Curriculum Vitae

Jasmine A. Luzum (formerly Talameh), PharmD, PhD, FHFSA, FAHA

CONTACT INFORMATION

University of Michigan College of Pharmacy Ann Arbor, MI 48109 LinkedIn ORCID jluzum@med.umich.edu Phone: 734-615-4851 Fax: 734-763-4480 <u>ResearchGate</u> <u>Google Scholar</u> <u>Faculty page</u> <u>Lab page</u> <u>Twitter</u> <u>MyNCBI</u> <u>Michigan Experts</u>

EMPLOYMENT

Assistant Professor University of Michigan College of Pharmacy – Ann Arbor, MI Department of Clinical Pharmacy	2016-Present		
Adjunct Assistant Professor Ohio State University College of Medicine – Columbus, OH Department of Biological Chemistry & Pharmacology	2016-2019		
Adjunct Research Scientist Henry Ford Health System – Detroit, MI Center for Individualized and Genomic Medicine Research (CIGMA)	2017-Present		
EDUCATION			
Post-Doctoral Fellowship2013-2016Ohio State University College of Medicine – Columbus, OHAmerican Heart Association and American Board of Clinical Pharmacology FellowshipResearch Project:"Racial Disparities in Heart Failure Clinical Outcomes: Discovery of GeneticMarkers for High-Risk African-Americans"Co-Mentors:Joseph Kitzmiller, MD, PhD, FCP and Wolfgang Sadee, Dr.rer.nat.			
Doctor of Philosophy in Pharmaceutical Sciences2008-2013University of North Carolina Eshelman School of Pharmacy - Chapel Hill, NCAmerican Foundation for Pharmaceutical Education FellowshipDissertation:"Genetic and Pharmacogenetic Associations with Heart Failure Patient Survival"Dissertation Committee:Herb Patterson, PharmD, Howard McLeod, PharmD, KirkwoodAdams, MD, Craig Lee, PharmD, PhD, Jo Ellen Rodgers, PharmD			
Doctor of Pharmacy Summa Cum Laude	2002-2008		

University of Pittsburgh School of Pharmacy - Pittsburgh, PA

RESEARCH INTERESTS

- Cardiovascular pharmacogenetics
 - Heart failure medications
 - o Statins
 - Drug-induced QT prolongation
- Racial disparities in cardiovascular drug responses
 - Heart failure medications
 - Role of genomic ancestry
 - Role of social determinants of health
- Implementation of pharmacogenomics into clinical practice
 - Guideline recommendations
 - Clinical pharmacogenetic education
- Modeling approaches for multiple pharmacogenetic markers
 - GWAS
 - Polygenic scores

RESEARCH FUNDING

Grants in Review

Research Project Grant (Parent R01 Clinical Trial Required) PA-20-183

Sponsor:NIHTitle:Mechanistic Clinical Trial of a Polygenic Risk Score for Beta-Blocker Response in
Patients with Heart FailureRole:PINumber:n/aAmount:\$2,999,708
Period:Number:n/a

Ruth L. Kirschstein National Research Service Award (NRSA) Individual Predoctoral Fellowship to Promote Diversity in Health-Related Research (Parent F31-Diversity) Sponsor: NIH

<u>Title:</u> Drug-Induced Long QT Syndrome: Determining the Associations of Candidate Genetic Variants and a Polygenic Score with diLQTS Risk

<u>Role</u>: Primary Mentor <u>PI</u>: Ana Lopez Medina Number: n/a

<u>Amount</u>: \$165,797 <u>Period</u>: (Resubmitted April 2023)

Funded Grants

Ruth L. Kirschstein National Research Service Award (NRSA) Individual Predoctoral Fellowship to Promote Diversity in Health-Related Research (Parent F31-Diversity) Sponsor: NIH

<u>Title:</u> Addressing the Racial Disparity of Angiotensin Inhibitor Benefit in HFrEF Hospitalizations: Distinguishing Genomic and Social Factors <u>Role</u>: Primary Mentor <u>PI</u>: Shana Littleton <u>Number</u>: pending <u>Amount</u>: \$81,074 <u>Period</u>: 5/1/2023-4/30/2025

Michigan Institute for Clinical & Health Research (MICHR) Predoctoral Translational Science T32 Training Grant

 Sponsor: MICHR/NIH

 Title: Addressing the Racial Disparity of Angiotensin Inhibitor Benefit in HFrEF

 Hospitalizations: Distinguishing Genomic and Social Factors

 Role: Primary Mentor

 PI: Shana Littleton

 Number: n/a

 Mumber: n/a

Michigan Institute for Clinical & Health Research (MICHR) Predoctoral Translational Science T32 Training Grant

Sponsor:MICHR/NIHTitle:Drug-Induced Long QT Syndrome: Determining the Associations of Candidate GeneticVariants and a Polygenic Score with diLQTS RiskRole:Primary MentorPI:Ana Lopez MedinaNumber:n/aPeriod:5/1/2023-4/30/2025

Ruth L. Kirschstein National Research Service Award (NRSA) Individual Postdoctoral Fellowship (Parent F32)

Sponsor: NIHTitle: Bleeding on Direct Oral Anticoagulants: Identification of Genetic Risk Factors and aPolygenic Predictive Score in Patients with Atrial FibrillationRole: Primary MentorPI: Alessandra Campos StafficoNumber: F32HL162231Amount: \$133,612Period: 09/30/2022-08/31/2024

UM Provost Early Tenure Track Faculty Research Support Initiative

Sponsor:
Title:
Luzum LabUniversity of Michigan Office of the Provost
Amount:
\$3,000
Period:
\$3,000
Period:
\$3/23/2022-03/23/2028

Postdoctoral Translational Scholars Program (PTSP)

Sponsor:Michigan Institute for Clinical and Health Research (MICHR)Title:Bleeding on Direct Oral Anticoagulants: Identification of Genetic Risk Factors and aPolygenic Predictive Score in Patients with Atrial FibrillationRole:Primary MentorPI:Alessandra Campos StafficoNumber:n/aPeriod:07/01/2021-06/30/2023

Embedded Writing Specialist Grant

Sponsor: University of Michigan ADVANCE program Title: n/a (The purpose of this award is to support the hiring of a writing specialist for my lab.) Role: Principal Investigator Institution: University of Michigan Amount: \$1,000

Period: 2/22/21 – 2/22/22

MCubed Collaborative Grant

Sponsor: University of Michigan Title: "Translational study of valproic acid for treating myocardial infarction" Role: Co-PI Institution: University of Michigan Amount: \$60,000 Number: n/a Period: 2/11/2019 - 12/31/2022

Career Development Award

Sponsor: National Heart, Lung, and Blood Institute (NHLBI) Title: "Precision Medicine for Heart Failure: The Role of Genomics in the Efficacy and Racial Disparity of Cornerstone Pharmacotherapy" **Role: Principal Investigator** Primary Mentor: David E. Lanfear Institution: University of Michigan Amount: \$815,410 Number: 1K08HL146990-01 Period: 4/1/2019 - 3/31/2024

Career Development Award

Sponsor: American Heart Association Title: "Precision Medicine for Heart Failure: The Role of Genomics in the Efficacy and Racial Disparity of Cornerstone Pharmacotherapy" Role: Principal Investigator Primary Mentor: David E. Lanfear Institution: University of Michigan Amount: (had to decline award because of overlap with NIH K08 award)

Number: n/a (had to decline award because of overlap with NIH K08 award)

Futures Grant

Sponsor: American College of Clinical Pharmacy Research Institute Title: "Precision Medicine for Heart Failure: The Role of Genomics in the Efficacy and Racial Disparity of Cornerstone Pharmacotherapy" Role: Principal Investigator Period: 9/15/2018 – 3/31/20 Institution: University of Michigan Amount: \$50,000 Number: n/a

NIH Clinical Research Student Loan Repayment Program

Sponsor: National Heart, Lung, and Blood Institute (NHLBI) Title: "Precision Medicine for the Recovery of Anthracycline-Induced Cardiotoxicity: A Pharmacogenetic Investigation of Carvedilol" **Role: Principal Investigator** Institution: University of Michigan Mentor: James Rae Period: 7/2018-6/2020 Number: L30 HL110279-03 Amount: \$32,931

Last updated: May 30, 2023

Summer Immersion Program

Sponsor:Michigan Institute for Clinical & Health Research (MICHR)Title:n/a – this competitive program provided a stipend for a pharmacy student, JosephEnglish, to do a summer research project in my labRole:Principal InvestigatorInstitution:University of MichiganNumber:n/a

New Investigator Award

Sponsor:American Association of Colleges of Pharmacy (AACP)Title:"Addressing Racial Disparity in Heart Failure Clinical Outcomes and Beta-BlockerResponse:Investigation of a Novel Beta-1 Adrenergic Receptor Regulatory Polymorphism inAfrican-Americans"Period: 2/2018 – 2/2019Role:Principal InvestigatorInstitution:University of MichiganNumber:n/a

