics of Ventricular Conduction in Multi-Ethnic Populations, CVD Epidemiology Seminar Series, University of Minnesota, Minneapolis, MN, December 9
- 2016 Effect of Prevalent User Bias and Exposure Misclassification on Pharmacogenomics Studies Conducted in Observational Cohort Settings: A Simulation Study, CHARGE Pharmacogenetics Working Group Meeting, Charlottesville, VA, September 28
- 2015 Pharmacogenomics of Thiazides and QT Interval Meta-Analysis, CHARGE Pharmacogenetics Working Group Meeting, Jackson, MS, July 1

Conference Oral Presentations

- 2017 **Seyerle AA**, Coombes B, Laurie CA, Sofer T, Smith NL, Tang W, de Andrade M, Kooperberg C, Pankow J, Rice K, and CL Laurie. Combined Analysis of Venous Thromboembolism Across Heterogeneous Sample Sets. TOPMed Steering Committee and External Advisory Panel Meeting. Tysons, VA. November 29-December 1.
- 2016 Highland HM, Sitlani CM, **Seyerle AA**, Gondalia R, Graff M, Avery CL, and KE North. Pleiotropic Effects on BMI, WHR, Fasting Glucose, and Fasting Insulin Levels. American Society of Human Genetics. Vancouver, BC, Canada. October 18-21.
- 2016 **Seyerle AA**, Sitlani CM, and CL Avery on behalf of the CHARGE Pharmacogenetics Working Group. Pharmacogenomics Study of Thiazide Diuretics and QT Interval in Multi-Ethnic Populations: The Cohorts for Heart and Aging Research using Genomic Epidemiology Pharmacogenetics Working Group (CHARGE PWG). CHARGE Investigator Meeting. Houston, TX. January 26-27.
- 2014 **Seyerle AA**, Wassel C, Carty CL, Fornage M, Bielinski SJ, Buyske S, Carnethon MR, Crawford DC, Duggan DJ, Gong J, Heckbert SR, Hindorff LA, Jeff JM, Lloyd-Jones DM, Okin PM, Perez MV, Psaty BM, Rotter JI, Shah SJ, Shohet RV, Soliman EZ, Sotoodehnia N, Wu C, Kooperberg C, and CL Avery. Generalization and fine mapping of PR interval loci in Hispanics: the Populations Architecture using Genomics and Epidemiology (PAGE) Study. NHLBI Trainee Session. San Francisco, CA. March 19.

Conference Poster Presentations

- 2021 Ko Y[†], Roberts MC, and **AA Seyerle**. Understanding the Importance of Racial Diversity in the Development and Implementation of Pharmacogenomics Guidelines in Kidney Transplant Patients Receiving Tacrolimus. American Society of Human Genetics. Virtual. October 18-22.
- 2021 Perry JD[†] and **AA Seyerle**. Characterization of Polypharmacy Patient Samples Using National Health and Nutrition Examination Survey (NHANES) Data. AMCP Nexus. October 20.
- 2021 Perry JD[†] and **AA Seyerle**. Characterization of Polypharmacy Patient Samples Using National Health and Nutrition Examination Survey (NHANES) Data. NPhA/SNPhA Convention. Virtual. July 29-August 1. (3rd Place Poster Presentation Award Winner).