Collaborative Research Pilot Grant

Sponsor: Michigan Institute for Clinical & Health Research (MICHR)Title: Precision Medicine for the Recovery of Chemotherapy-Induced Cardiotoxicity: APharmacogenetic Investigation of CarvedilolRole: Co-Principal InvestigatorInstitution: University of MichiganNumber: F050658

Startup Package

Sponsor:University of Michigan College of PharmacyTitle:Cardiovascular PharmacogenomicsRole:Principal InvestigatorInstitution:University of MichiganNumber:n/a

NIH Clinical Research Student Loan Repayment Program

Sponsor:National Heart, Lung, and Blood Institute (NHLBI)Title:Racial Disparities in Heart Failure Clinical Outcomes: Discovery of Genetic Markers forHigh-Risk African-AmericansDiscovery of Genetic Markers forRole:Principal InvestigatorInstitution:Ohio State UniversityMentor:Wolfgang SadeeNumber:L30 HL110279-02Amount:\$67,180

Post-Doctoral Fellowship

<u>Sponsor:</u> American Heart Association <u>Title:</u> Racial Disparities in Heart Failure Clinical Outcomes: Discovery of Genetic Markers for High-Risk African-Americans <u>Role:</u> Principal Investigator (Post-Doctoral Fellow) <u>Institution</u>: Ohio State University <u>Co-Mentors:</u> Wolfgang Sadee and Joseph Kitzmiller <u>F</u> <u>Number</u>: 14POST20100054

Period: 7/2014-6/2016 Amount: \$100,000

NIH Clinical Research Student Loan Repayment Program

Sponsor:National Heart, Lung, and Blood InstituteTitle:Genetic and Pharmacogenetic Associations in Patients with Heart FailureRole:Principal InvestigatorInstitution:University of North Carolina at Chapel HillMentor:Herb PattersonNumber:L30 HL110279-01Period:\$30,900

Pre-Doctoral Fellowship

Sponsor:American Foundation for Pharmaceutical EducationTitle:Genetic and pharmacogenetic associations of the sympathetic adrenergic system andrenin-angiotensin-aldosterone system in patients with heart failure.Role:Principal Investigator (Pre-Doctoral Fellow)Institution:University of North Carolina at Chapel HillMentor:Herb PattersonNumber:N/A

Kathryne A. Brewington Graduate Student Research Award

Sponsor:University of North Carolina Eshelman School of PharmacyTitle:Genetic and Pharmacogenetic Associations in Patients with Heart FailureRole:Principal InvestigatorInstitution:University of North Carolina at Chapel HillMentor:Herb PattersonNumber:N/A

Pilot Grant

Sponsor:North Carolina Translational and Clinical Sciences Institute (NC TraCS)Title:Association of genetic polymorphisms in the sympathetic adrenergic and renin-
angiotensin-aldosterone systems with survival in patients with heart failureRole:Principal InvestigatorInstitution:University of North Carolina at Chapel HillCo-Investigators:Herb Patterson, Kirkwood F. Adams, Jr., Howard McLeod, Janelle Hoskins,
and Todd SchwartzNumber:#10KR51038

First Year Graduate School Fellowship

Sponsors:
Role:Rho Chi, Allergan Foundation, American Foundation for Pharmaceutical Education
Role:Role:Principal Investigator (First Year Graduate School Fellow)
Institution:Institution:University of North Carolina at Chapel Hill
Mentor:Mentor:Robert Gibbs
Amount:N/APeriod:9/2008-8/2009
Amount:

Undergraduate Research Scholarship

Sponsors:
American Foundation for Pharmaceutical Education and Ortho-McNeil
Pharmaceutical Gateway to Research Scholarship
Title:
Effects of systemic administration of anastrozole on aromatase activity in rat brain, basal
forebrain cholinergic neurons, and on cognitive performance.
Role:
Principal Investigator (Undergraduate Research Scholar)
Institution:
University of Pittsburgh
Mentor:
Robert GibbsPeriod:
\$1/2005-5/2006
Amount:
\$4,000

Undergraduate Research Scholarship

<u>Sponsor:</u> University of Pittsburgh School of Pharmacy Graduate Education and Research at the University of Pittsburgh [GEAR UP] Scholarship <u>Title:</u> Effects of estrogen replacement on the number of cholinergic neurons expressing pMEK in the basal forebrain of ovariectomized rats. Role: Principal Investigator (Undergraduate Research Scholar)

<u>Institution</u>: University of Pittsburgh <u>Mentor:</u> Robert Gibbs Number: N/A <u>Amount</u>: \$2,000 <u>Period:</u> 6/2004 to 8/2004

PUBLICATION STATISTICS

Total: <u>66</u> Number of citations: <u>899</u> h-index: <u>16</u> i10-index: <u>26</u>

PUBLICATIONS

(*corresponding author)

Journal Articles

- Duarte JD, Gammal R, Thomas CD, Lee CR, Huddart R, Agundez JAG, Baye J, Gaedigk A, Klein TE, Lanfear DE, Monte AA, Nagy M, Schwab M, Stein CM, Uppugunduri R, van Schaik RHN, Caudle KE, Luzum JA. Clinical Pharmacogenetics Implementation Consortium (CPIC) Guideline for CYP2D6, ADRB1, ADRB2, GRK4, and GRK5 Genotypes and Beta-Blocker Therapy. *Clinical Pharmacology and Therapeutics*. 2023 [in preparation]. Roles: Conceptualization, Design, Analysis, Writing, and Critical Review.
- Campos-Staffico AM, Jacoby JP, Dorsch MP, Limdi NA, Barnes GD, and Luzum JA. Comparative Performance of Specific and Non-Specific Tools for Predicting Major Bleeding from Direct Oral Anticoagulants in Atrial Fibrillation Patients. *Journal of Thrombosis and Haemostasis.* 2023. [in preparation]. Roles: Critical Review.
- 3. Gui H, **Luzum JA**, Bryson TD, Malouf ZE, Li J, She R, Peterson E, Williams LK, Sabbah HN, Gardell SJ, *Lanfear DE. Genetic Influence on Human Plasma Metabolites That Determine Mortality in Heart Failure Patients with Reduced Rejection Fraction. *TBD*. 2023. [in preparation]. Roles: Critical Review.

- *Pereira N, Cresci S, Angiolillo DJ, Batchelor W, Capers Q, Cavallari L, Leifer D, Luzum JA, Roden DM, Stellos K, Turrise SL, and Tuteja S. AHA Scientific Statement: CYP2C19 Genetic Testing for Oral P2Y12 Inhibitor Therapy. Circulation. 2023. [in revision] Roles: Writing and Critical Review.
- *Oni-Orisan A, Tuteja S, Smith DM, Castrichini M, Crews KR, Murphy WA, Nguyen NHK, Hoffecker G, Huang Y, Lteif C, Friede K, Tantisira K, Aminkeng K, Voora D, Cavallari LH, Whirl-Carrillo M, Duarte J, Luzum JA. An Introductory Guide to Cardiovascular Pharmacogenetics for Healthcare Providers. *Clinical Pharmacology & Therapeutics*. 2023. [in press] Roles: Conceptualization, Design, Writing, and Critical Review.
- Debbs J, Hannawi B, Peterson E, Gui H, Zeld N, Luzum JA, Sabbah HN, Snider J, Pinto Y, Williams LK, and Lanfear DE. Evaluation of a new aptamer-based array for soluble suppressor of tumorgenicity (ST2) and N-terminal pro-B-type natriuretic peptide (NTproBNP) in heart failure patients. *Journal of Cardiovascular Translational Research*. 2023. [online ahead of print] PMID: 37191882. Roles: Critical Review
- Luzum JA, Campos-Staffico AM, Li J, She R, Gui H, Peterson EL, Liu B, Sabbah HN, Williams LK, *Lanfear DE. Genome-Wide Association Study of Beta-Blocker Survival Benefit in Black and White Patients with Heart Failure with Reduced Ejection Fraction. *Genes*. 2022. [in preparation] Roles: Conceptualization, Design, Writing, Critical Review, and Corresponding Author
- 8. Mack A, Cordwin D, Koelling T, Hummel SL, **Luzum J**, *Dorsch MP. Race and Guideline-Directed Medical Therapy Prescribing in Patients with Heart Failure with Reduced Ejection Fraction at a Large Academic Medical Center. 2022. [in preparation] Roles: Conceptualization, Design, Writing, and Critical Review
- Campos-Staffico AM, Dorsch MP, Barnes GD, Zhu HJ, Limdi NA, and *Luzum JA. Eight Pharmacokinetic Genetic Variants are not Associated with the Risk of Bleeding from Direct Oral Anticoagulants in Non-valvular Atrial Fibrillation Patients. *Frontiers in Pharmacology*. 2022;13:1007113. PMID: 36506510 PMCID: PMC9730333. Roles: Conceptualization, Design, Writing, Critical Review, and Corresponding Author
- 10.*Lanfear DE, Luzum JA, She R, Li J, Sabbah HN, Liu B, Peterson E, Williams LK. Validation of a Polygenic Score for Predicting Beta-Blocker Survival Benefit in Patients with Heart Failure using the United Kingdom Biobank. *Circulation: Genomics and Precision Medicine*. 2023. [in press]. PMID: 36866666 Roles: Writing and Critical Review
- 11. English JD, Tian S, Wang Z, and *Luzum JA. Association of Valproic Acid Use with Post-Myocardial Infarction Heart Failure Development: a Meta-Analysis of Two Retrospective Case-Control Studies. *Journal of Cardiovascular Pharmacology and Therapeutics*. 2022;27:10742484221140303. PMID: 36416392. PMCID: PMC9841513 Roles: Design, Writing, Critical Review and Corresponding Author

- 12.*Lanfear DE, Gui H, Tang WWH, Francke S, Li J, She R, Bazeley P, Pereira N, Adams KF, Luzum JA, Connolly T, Hernandez AF, McNaughton CD, and Williams LK. Common variants on FGD5 increase hazard of mortality or re-hospitalization in heart failure patients from ASCEND-HF trial. *Circulation: Heart Failure*. 2023. [in review] Roles: Design, Writing, Critical Review
- Lopez Medina AI, Chahal CAA, and *Luzum JA. Genetics of Drug-Induced QT Prolongation: Evaluating the Evidence for Pharmacodynamic Variants. *Pharmacogenomics.* 2022. 23(9):543-557. PMID: 35698903 PMCID: PMC9245591 Roles: Conceptualization, Design, Analysis, Writing, Critical Review and Corresponding Author
- 14. Castrichini M, Luzum JA, Pereira N. Pharmacogenetics of Antiplatelet Therapy. Annual Review of Pharmacology and Toxicology. 2023;63:211-229. PMID: 35914768. PMCID: PMC9868113. Roles: Writing and Critical Review
- 15. O'Sullivan JW, Raghavan S, Marquez-Luna C, Luzum JA, Damrauer S, Ashley E, O'Donnell CJ, Willer C, and *Natarajan P. Polygenic Risk Scores for Cardiovascular Disease: A Scientific Statement from the American Heart Association. *Circulation.* 2022;146(8):e93-e118. PMID: 35862132. PMCID: PMC9847481 Roles: Writing and Critical Review
- 16. Siddiqui MK, Luzum J, Coenen M, and Mahmoudpour SH. Editorial: Pharmacogenomics of Adverse Drug Reactions (ADRs). *Frontiers in Genetics*. 2022; 13: 859909. PMID: 35330732 PMCID: PMC8940279 Roles: Writing and Critical Review
- 17. Cooper-DeHoff R, Niemi M, Ramsey LB, Luzum JA, Tarkiainen K, Straka RJ, Gong L, Tuteja S, Wilke RA, Wadelius M, Larson EA, Roden DM, Klein TE, Yee SW, Krauss RM, Turner R, Palaniappan L, Gaedigk A, Giacomini KM, Caudle KE, *Voora D. The Clinical Pharmacogenetics Implementation Consortium (CPIC) guideline for *SLCO1B1*, *ABCG2*, and *CYP2C9* and statin-associated musculoskeletal symptoms. *Clinical Pharmacology and Therapeutics*. 2021. PMID: 35152405; 111(5): 1007-21 PMCID: PMC9035072. Roles: Analysis, Writing, Critical Review
- Lee CR, Luzum JA, Sangkuhl K, Gammal RS, Sabatine MS, Stein CM, Kisor DF, Limdi NA, Lee YM, Scott SA, Hulot JS, Roden DM, Gaedigk A, Caudle KE, Klein TE, Johnson JA, *Shuldiner AR. Clinical Pharmacogenetics Implementation Consortium Guideline for *CYP2C19* Genotype and Clopidogrel Therapy: 2022 Update. *Clinical Pharmacology and Therapeutics.* 2022;112(5):959-967. PMID: 35034351. PMCID: PMC9287492. Roles: Analysis, Writing, Critical Review
- Linskey DA, Linskey DC, McLeod HL, and *Luzum JA. The need to shift pharmacogenetic research from candidate gene to genome-wide association studies. *Pharmacogenomics*. 2021; 22(17):1143-1150. PMID: 34608812. PMCID: PMC8738979 Roles: Conceptualization, Design, Writing, Critical Review and Corresponding Author
- 20.*Luzum JA, Edokobi O, Dorsch MP, Peterson E, Liu B, Gui H, Williams LK, and Lanfear DE. Survival Association of Angiotensin Inhibitors in Heart Failure with Reduced Ejection

Fraction: Comparisons Using Self-Identified Race and Genomic Ancestry. *Journal of Cardiac Failure*. 2021. S1071-9164(21)00338-9. PMID: 34425222. PMCID: PMC9199310. Roles: Conceptualization, Design, Analysis, Writing, Critical Review and Corresponding Author

- 21.*Luzum JA, Petry N, Taylor AK, Van Driest SL, Dunnenberger HM, and Cavallari LH. Moving Pharmacogenetics into Practice: It's All About the Evidence! *Clinical Pharmacology* & *Therapeutics*. 2021;110(3):649-661. PMID: 34101169. PMCID: PMC8376790. Roles: Writing, Critical Review, and Corresponding Author
- Shugg TS, Pasternak AL, *Luzum JA. Comparison of Clinical Pharmacogenetic Recommendations Across Therapeutic Areas. *Pharmacogenetics and Genomics.* 2021 ;32(2):51-59. PMID: 34412102. PMCID: PMC8702450. Roles: Conceptualization, Design, Analysis, Writing, Critical Review and Corresponding Author
- 23. Campos-Staffico AM, Cordwin D, Murthy VL, Dorsch MP, *Luzum JA. Comparative Performance of the Two Pooled Cohort Equations for Predicting Atherosclerotic Cardiovascular Disease. *Atherosclerosis.* 2021. 334:23-29. PMID: 34461391. PMCID: PMC8527545. Roles: Design, Writing, Critical Review and Corresponding Author
- 24. Chen W, Ochs-Balcom HM, Ma C, Isackson PJ, Vladutiu GD, *Luzum JA. Evaluating Coenzyme Q10 Therapy in Patients Experiencing Statin Associated Muscle Symptoms. *Future Cardiology.* 2022; 8(6):461-470. PMID: 35297269. PMCID: PMC9171566. Roles: Conceptualization, Design, Analysis, Writing, Critical Review and Corresponding Author
- 25. *Patel JN, Jiang C, Owzar K, Mulkey F, Luzum JA, Mamon HJ, Swanson RS, Haller DG, Dragovich T, Alberts SR, Bjarnason G, Willet CG, Niedzwiecki D, Enzinger P, Ratain MJ, Fuchs C, McLeod HL. Pharmacogenetic Study in Gastric Cancer Patients Treated with Adjuvant Fluorouracil/Leucovorin or Epirubicin/Cisplatin/Fluorouracil Before and After Chemoradiation on CALGB 80101 (Alliance). *Pharmacogenetics and Genomics*. 2021;31(9):215-220. PMID: 34149004. PMCID: PMC8490297. Roles: Analysis, Critical Review
- 26.*Lanfear DE and Luzum JA. BNP and Precision Medicine: Tip of an Iceberg. *JACC: Basic to Translational Science*. 2021. 6(6):505-506. PMID: 34222721. PMCID: PMC8246027. Roles: Writing and Critical Review
- 27. Campos-Staffico AM, Cordwin D, Ding Y, Lester CA, Brook RD, Luzum JA, and *Dorsch MP. Fewer Patients Receive Recommendations for Primary Prevention Using the 2018 Atherosclerotic Cardiovascular Disease Risk Estimator. *Preventive Medicine*. 2021;148:106555. PMID: 33862035 Roles: Design, Writing, Critical Review
- 28. Gui H, She R, Luzum JA, Li J, Bryson TD, Pinto Y, Sabbah HN, Williams LK, *Lanfear DE. Plasma Proteomic Profile Predicts Survival in Heart Failure with Reduced Ejection Fraction. 2020. *Circulation: Genomics and Precision Medicine*. 2021;14(3):e003140. PMID: 33999650. Roles: Critical Review