- 2019 Almuwaqqat Z, Jokhadar M, Norby FL, Lutsey PL, O'Neal WT, **Seyerle AA**, Soliman EZ, Chen LY, Bremner DJ, Vaccarino B, Shah AJ, A Alonso. Associations of Antidepressant Type with the Incidence of Cardiovascular Disease in the Atherosclerosis Risk in Communities (ARIC) Study. AHA EPI/Lifestyle. Houston, TX. March 5-8.
- 2018 **Seyerle AA**, Laurie CA, Coombes B, Jain D, Tang W, Chen MH, Puurunen M, Ko D, Johnson AD, Morrison A, Cushman M, Heckbert SR, de Andrade M, Boerwinkle E, Vasani RS, Reiner AP, McKnight B, Rice K, Sofer T, Laurie CC, Pankratz N, Pankow J, Kooperberg C, and NL Smith. Genetic Association Study of Venous Thromboembolism Based on Whole-Genome Sequencing in the Trans-Omics for Precision Medicine (TOPMed) Program. TOPMed Steering Committee and External Advisory Panel Meeting. Tysons, VA. December 5-6.
- 2018 Laurie CA, **Seyerle AA**, Coombes B, Jain D, Tang W, Chen MH, Puurunen M, Ko D, Johnson AD, Morrison A, Cushman M, Heckbert SR, de Andrade M, Boerwinkle E, Vasani RS, Reiner AP, McKnight B, Rice K, Sofer T, Laurie CC, Pankratz N, Pankow J, Kooperberg C, and NL Smith. Genetic Association Study of Venous Thromboembolism Based on Whole-Genome Sequencing in the Trans-Omics for Precision Medicine (TOPMed) Program. American Society of Human Genetics. San Diego, CA. October 17-20.
- 2018 Laurie CA, **Seyerle AA**, Coombes B, Jain D, Tang W, Chen MH, Puurunen M, Ko D, Johnson AD, Morrison A, Cushman M, Heckbert SR, de Andrade M, Boerwinkle E, Vasani RS, Reiner AP, McKnight B, Rice K, Sofer T, Laurie CC, Pankratz N, Pankow J, Kooperberg C, and NL Smith. Genetic Association Study of Venous Thromboembolism Based on Whole-Genome Sequencing in the Trans-Omics for Precision Medicine (TOPMed) Program, CHARGE Investigator Meeting, Baltimore, MD, October 11-12.
- 2018 **Seyerle AA**, Coombes B, Laurie CA, Sofer T, Smith NL, Tang W, Pankratz N, de Andrade M, Kooperberg C, Pankow J, Rice K, and CC Laurie. Combined Analysis of Longitudinal Cohorts with Case-Only Sample Sets for Detecting Genetic Effects on Venous Thromboembolism in TOPMed. CHARGE Investigator Meeting. Rotterdam, The Netherlands. April 18-19.
- 2018 **Seyerle AA**, Coombes B, Laurie CA, Sofer T, Smith NL, Tang W, Pankratz N, de Andrade M, Kooperberg C, Pankow J, Rice K, and CC Laurie. Combined Analysis of Longitudinal Cohorts with Case-Only Sample Sets for Detecting Genetic Effects on Venous Thromboembolism in TOPMed. AHA EPI/Lifestyle. New Orleans, LA. March 20-23.
- 2017 **Seyerle AA**, Schladt D, Guan W, Rimmel R, Oetting WS, Dorr C, Wu B, Israni A, and PA Jacobson. Rare Variation Associated With Immunosuppressant Drug Concentrations: Moving Beyond Common SNPs in Predicting Drug Metabolism. American Society of Human Genetics. Orlando, FL. October 18-21.
- 2017 **Seyerle AA**, Basu S, Fuchsberger C, Germain M, Guan W, Kacprowski T, Greinacher A, Kleber ME, Delgado G, März W, Morange P-E, Pankratz N, Tregouet D-A, Pankow JS, and W Tang. Genome-Wide Association Study of Activated Partial Thromboplastin Time in Multi-Ethnic Populations. CHARGE Investigator Meeting. New York, NY. March 23-24.
- 2017 **Seyerle AA**, Basu S, Fuchsberger C, Germain M, Guan W, Kacprowski T, Greinacher A, Kleber ME, Delgado G, März W, Morange P-E, Pankratz N, Tregouet D-A, Pankow JS, and W Tang. Genome-Wide Association Study of Activated Partial Thromboplastin Time in Multi-Ethnic Populations. NHLBI Trainee Session. Portland, OR. March 8. (Moderated).