- Lopez Medina AI, Campos Staffico AM, and *Luzum JA. QT Prolongation with Hydroxychloroquine and Azithromycin for the treatment of COVID-19: The Need for Pharmacogenetic Insights. *Journal of Cardiovascular Electrophysiology*. 2020; 31(10):2793-2794. PMID: 32870576 Roles: Conceptualization, Writing, Critical Review and Corresponding Author
- 30. Takahashi T, **Luzum JA**, Nicol MR, *Jacobson PA. Pharmacogenomics of COVID-19 Therapies. *NPJ Genomic Medicine.* 2020; 5:35. PMID: 32864162. Roles: Conceptualization, Design, Writing, Critical Review
- 31.*Lanfear DE, Luzum JA, She R, Gui H, Donahue MP, O'Connor CM, Adams KF, Sandersvan Wijk S, Zeld N, Maeder MT, Sabbah HN, Kraus WE, Brunner-La Rocca HP, Li J, Williams LK. Polygenic Score for Beta-Blocker Survival Benefit in European Ancestry Patients with Reduced Ejection Fraction Heart Failure. *Circulation: Heart Failure*. 2020; 3(12):e007012. PMID: 33012170. Roles: Design, Writing, Critical Review
- 32. Shugg T, Pasternak AL, London B, *Luzum JA. Prevalence and Types of Inconsistencies in Clinical Pharmacogenetic Recommendation Among Major U.S. Sources. NPJ Genomic Medicine. 2020; 5(1):48. PMID: 33145028; PMCID: PMC7603298 Roles: Conceptualization, Design, Analysis, Writing, Critical Review, and Corresponding Author
- 33. Linskey DW, English JD, Perry DA, Ochs-Balcom HM, Ma C, Isackson PJ, Vladutiu GD,
 *Luzum JA. Association of *SLCO1B1* T521C (rs4149056) with Discontinuation of Atorvastatin Due to Muscle Adverse Drug Reactions. *Pharmacogenetics and Genomics*. 2020; 30(9):208-211. PMID: 32453264 Roles: Conceptualization, Design, Analysis, Writing, Critical Review and Corresponding Author
- 34.*Luzum JA, Ting C, Peterson E, Gui H, Shugg T, Li L, Sadee W, Wang D, and Lanfear DE. Association of Cardiac-Specific Regulatory Genetic Variants for Protein Kinase C α with Mortality in Patients with Heart Failure. *Cardiovascular Drugs and Therapy.* 2019;33(6):693-700. [PMID: 31728800] Roles: Design, Writing, Critical Review
- 35.*Luzum JA, English JD, Ahmad U, Sun JW, Canan BD, Sadee W, Kitzmiller JP, and Binkley PF. Association of Genetic Polymorphisms in the Beta-1 Adrenergic Receptor with Recovery of Left Ventricular Ejection Fraction in Patients with Heart Failure. *Journal of Cardiovascular Translational Research*. 2019. 12(4):280-289. [PMID: 30756358 and PMCID: PMC6690812] Roles: Design, Analysis, Writing, Critical Review
- 36. Ochs-Balcom HM, Minh L, Ma C, Isackson PJ, Luzum JA, Kitzmiller JP, Tarnopolsky M, Weisman M, Christopher-Stine L, Peltier W, and *Vladutiu GD. Clinical Features Related to Statin-Associated Muscle Symptoms. *Muscle and Nerve*. 2019;59(5):537-543 [PMID: 30549046] Roles: Design, Analysis, Writing, Critical Review
- 37.*Luzum JA and Cheung JC. Does cardiology hold pharmacogenetics to an inconsistent standard? A comparison of evidence among recommendations. *Pharmacogenomics*.

2018;19(15):1203-1216. [PMID: 30196751] Roles: Conceptualization, Design, Writing, Critical Review and Corresponding Author

- 38. Luzum JA, Peterson E, Li J, She R, Pinto YM, Williams LK, Sabbah HN, and *Lanfear DE. Race and beta-blocker survival benefit in patients with heart failure: an investigation of selfreported African American race and African genetic ancestry. *Journal of the American Heart Association*. 2018; 7(10). pii: e007956. [PMID: 29739794] Roles: Design, Analysis, Writing, Critical Review
- 39. Allyn-Feuer A, Ade A, **Luzum JA**, Higgins GA, and *Athey BD. The Pharmacoepigenomics Informatics Pipeline (PIP) Defines a Pathway of Novel and Known Warfarin Pharmacogenomics Variants. *Pharmacogenomics*. 2018; 19(5):413-434. [PMID: 29400612] Roles: Design and Critical Review
- 40. Pasternak AL, Ward KM, **Luzum JA**, Ellingrod V, and *Hertz DL. Germline genetic variants with implications for disease risk and therapeutic outcomes. *Physiologic Genomics*. 2017; 49(10):567-581 [PMID: 28887371] Roles: Analysis, Writing, Critical Review
- 41.*Hertz DL, **Luzum JA**, Pasternak AL, Ward KM, Zhu H, Rae JM, and Ellingrod VL. Institutional Profile of Pharmacogenetics within University of Michigan College of Pharmacy. *Pharmacogenomics*. 2017 Jul 26. doi: 10.2217/pgs-2017-0107. [PMID: 28745551] [Epub ahead of print] Roles: Writing
- 42. Mukherjee C, Sweet KM, Luzum JA, Abdel-Rasoul M, and *Kitzmiller JP. Clinical pharmacogenomics: patient perspectives of pharmacogenomic testing and the incidence of actionable test results in a chronic disease cohort. *Personalized Medicine*. 2017;14(5):383-388. [PMID: 29181084] Roles: Conceptualization, Design, Analysis, Critical Review
- 43. Luzum JA, Pakyz RE, Elsey AR, Haidar CE, Peterson JF, Whirl-Carrillo M, Handelman SK, Palmer K, Schildcrout JS, Pulley JM, Beller M, Field JR, Weitzel KW, Cooper-DeHoff RM, Cavallari LH, O'Donnell PH, Pereira N, Ratain MJ, Roden DM, Embi PJ, Sadee W, Klein TE, Johnson JA, Relling MV, Wang L, Weinshilboum RM, Shuldiner AR, *Freimuth RR, for the Pharmacogenomics Research Network Translational Pharmacogenetics Program. The Pharmacogenomics Research Network Translational Pharmacogenetics Program: Outcomes and Metrics of Pharmacogenetic Implementations Across Diverse Healthcare Systems. *Clinical Pharmacology & Therapeutics*. 2017;102(3):502-510 [PMID: 28090649; PMCID: PMC5511786] Roles: Design, Analysis, Writing, Critical Review
- 44.*Luzum JA, Sweet K, Binkley PF, Sadee W, and Kitzmiller JP. CYP2D6 Genetic Variation and Beta-Blocker Maintenance Dose in Patients with Heart Failure. *Pharmaceutical Research.* 2017;34(8):1615-1625. [PMID: 28181117; PMCID: PMC5500390] Roles: Conceptualization, Design, Analysis, Writing, Critical Review and Corresponding Author
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- 57. **Talameh JA**, McLeod H, Adams KF, and *Patterson JH. Genetic Tailoring of Pharmacotherapy in Heart Failure: Optimize the old, while we wait for something new. *Journal of Cardiac Failure*. 2012;18(4):338-49. [PMID: 22464776] Roles: Conceptualization, Design, Analysis, Writing, and Critical Review
- 58.*Talameh JA, Misher A, Hoskins J. A capillary electrophoresis method for genotyping the 9 bp exon 1 insertion/deletion in *BDKRB2*. *Pharmacogenomics*. 2012;13(3):353-8. [PMID: 22304584] Roles: Conceptualization, Design, Analysis, Writing, Critical Review and Corresponding Author
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- 60. **Talameh JA**, *McLeod H. *PON1* Q192R and Clopidogrel: A case of the winner's curse or inadequate replication? *Clinical Pharmacology & Therapeutics.* 2011;90(6):771-4. [PMID: 22089342] Roles: Design, Analysis, Writing, and Critical Review
- 61.***Talameh JA**, Rezk NL, Kashuba AD. Quantifying the HIV-1 integrase inhibitor raltegravir in female genital tract secretions using high-performance liquid chromatography with ultraviolet detection. *Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences*. 2010;878(1):92-6. [PMID: 19942487] Roles: Analysis and Writing
- 62.*Gibbs RB, Edwards D, Lazar N, Nelson D, and Talameh J. Effects of long-term hormone treatment and of tibolone on monoamines and monoamine metabolites in the brains of ovariectomised, cynomologous monkeys. *Journal of Neuroendocrinology*. 2006;18(9):643-654. [PMID: 16879163] Roles: Analysis

Book Chapters

- Ray SD, Luzum JA, Gray JP, and Stohs SJ. "Focus on pharmacogenomics, phytonutrientdrug interactions and COVID-19 vaccines: Perspectives on ADRs, ADEs, and SEDs." *Side Effects of Drugs Annual*. Edited by Sidhartha D. Ray, Elsevier, Volume 44, 2022, Pages xxv-lii. <u>https://www.sciencedirect.com/science/article/pii/S0378608022000484</u>
- Ray SD, Luzum JA, Gray JP, and Stohs SJ. "Focus on pharmacogenomics, phytonutrientdrug interactions and COVID-19 vaccines: Perspectives on ADRs, ADEs, and SEDs." *Side Effects of Drugs Annual*. Edited by Sidhartha D. Ray, Elsevier, Volume 43, 2021, Pages xxv-lii. <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8565918/</u>

Published Abstracts

- Lopez Medina AI, Campos-Staffico AM, Chahal AAC, Saeed M, Berenfeld O, Luzum JA. Genetic Risk Factors for Drug-Induced Long QT Syndrome: Findings from a Large Real-World Cohort. *Circulation*. 2023. [submitted June 2023]. Roles: Conceptualization, Design, Writing, Critical Review.
- Lanfear DE, She R, Gardell S, Luzum JA, Williams LK, and Sabbah HN. Association of Plasma Metabolites and Cardiac Mitochondrial Function with Heart Failure Progression. *Journal of the American College of Cardiology*. 2023 Mar, 81 (8_Supplement) 435. Roles: Critical Review.
- Campos-Staffico AM, Dorsch MP, Barnes G, and Luzum JA. Nonspecific Tools Performed Better in Discriminating Major Bleeding From Direct Oral Anticoagulants Than Specific Tools in a Real-World Population With Atrial Fibrillation. *Circulation*. 2022; 146 (Supp_1):A14037. Roles: Critical Review
- Campos-Staffico AM, Dorsch MP, Barnes G, Zhu H, Limdi N, and Luzum JA. Eight Pharmacokinetic-Related Genetic Variants Were Not Associated With Bleeding From Direct Oral Anticoagulants in Non-Valvular Atrial Fibrillation Patients. *Circulation.* 2022;146(Supp_1):A14063. Roles: Conceptualization, Design, Critical Review.
- Lanfear DE, Luzum J, She R, Li J, Liu B, Peterson E, Williams LK. Validation Of Polygenic Score For Beta-Blocker Survival Benefit In Heart Failure Using The United Kingdom Biobank. *Journal of the American College of Cardiology*. 2022; 79(9 Supplement): 228. Roles: Critical Review
- Lanfear DE, Gui H, Hannawi B, Connolly T, Li J, She R, Pereira N, Adams K, Hernandez A, Luzum J, Francke S, Tang WH, Williams LK. Pharmacogenomic Analyses In Ascend-Hf Indicate Influence Of Npr3on Nesiritide Blood Pressure Effect. *Journal of the American College of Cardiology*. 2021; 77(18_Supplement_1): 840. Roles: Critical Review
- 7. Luzum JA, Peterson E, Li J, She R, Gui H, Liu B, Williams LK, Sabbah HN, and Lanfear DE. Comparison of Survival Benefit from Angiotensin Inhibitors in Patients with Heart

Failure and Reduced Ejection Fraction by Race and Genomic Ancestry. *Circulation*. 2020;142:A15985.

- Michaels AT, Peterson E, Luzum JA, Gui H, Pinto Y, Sabbah HN, Williams LK, Snider J, Lanfear DE. Biomarker Guided Therapy For Heart Failure With Mid-Range EF. *Journal of Cardiac Failure*. 2020; 26(10 Supplement): s37. Roles: Critical Review
- 9. Campos-Staffico A, Cordwin D, Ding Y, Lester C, Brook R, **Luzum JA**, and Dorsch MP. Fewer patients receive recommendations for primary drug prevention using the 2018 atherosclerotic cardiovascular disease risk estimator. *Journal of the American College of Clinical Pharmacy*. 2020; 3(8): 1540. Roles: Critical Review
- 10. Debbs J, Bryson TD, Zeld N, Aurora L, Gui H, Luzum JA, Peterson E, She R, Williams LK, and Lanfear DE. Somalogic ST2 and NT Pro-BNP assays predict heart failure mortality as effectively as the ELISA assay. *Journal of the American College of Cardiology*. 2020; 75 (11); Supplement 1: 1091. Roles: Critical Review
- 11. Bryson T, Debbs JC, She R, Gui H, Luzum JA, Zeld N, Brawner CA, Keteyian SJ, Ehrman JK, Williams LK, and Lanfear DE. A single nucleotide polymorphism within the RXRA gene predicts a favorable response to exercise in heart failure. *Journal of the American College of Cardiology*. 2020; 75 (11): Supplement 1: 1012. Roles: Critical Review
- 12. Shugg T and Luzum JA. Discrepancies in Clinical Guidance to Manage Drug-Gene Interactions: Analysis of Recommendations From Prominent U.S. Guidance Sources. *Journal of the American College of Clinical Pharmacy.* February 3, 2020. 3(1): 288. Roles: Conceptualization, Design, Analysis, Writing, Critical Review
- 13. Mahoney RC, Kitzmiller JP, Ochs-Balcom HM, Isackson PJ, Ma C, Vladutiu GD, and Luzum JA. Machine Learning to Discover Novel Drug-Drug Interactions Associated With Statin Associated Muscle Symptoms. *Journal of the American Pharmacists Association*. July-August 2019; 59: e248. Roles: Conceptualization, Design, Analysis, Writing, Critical Review
- 14. Luzum JA, Musani SK, Mwasongwe SE, Peterson EL, and Lanfear DE. Addressing Racial Disparity in Heart Failure Outcomes and Beta-Blocker Response. *American Journal of Pharmaceutical Education*. June 2019. 83 (5); 7654. Roles: Conceptualization, Design, Analysis, Writing, Critical Review
- 15. Shugg T, Li J, She R, Gui H, Sabbah HN, Williams LK, **Luzum JA**, and Lanfear DE. Genome-Wide Association Study of Mortality Benefit from Beta-Blockers in Patients With Heart Failure With Reduced Ejection Fraction. *Journal of the American College of Cardiology*. March 12, 2019. 73 (9 Supplement 1): 1005. Roles: Writing, Critical Review
- 16. Luzum JA, Ting C, Peterson E, Gui H, Li L, Sadee W, Wang D, and Lanfear DE. A Cardiac-Specific Regulatory Genetic Variant for Protein Kinase C α is Significantly Associated with Mortality in Patients with Heart Failure. *Journal of Cardiac Failure*. August 2018. 24 (8); S2. Roles: Conceptualization, Design, Writing, Critical Review

- 17. Talameh J, Garrand A, Ghali JK, Oren R, Dunlap SH, Van Bakel AB, Piña IL, Patterson JH, Sueta CA, McGrew F, Miller A, Schwartz TA, and Adams Jr KF. Beta-1 Adrenergic Receptor Genotype Ser49Gly Is Associated with Beta-Blocker Survival Benefit in Patients with Heart Failure. *Journal of the American College of Cardiology*. 2012;59(13 Suppl):E861. Roles: Analysis, Writing, and Critical Review
- **18.** McNeely, EB, Hull, JH, Adams, KF, **Talameh, J**, Simmons, B, Henry, J, Brouwer, KLR, and Patterson, JH. Comparison of the relative oral bioavailability of tolvaptan administered via nasogastric tube to tolvaptan tablets swallowed intact. *Pharmacotherapy*. 2012;32(5):E114. Roles: Design, Analysis, Writing, and Critical Review

Acknowledgements

American Society of Health System Pharmacist (ASHP) Statement on the Pharmacist's Role in Clinical Pharmacogenomics. 2021. (Reviewer). <u>https://www.ashp.org/-/media/assets/house-delegates/docs/statement-pharmacist-role-pharmacogenomics.ashx</u>

RESEARCH AWARDS

•	Leon I. Goldberg Early Investigator Award	2023
	 Established by the American Society for Clinical Pharmacology and Therapeutics (ASCPT) in 1986 to honor a young scientist for accomplishments in the field of clinical pharmacology achieved early in his/her career. 	
•	McGlone Research Award for Excellence in PharmD Research	2023
	 For student Tk Nguyen for her project "Factors Associated with Recovery in Anthracycline-Induced Cardiomyopathy" 	
	 Given annually by the University of Michigan College of Pharmacy to graduating PharmD student for excellence in research. 	
•	Fellow of the American Heart Association (FAHA)	2021
	 Election as a Fellow of the American Heart Association recognizes scientific and professional accomplishments, volunteer leadership and service. 	
• at	Pharmacogenomics Global Research Network (PGRN) Top Trainee Poster Award the PGRN Fall 2021 Annual Meeting for post-doc Alessandra Campos Staffico	2021
•	 Fellow of the Heart Failure Society of America (HFSA) Fellowship is one of the most distinguished designations the HFSA can offer its members, and is a tremendous recognition of professional achievement and contributions to the society. The designation is based on outstanding credentials, achievements, and contributions to heart failure medicine. 	2021