- 2017 **Seyerle AA**, Basu S, Fuchsberger C, Germain M, Guan W, Kacprowski T, Greinacher A, Kleber ME, Delgado G, März W, Morange P-E, Pankratz N, Tregouet D-A, Pankow JS, and W Tang. Genome-Wide Association Study of Activated Partial Thromboplastin Time in Multi-Ethnic Populations. AHA EPI/Lifestyle. Portland, OR. March 7-10.
- 2016 Avery CL, Floyd J, Noordam R, **Seyerle AA**, and CM Sitlani on behalf of the CHARGE Pharmacogenetics Working Group. Pharmacogenomics of Risk Factors for Cardiac Arrhythmias in Global Populations. American Heart Association. New Orleans. November 12-16.
- 2016 **Seyerle AA**, Sitlani CM, North KE, Lee CR, Whitsel EA, Stürmer T, and CL Avery. Effect of Bias and Misclassification on Gene-Environment Studies Conducted in Observational Cohort Settings: A Simulation Study. American Society of Human Genetics. Vancouver, BC, Canada. October 18-21.
- 2016 **Seyerle AA**, Sitlani CM, North KE, Lee CR, Whitsel EA, Stürmer T, and CL Avery. Effect of Bias and Misclassification on Gene-Environment Studies Conducted in Observational Cohort Settings: A Simulation Study. CHARGE Investigator Meeting. Charlottesville, VA. September 28-29.
- 2016 **Seyerle AA**, Sitlani CM, and CL Avery on behalf of the CHARGE Pharmacogenetics Working Group. Genes Regulating Ion Transport Implicated in a Large Multi-Ethnic Pharmacogenomics Study of Thiazide Diuretics and QT Interval: The Cohorts for Heart and Aging Research using Genomic Epidemiology Pharmacogenetics Working Group (CHARGE PWG). AHA EPI/Lifestyle. Phoenix, AZ. March 1-4. (Moderated).
- 2015 **Seyerle AA**, Lin HJ, Gogarten SM, Soliman EZ, Heckbert SR, Kerr KF, Kooperberg C, Rodriguez CJ, Guo X, Ryckman KK, Yao J, Sotoodehnia N, Taylor KD, Whitsel EA, Rotter JI, Laurie CC, and CL Avery. Meta-Analysis of Genome-Wide Studies of PR interval in Hispanic Populations. NHLBI Trainee Session. Baltimore, MD. March 4. (Moderated).
- 2015 **Seyerle AA**, Lin HJ, Gogarten SM, Soliman EZ, Heckbert SR, Kerr KF, Kooperberg C, Rodriguez CJ, Guo X, Ryckman KK, Yao J, Sotoodehnia N, Taylor KD, Whitsel EA, Rotter JI, Laurie CC, and CL Avery. Meta-Analysis of Genome-Wide Studies of PR interval in Hispanic Populations. AHA EPI/Lifestyle. Baltimore, MD. March 3-6.
- 2014 **Seyerle AA**, Wassel C, Carty CL, Fornage M, Bielinski SJ, Buyske S, Carnethon MR, Crawford DC, Duggan DJ, Gong J, Heckbert SR, Hindorff LA, Jeff JM, Lloyd-Jones DM, Okin PM, Perez MV, Psaty BM, Rotter JI, Shah SJ, Shohet RV, Soliman EZ, Sotoodehnia N, Wu C, Kooperberg C, and CL Avery. Generalization and fine mapping of PR interval loci in Hispanics: the Populations Architecture using Genomics and Epidemiology (PAGE) Study. AHA EPI/NPAM. San Francisco, CA. March 18-21.
- 2013 **Seyerle AA**, Young AM, Jeff JM, Melton PE, Jorgensen NW, Lin Y, Carty CL, Deelman E, Heckbert SR, Hindorff LA, Jackson RD, Martin LW, Okin PM, Perez MV, Psaty BM, Soliman EZ, Whitsel EA, North KE, Laston S, Kooperberg C, and CL Avery. Evidence of heterogeneity in genetic determinants of QT interval across global populations: The Population Architecture using Genomics and Epidemiology (PAGE) Study. AHA EPI/NPAM. New Orleans, LA. March 19-22.

TEACHING EXPERIENCE

2021-Present Course Director
DPOP Division Seminar

UNC Eshelman School of Pharmacy
PHRS 899 (Professional)

2021-Present	Course Director Pharmaceutical: Ethical & Social Issues	UNC Eshelman School of Pharmacy PHCY 100 (Undergraduate)
2019-Present	Course Director (DPOP Division Director) Research and Scholarship in Pharmacy	UNC Eshelman School of Pharmacy PHCY 624/725/726 (Professional)
2021	Guest Panelist Foundations for Cross-Disciplinary Training in the Pharmaceutical Sciences	UNC Eshelman School of Pharmacy PHRS 801 (Graduate)
2019-2020	Group Facilitator Patient Care Experience	UNC Eshelman School of Pharmacy PHCY 718 (Professional)
2019	Invited Lecturer Pharmaceutical Outcomes Research Methods	UNC Eshelman School of Pharmacy DPOP 870 (Graduate)
2018	Invited Lecturer Evidence-Based Practice	UNC Eshelman School of Pharmacy PHCY 504 (Professional)
2017	Invited Facilitator Pathophysiology of Human Disease	University of Minnesota PubH 6355 (Graduate)
2017	Invited Lecturer Genetics in Public Health	University of Minnesota PubH 6381 (Graduate)
2017	Invited Lecturer Human Genetics	University of Minnesota GCD 4143 (Upper Undergraduate)
2015-2016	Invited Lecturer Genetic Epidemiology: Methods and Applications	Univ of North Carolina at Chapel Hill EPID 743 (Graduate)
2013	Teaching Assistant Clinical Measurement/Evaluation	Univ of North Carolina at Chapel Hill EPID 711 (Graduate)

GRADUATE STUDENT MENTORING

Doctoral Student Advisor

Caitlin Kurtz (Pharmaceutical Sciences, expected graduation 2026)

Doctoral Student Committee Chair

Yiran (Ellen) Qian (Pharmaceutical Sciences, expected graduation 2023)

Doctoral Student Committee Member

Malvika Pillai (Biomedical and Health Informatics, expected graduation 2022)

Masters Student Advisor

Heather Kincaide (Biomedical and Health Informatics, expected graduation 2023)
Anthony Hudzik (Biomedical and Health Informatics, expected graduation 2023)
Rachel Black (Biomedical and Health Informatics, expected graduation 2022)
Samuel Lee (Biomedical and Health Informatics, 2021)