 National Institute for Minority Health and Health Disparities (NIMHD) Research Institute (HDRI) Scholar 	2021
 The HDRI aims to support the research career development of promising early-career minority health/health disparities research scientists and stimulate research in the disciplines supported by health disparities science. 	
• My PharmD student's (Derek Linksey) poster was awarded an Honorable Award	2020
at the Pharmacogenomics Research Network Meeting	
My post-doc Tyler Shugg's abstract was selected for a travel award and	2019
continuing education at the American College of Clinical Pharmacy (ACCP)	
Annual Meeting	0040
Rising Star Award from the University of Pittsburgh School of Pharmacy	2019
 Recognizes alumni of the University of Pittsburgh School of Bhormoou that are making great achievements while still 	
Pharmacy that are making great achievements while still early in their careers.	
 Finalist for the Jay N. Cohn New Investigator Award 	2018
from the Heart Failure Society of America (HFSA)	2010
 Pharmacist Travel Award from the Heart Failure Society of America (HFSA) 	2018
NIH Loan Repayment Program Ambassador Spotlight (May)	2018
 Pharmacogenomics Research Network Monthly Featured Investigator (August) 	2017
• 3 rd Place Post-Doctoral Research Poster at the Ohio State University	2013
Davis Heart and Lung Research Institute Poster Competition	
Impact Award – UNC-Chapel Hill	2013
 Recognizes graduate students whose research directly contributes to the 	
educational, economic, physical, social or cultural well-being of North Ca	rolina
citizens in the near future	
 Boka W. Hadzija Award for Distinguished University Service – UNC-Chapel Hill 	2012
 Recognizes a graduate or professional student with outstanding characte 	
scholarship, leadership, and service to the University. Only one student p receives this award	er year
 Kathryne A. Brewington Graduate Student Research Award 	2011
 Given annually to the most outstanding doctoral student in the Pharmace 	
Sciences PhD program at the University of North Carolina Eshelman Sch Pharmacy	

RESEARCH PRESENTATIONS

Podium (presenting author underlined)

- <u>Shugg T</u> and Luzum JA. Discrepancies in Clinical Guidance to Manage Drug-Gene Interactions: Analysis of Recommendations From Prominent U.S. Guidance Sources. *American College of Clinical Pharmacy Annual Meeting.* New York, NY. October 22-26, 2019
- Perry DA, Kitzmiller JP, Ochs-Balcom HM, Isackson PJ, Ma C, Vladutiu GD, and Luzum JA. Atorvastatin may be Associated with a Lower Risk of Discontinuation due to Muscle Pain and/or Weakness Compared with Other Statins. University of Michigan Health System Department of Internal Medicine Research Symposium. Ann Arbor, MI May 10, 2019.
- 3. <u>Mahoney RC</u>, Kitzmiller JP, Ochs-Balcom HM, Isackson PJ, Ma C, Vladutiu GD, and **Luzum JA**. Machine Learning to Discover Novel Drug-Drug Interactions Associated With Statin Associated Muscle Symptoms. *American Pharmacists Association Annual Meeting*. Seattle, WA March 22-25, 2019.
- Luzum JA, Ting C, Peterson E, Gui H, Li L, Sadee W, Wang D, and Lanfear DE. A Cardiac-Specific Regulatory Genetic Variant for Protein Kinase C α is Significantly Associated with Mortality in Patients with Heart Failure. *Heart Failure Society of America Annual Meeting*, Nashville, TN, September 17, 2018.
- <u>Talameh J</u>, Garrand A, Ghali JK, Oren R, Dunlap SH, Van Bakel AB, Piña IL, Patterson JH, Sueta CA, McGrew F, Miller A, Schwartz TA, and Adams Jr KF. Beta-1 Adrenergic Receptor Genotype Ser49Gly is Associated with Beta-Blocker Survival Benefit in Patients with Heart Failure. *American College of Cardiology Scientific Session*, Chicago, IL, Sunday, March 25, 2012.
- Jones A, Talameh J, Patterson K, Rezk N, Prince H, and Kashuba A. First-dose and steady-state pharmacokinetics of raltegravir in the genital tract of HIV uninfected women. 10th International Workshop on Clinical Pharmacology of HIV Therapy, Amsterdam, The Netherlands, April 15-17, 2009.

Posters

(presenting author underlined)

- Lopez Medina AI, Campos-Staffico AM, Chahal AAC, Saeed M, Berenfeld O, Luzum JA. Genetic Risk Factors for Drug-Induced Long QT Syndrome: Findings from a Large Real-World Cohort. *American Heart Association Scientific Sessions*. Philadelphia, PA. November 11-13, 2023. [submitted June 2023]
- 2. <u>Lanfear DE</u>, She R, Gardell S, **Luzum JA**, Williams LK, and Sabbah HN. Association of Plasma Metabolites and Cardiac Mitochondrial Function with Heart Failure Progression. *American College of Cardiology Scientific Sessions*. New Orleans, LA. March 4-6, 2023.
- 3. <u>Campos-Staffico AM</u>, Dorsch MP, Barnes GD, **Luzum JA**. Nonspecific Tools Performed Better In Discriminating Major Bleeding From Direct Oral Anticoagulants Than Specific

Tools in a Real-World Population With Atrial Fibrillation. *American Heart Association Scientific Sessions.* Chicago, IL. November 5-7, 2022.

- <u>Campos-Staffico AM</u>, Dorsch MP, Barnes GD, Zhu H, Limdi NA, Luzum JA. Eight Pharmacokinetic-related Genetic Variants Were Not Associated With Bleeding From Direct Oral Anticoagulants In Non-valvularAtrial Fibrillation Patients*American Heart Association Scientific Sessions*. Chicago, IL. November 5-7, 2022.
- Lanfear DE, Luzum JA, She R, Li J, Peterson E, Williams LK. Validation of a Polygenic Score for Predicting Beta-Blocker Survival Benefit in Patients with Heart Failure Using the United Kingdom Biobank. *American College of Cardiology Scientific Sessions*. Washington, DC. April 2, 2022.
- 6. <u>Campos-Staffico AM</u>, Hanigan S, Pogue K, Dorsch MP, and **Luzum JA**. *ABCB1* Diplotype Is Associated With Bleeding From Rivaroxaban. *American Society for Human Genetics and Pharmacogenomics Research Network Symposium*. (Virtual). October 18, 2021.
- Lanfear DE, Luzum JA, She R, Gui H, Sanders-van Wijk S, Zeld N, Maeder MT, Sabbah HN, Li J, Brunner-LaRocca HP, Williams LK. Polygenic Score for Beta-Blocker Survival Benefit in Heart Failure with Preserved Ejection Fraction Patients. *Heart Failure Society of America Annual Meeting.* Denver, CO. September 10-13, 2021.
- 8. <u>Lanfear DE</u>, Gui H, Hannawi B, Connolly T, Li J, She R, Pereira N, Adams KF, Hernandez AF, **Luzum JA**, Francke S, Tang WH, and Williams LK. Pharmacogenomic analyses in ASCEND-HF indicate influence of NPR3 genetics on nesiritide blood pressure effect. *American College of Cardiology Scientific Session*. Atlanta, GA. May 15-17, 2021.
- 9. <u>Chen W</u>, Ochs-Balcom HM, Vladutiu GD, and **Luzum JA**. Evaluating Coenzyme Q10 Therapy in Participants Experiencing Statin Associated Muscle Symptoms. *American Society for Health-System Pharmacists Midyear Meeting*. (Virtual). December 6-10, 2020.
- 10. <u>Luzum JA</u>, Peterson E, Li J, She R, Gui H, Liu B, Williams LK, Sabbah HN, and Lanfear DE. Comparison of Survival Benefit from Angiotensin Inhibitors in Patients with Heart Failure and Reduced Ejection Fraction by Race and Genomic Ancestry. *American Heart Association Scientific Sessions*. (Virtual). November 14-16, 2020
- 11. <u>Campos-Staffico AM</u>, Cordwin D, Ding Y, Lester CA, Brook RD, Luzum JA, Dorsch MP. Fewer Patients Receive Recommendations For Primary Drug Prevention Using The 2018 Atherosclerotic Cardiovascular Disease Risk Estimator. *American College of Clinical Pharmacy Annual Meeting*. (Virtual). October 19-30, 2020
- 12. <u>Linskey DW</u>, Linskey DC, and **Luzum JA**. How often do pharmacogenomic GWAS discover novel variants and genes versus confirm previously known candidates? Pharmacogenomics Research Network Annual Meeting. (Virtual) October 26, 2020.

- 13. <u>Michaels AT</u>, Peterson E, **Luzum JA**, Gui H, Pinto Y, Sabbah HN, Williams LK, Snider J, Lanfear DE. Biomarker Guided Therapy For Heart Failure With Mid-Range EF. *Heart Failure Society of America Annual Meeting.* (Virtual) September 30-October 6, 2020.
- 14. <u>Gui H</u>, Bryson TD, She R, Li J, Luzum JA, Gibbs J, Zeld N, Pinto Y, Bayes-Genis A, Sabbah HN, Williams LK, Lanfear DE. Genome-wide screening of genetic markers for prognostic human plasma miRNAs in heart failure patients. *Heart Failure Congress*. Barcelona, Spain. May 23-26, 2020.
- 15. <u>Debbs J</u>, Bryson TD, Zeld N, Aurora L, Gui H, Luzum JA, Peterson E, She R, and Lanfear DE. Somologic ST2 and NT pro-BNP Assays Predict Heart Failure Mortality as Effectively as the ELISA Assay. *American College of Cardiology Scientific Session*. Chicago, IL. March 28-30, 2020.
- 16. <u>Bryson TD</u>, Debbs J, She R, Luzum JA, Gui H, Zeld N, Keteyian S, Williams LK, Brawner C, Lanfear DE. A Single Nucleotide Polymorphism Within the *RXRA* Gene Predicts a Favorable Response to Exercise in Heart Failure. *American College of Cardiology Scientific Session*. Chicago, IL. March 28-30, 2020.
- 17. <u>Cook M</u>, Musani SK, Mwasongwe SE, and **Luzum JA**. The Relationship Between Beta Blocker Dose and the rs11196454 Genetic Variant and Survival in African American Patients with Heart Failure. *American Society of Health System Pharmacists Midyear Meeting*. Las Vegas, NV. December 8-12, 2019.
- 18. <u>Luzum JA</u>, Musani SK, Mwasongwe SE, Peterson EL, and Lanfear DE. Addressing Racial Disparity in Heart Failure Outcomes and Beta-Blocker Response. *American Association* of Colleges of Pharmacy Annual Pharmacy Education Meeting. Chicago, IL July 14, 2019
- 19. <u>Shugg T</u>, Li J, She R, Gui H, Sabbah HN, Williams LK, Luzum JA, and Lanfear DE. Genome-Wide Association Study of Mortality Benefit from Beta-Blockers in Patients With Heart Failure With Reduced Ejection Fraction. *American College of Cardiology Scientific Session*. New Orleans, LA March 16-18, 2018
- 20. <u>Perry DA</u>, Kitzmiller JP, Ochs-Balcom HM, Isackson PJ, Ma C, Vladutiu GD, and Luzum JA. Atorvastatin is Associated with the Lowest Risk of Discontinuation due to Muscle Pain or Weakness Compared with Other Statins. UM Frankel Cardiovascular Center Scientific Symposium. Ann Arbor, MI, June 7, 2018.
- 21. <u>Luzum JA</u>, Gui H, Peterson EL, Zeld N, Liu B, Sabbah HN, Williams LK, and Lanfear DE. Pharmacogenetic Score is Associated with Effectiveness of Angiotensin Converting Enzyme Inhibitors and Angiotensin Receptor Blockers in Patients with Heart Failure and Reduced Ejection Fraction. *American College of Cardiology Scientific Sessions*. Orlando, FL, March 10-12, 2017. [accepted but withdrawn]
- 22. <u>Luzum JA</u>, Mukherjee C, Sweet KM, Abdel-Rasoul M, and Kitzmiller JP. Pharmacogenetic Testing in Patients with Chronic Cardiovascular Disease:

Frequency of Actionable Test Results and Patient Perspectives. *University of Michigan Frankel Cardiovascular Center Scientific Symposium.* Ann Arbor, MI, June 9, 2017.

- Luzum JA and Luzum MJ. Improving Clinicians' Perception of the Clinical Utility of Pharmacogenetics: A Proof-of-Concept Study of Pharmacogenetic Education. *Pharmacogenomics Research Network (PGRN) Meeting.* State College, PA, April 28, 2015.
- 24. <u>Talameh JA</u>, Vladutiu GD, Isackson PJ, Sadee W, and Kitzmiller JP. Evaluation of Genetic Risk Scores for Predicting Statin-Induced Myopathy. *OSU Davis Heart and Lung Research Institute Research Day.* Columbus, OH, October 9, 2013.
- 25. <u>Hertz D.</u> Crona D, Brantley S, **Talameh J**, Theken K, Roode L, and Hull JH. Integration of Scientific Writing into an Applied Biostatistics and SAS Programming Course for Pharmaceutical Sciences Graduate Students. 20th Annual Southeast SAS Users Group Conference, Durham, NC, October 14-16, 2012.
- 26. <u>McNeely EB</u>, Hull JH, Adams Jr. KF, **Talameh JA**, Simmons B, Henry J, Brouwer KLR, and Patterson JH. Comparison of the relative oral bioavailability of tolvaptan administered via nasogastric tube to tolvaptan tablets swallowed intact. *American College of Clinical Pharmacy Virtual Poster Symposium*, May 22-24, 2012.
- 27. <u>Talameh J</u>, Patterson JH, McLeod H, Hoskins J, Schwartz T, and Adams KF. Association of genetic polymorphisms in the sympathetic adrenergic and renin-angiotensinaldosterone systems with clinical outcome in heart failure patients. *Globalization of Pharmaceutical Education Network Biennial Meeting,* Chapel Hill, NC, November 10-12, 2010.
- 28. <u>Talameh J</u>, Paine M, Pollack G. A physiologically based pharmacokinetic model of the *ABCB1* 3435T>C polymorphism and digoxin in patients with heart failure. *Personalized Medicine in the 21st Century Symposium*, Durham, NC, June 15, 2010.
- 29. <u>Talameh J</u>, Reynolds M, Kirisci L, Tarter, R. Childhood stress contributes to the liability to develop substance use disorder in adulthood. *17th Annual Society for Prevention Research Meeting*, Washington, DC, May 26-29, 2009.
- 30. <u>Talameh J.</u> Gibbs R. Effects of estrogen replacement on the number of cholinergic neurons expressing pMEK in the basal forebrain. *American Association of Pharmaceutical Scientists U. Michigan- U. Pittsburgh Pharmaceutics Exchange-* Ann Arbor, MI, April 2005.
- 31. <u>Talameh J.</u> Gibbs R. Effects of estrogen replacement on the number of cholinergic neurons expressing pMEK in the basal forebrain. *26th Annual Pharmacy Student Research Conference* Eastern States- Morgantown, WV, October 2004.

Seminars

- 1. "*Race-Based Medicine: Where does it come from and what is the danger?*" at the American Society for Clinical Pharmacology and Therapeutics (ASCPT) Annual Meeting, Atlanta, GA, March 23, 2023.
- 2. *"Polygenic Risk Scores in Pharmacogenetics"* at the Precision Medicine Leaders Summit: Updates in Precision Medicine and Pharmacogenomics, Orlando, FL, March 2, 2023.
- 3. "*Race-Based Medicine: Where does it come from and what is the danger*?" at the American College of Clinical Pharmacy Global Conference on Clinical Pharmacy, San Franciso, CA, October 18, 2022.
- 4. "*Cardiovascular Pharmacogenetics for Healthcare Providers*" at National Human Genomic Research Institute (NHGRI) Healthcare Provider Genomics Education Week, (virtual), June 7, 2022.
- 5. "Debate: Are Polygenic Risk Scores Ready for Clinical Implementation?" at the Clinical Pharmacogenetics Implementation Consortium & Pharmacogenomics Global Research Network (CPIC-PGRN) Meeting, Aurora, CO, May 10, 2022.
- 6. "Application of Genetic Risk Scores in Research: Beta-Blocker Survival Benefit in Heart Failure with Reduced Ejection Fraction" at the American Society for Clinical Pharmacology and Therapeutics (ASCPT) Network and Community Experience meeting, (virtual), January 11, 2022.
- 7. "Identifying effective interventions for heart failure patients not benefitting from betablockers: a mechanistic clinical trial of a polygenic risk score" at Michigan Medicine Heart Failure Research Conference, Ann Arbor, MI, October 28, 2021.
- 8. "*Cardiovascular Pharmacogenetics for Healthcare Providers*" at Clinical Pharmacy Translational Science Seminar at the University of Michigan College of Pharmacy, Ann Arbor, MI, October 4, 2021.
- 9. "*Cardiovascular Pharmacogenetics for Healthcare Providers*" at NHGRI Healthcare Provider Genomics Education Week, (virtual), June 8, 2021.
- 10."*Race-Based Drug Recommendations in Cardiology: Hypertension Vs Heart Failure*" at the Race in Healthcare Seminar Series at the UM College of Pharmacy, (virtual), April 15, 2021.
- 11."*Race-Based Drug Recommendations in Cardiology: Hypertension Vs Heart Failure*" at NEOMED College of Pharmacy, (virtual), April 9, 2021.
- 12. "*Pharmacogenomics*" at the Great Lakes Pharmacy Conference (panelist), March 20, 2021 (virtual)