PharmD Student Research Mentor

Young Eun (Stella) Ko (2022)
Jasmine Perry (2022)

Post-Doctoral Fellow Director

Rachel Black (AESARA Fellow 2020-2022)
Anthony Hudzik (AESARA Fellow 2021-2023)

PROFESSIONAL DEVELOPMENT

- 2022 Summer Writing Group, Center for Faculty Excellence, University of North Carolina at Chapel Hill, Chapel Hill, NC
- 2021 Building Effective Mentoring Relationships Training Series, NC TraCS Institute, Chapel Hill, NC
- 2019 TOPMed Analysis Workshop, University of Michigan, Ann Arbor, MI
- 2019 Google Cloud Platform Training, Google, Chapel Hill, NC
- 2018 What is Mendelian Randomization and How Can it be Used as a Tool for Medicine and Public Health? Opportunities and Challenges, Precision Medicine and Population Health Webinar, Centers for Disease Control and Prevention, Atlanta, GA
- 2018 Minnesota Clinical and Translational Science Institute Mock NIH Study Section, University of Minnesota, Minneapolis, MN
- 2017 TOPMed Analysis Workshop, University of Washington, Seattle, WA
- 2017 NIH Public Access Policy, University of Minnesota, Minneapolis, MN
- 2017 Teaching-Engaging Students Through Online/Blended Learning, University of Minnesota, Minneapolis, MN
- 2017 Precision Medicine and Health Disparities Summit, Duluth, MN
- 2017 CHARGE Epigenetics of Aging and Disease Workshop, New York, NY
- 2017 Beyond the NIH: An Overview of Non-NIH Funded Grant Mechanisms, Minneapolis, MN
- 2017 Analysis Commons Hands-On Workshop (DNAexus), Houston, TX
- 2016 Addressing Microaggressions and Being an Ally, University of Minnesota, Minneapolis, MN
- 2016 CHARGE Epigenetics of Aging and Disease Workshop, Charlottesville, VA
- 2014 Responsible Conduct of Research, NC TraCS Institute, Chapel Hill, NC
- 2014 Longitudinal Data Analysis, Including Categorical Outcomes, Summer Program in Quantitative Methods of Social Research, ICPSR, Ann Arbor, MI
- 2012 The Genetics of the Peoples of Africa and the Transatlantic African Diaspora Conference, Chapel Hill, NC

PROFESSIONAL SERVICE

University Service

- 2020-Present Program Director, AESARA Post-doctoral Fellowship, Univ of North Carolina at Chapel Hill
- 2019-Present RASP Directors Committee, UNC Eshelman School of Pharmacy

2018-Present	Division of Pharmaceutical Outcomes and Policy Comps and Admissions Committee, UNC Eshelman School of Pharmacy
2019	DataAware Faculty Mentor, Carolina Health Informatics Program, Univ of North Carolina at Chapel Hill
2019-2020	Division of Pharmaceutical Outcomes and Policy Morale Committee, UNC Eshelman School of Pharmacy
2018-2021	Multiple Mini Interview (MMI) Candidate Interviewer, UNC Eshelman School of Pharmacy
2018-2019	Finance, Administration, and Operations Committee, UNC Eshelman School of Pharmacy
2017	Cardiovascular Disease Epidemiology Program Professional Development Coordinator, University of Minnesota
2017	Cardiovascular Disease Epidemiology Program Peer Mentoring Coordinator, University of Minnesota
2015	CVD Strategic Planning Student Coordinator, Univ of North Carolina at Chapel Hill
2014	Cardiovascular Disease Epidemiology Seminar Coordinator, Univ of North Carolina at Chapel Hill
2013	Cardiovascular Disease Epidemiology Peer Led Coordinator, Univ of North Carolina at Chapel Hill
2010	Newnan Advising Center Junior/Senior Committee, University of Michigan – Ann Arbor
2010	Newnan Advising Center Hiring Committee, University of Michigan – Ann Arbor
2010	College of LSA Curriculum Committee, University of Michigan – Ann Arbor
2009	Newnan Advising Center Orientation Committee, University of Michigan – Ann Arbor
2008-2011	College of LSA Student Government, University of Michigan – Ann Arbor

Invited Manuscript Review

2021 (2)	<i>Frontiers in Genetics</i>
2018 (1), 2019 (2)	<i>PLOS-One</i>
2017 (2)	<i>Heart</i>
2019 (1)	<i>JAHA</i>

Community Service

2021	Review Editor for <i>Applied Genetic Epidemiology</i>
2017-2018	DNA Day Essay Contest Judge, American Society for Human Genetics
2013	Team Epi-Aid, University of North Carolina at Chapel Hill

MEMBERSHIPS

American Society of Human Genetics (2016)
 American Heart Association (2013)
 Phi Alpha Theta History Academic Honor Society (2009)