- 13. "Levels of Evidence for the Clinical Implementation of Pharmacogenomics: An Academic Perspective" at the American Society of Clinical Pharmacology & Therapeutics (ASCPT) Annual Meeting, (virtual), March 12, 2021.
- 14. "*Pharmacogenetics in Cardiology Clinical Practice Guidelines*" at the American Medical Association (AMA) and American Society of Health-System Pharmacists (ASHP) Virtual Pharmacogenomics Summit, (virtual), March 5, 2021.
- 15. "*Race-Based Drug Recommendations in Cardiology: Hypertension Vs Heart Failure*" at the University of Florida Precision Health Seminar Series, (virtual), February 26, 2021.
- 16. "*Race-Based Drug Recommendations in Cardiology*" at the Morgan State University Interdisciplinary Seminar Series, (virtual), October 29, 2020.
- 17. "Does Genetic Variation Affect Heart Failure Patients' Responses to Beta-Blockers?" at the University of Michigan College of Pharmacy Clinical Pharmacy and Translational Science Seminar Series, Ann Arbor, MI, September 16, 2019.
- 18. "Does Genetic Variation Affect Heart Failure Patients' Responses to Beta-Blockers?" at the University of Colorado Skaggs School of Pharmacy, Aurora, CO, August 5, 2019.
- 19. "*An Introduction to Cardiovascular Pharmacogenetics*" at the Michigan Medicine Heart Failure Conference, Ann Arbor, MI, July 19, 2018.
- 20. "Perspectives on Developing a Successful New Investigator Award Application" (panelist), organized by the American Association of Colleges of Pharmacy (AACP), on July 12, 2018 (virtual)
- 21. "*Treatment of Chemotherapy-Induced Cardiotoxicity: Are Beta-Blockers Effective for All?*" at the Michigan Medicine Hematology/Oncology Research Conference, Ann Arbor, MI, May 10, 2018.
- 22. "*An Update on Cardiovascular Pharmacogenetics*" at the Michigan Medicine Heart Failure Conference, Ann Arbor, MI, July 13, 2017.
- 23. "Discovery of Effective Pharmacotherapy for Heart Failure with Preserved Ejection *Fraction*" at the University of Michigan Department of Computational Medicine and Bioinformatics, Ann Arbor, MI, August 31, 2016.
- 24. "A Journey Across the Translational Research Spectrum: Beta-Blocker Pharmacogenetics in Heart Failure" at the University of Michigan College of Pharmacy, Ann Arbor, MI, January 28, 2016.
- 25. "A Journey Across the Translational Research Spectrum: Beta-Blocker Pharmacogenetics in Heart Failure" at the University of Minnesota College of Pharmacy, Minneapolis, MN, December 15, 2015.

- 26. "A Journey Across the Translational Research Spectrum: Beta-Blocker Pharmacogenetics in Heart Failure" at the Cleveland Clinic Genomic Medicine Institute, Cleveland, OH, December 7, 2015.
- 27. "A Journey Across the Translational Research Spectrum: Beta-Blocker Pharmacogenetics in Heart Failure" at the University of Michigan School of Medicine, Ann Arbor, MI, November 13, 2015.
- 28. "A Journey Across the Translational Research Spectrum: Beta-Blocker Pharmacogenetics in Heart Failure" at the University of Illinois at Chicago College of Pharmacy, Chicago, IL, November 5, 2015.
- 29. "Toward the Clinical Implementation of Pharmacogenetics: Beta-Blocker Pharmacogenetics in Heart Failure as an Example" at the University of California at San Diego Skaggs School of Pharmacy and Pharmaceutical Sciences, San Diego, CA, October 9, 2015.
- 30. "A Journey Across the Translational Research Spectrum: Beta-Blocker Pharmacogenetics in Heart Failure" at Wayne State University College of Pharmacy & Health Sciences, Detroit, MI, August 4, 2015.
- 31. *"The Gnome Pharmacogenomics Panel: Potential Benefits for Residents of Long-Term Care Facilities"* at Omnicare, Cincinnati, OH, June 9, 2015.
- 32. "*Research training in the Pharmaceutical Sciences: Let your interests guide you to success*" at the University of Minnesota College of Pharmacy, Minneapolis, MN, May 13, 2015.
- 33. "A Journey Across the Translational Research Spectrum: Beta-Blocker Pharmacogenetics in Heart Failure" at Cincinnati Children's Hospital, Cincinnati, OH, April 8, 2015.
- 34. "*Cardiovascular Pharmacogenetics*" at the Cardiology Grand Rounds, Ohio State University Wexner Medical Center, Columbus, OH, March 27, 2015.
- 35. "*Beta-Blocker Pharmacogenetics in Heart Failure*" at the Department of Molecular and Cellular Biochemistry Seminar, Ohio State University, Columbus, OH, October 30, 2014.
- 36. "Genetic and Pharmacogenetic Associations with Heart Failure Patient Survival" at the Eshelman School of Pharmacy, University of North Carolina, Chapel Hill, NC December 13, 2012.
- 37. "Beta-1 Adrenergic Receptor Genotype Ser49Gly Is Associated with Beta-Blocker Survival Benefit in Patients with Heart Failure" at the Eshelman School of Pharmacy Graduate Program Retreat, University of North Carolina, Chapel Hill, NC August 20, 2012.

- 38. *"Pharmacogenetics and Heart Failure Patient Survival"* at the Aab Cardiovascular Research Institute, University of Rochester, Rochester, NY, January 30, 2012.
- 39. "Pharmacogenetics and Heart Failure Patient Survival" at the Division of Clinical Pharmacology, Indiana University School of Medicine, Indianapolis, IN, November 14, 2011.
- 40. "Genetic and Pharmacogenetic Associations with Heart Failure Patient Survival" at Division of Pharmacotherapy and Experimental Therapeutics Seminar, UNC Eshelman School of Pharmacy, Chapel Hill, NC, October 18, 2011.
- 41. *"Genetic and Pharmacogenetic Associations with Heart Failure Patient Survival"* at Heart Failure Management: Established Therapy and New Frontiers 2011, Amelia Island, FL, July 23, 2011.
- 42. *"Genetic and Pharmacogenetic Associations with Heart Failure Patient Survival"* Division of Pharmacotherapy and Experimental Therapeutics Seminar and Preliminary Oral Defense, UNC Eshelman School of Pharmacy, Chapel Hill, NC, November 23, 2010.
- 43. "Genetic and Pharmacogenetic Associations in Patients with Heart Failure" at Heart Failure Management: Established Therapy and New Frontiers 2010, Amelia Island, FL, July 17, 2010.
- 44. "Genetic and Pharmacogenetic Associations in Patients with Heart Failure" at Pharmaceutical Sciences Graduate Program Retreat 2010, UNC Eshelman School of Pharmacy, Chapel Hill, NC, May 25, 2010.
- 45. "Association of genetic polymorphisms in the sympathetic adrenergic system (SAS) and renin-angiotensin-aldosterone system (RAAS) with mortality in patients with heart failure (*HF*)" Division of Pharmacotherapy and Experimental Therapeutics Seminar, UNC Eshelman School of Pharmacy, Chapel Hill, NC, March 2, 2010.
- 46. *"First-dose and steady-state pharmacokinetics of raltegravir in the genital tract of HIV negative women."* Division of Pharmacotherapy and Experimental Therapeutics Seminar, UNC Eshelman School of Pharmacy, Chapel Hill, NC, March 3, 2009.

Moderator

- 1. "*The Role of Omics in Vaccine Development: Implications for Cardiovascular Health*" at the American Heart Association Scientific Sessions. (Invited). Chicago, IL, November 7, 2022.
- 2. "BEST IN SCIENCE: When AI meets Cardiovascular Genomics" at the American Heart Association Scientific Sessions. (Invited). Chicago, IL, November 7, 2022.

3. "Integrated Omics in Heart Failure: Precision Medicine Highlights for Heart Failure Clinicians and Scientists" at the Heart Failure Society of America Annual Scientific Meeting (Virtual). September 30, 2020.

RESEARCH PRESS RELEASES

- "Polygenic Risk Score Shows Promise Predicting Beta Blocker Response in Heart Failure Patients" by Jessica Kim Cohen of GenomeWeb on April 2, 2023. URL: <u>https://www.genomeweb.com/cardiovascular-disease/polygenic-risk-score-shows-promise-predicting-beta-blocker-responseheart?utm_source=Sailthru&utm_medium=email&utm_campaign=GWDN%20Tues%20AM %202023-04-04&utm_term=GW%20Daily%20News%20Bulletin#.ZCw9IXbMLIU
 </u>
- 2. "Dr. Jasmine Luzum Publishes Review of Pharmacogenomics for COVID-19 Therapies" on the University of Michigan College of Pharmacy website on September 3, 2020. URL: <u>https://pharmacy.umich.edu/about-college/news/category/research-news/dr-jasmine-luzumpublishes-review-pharmacogenomics-covid-19-therapies</u>
- 3. *"Student researchers shine in Seattle"* (Student Rebekah Mahoney featured in) on the American Pharmacists Association website on July 23, 2019. URL: <u>https://www.pharmacist.com/Publications/Transitions/student-researchers-shine-in-seattle</u>
- 4. *"Dr. Jasmine Luzum Wins Two Research Awards*" on the University of Michigan College of Pharmacy website on September 14, 2018. URL: <u>https://pharmacy.umich.edu/about-college/news/category/faculty-news/dr-jasmine-luzum-wins-two-research-awards</u>
- 5. "*Dr. Jasmine Luzum Earns AACP New Investigator Award*" on the University of Michigan College of Pharmacy website on January 31, 2018. URL: <u>https://pharmacy.umich.edu/about-college/news/category/faculty-news/dr-jasmine-luzumearns-aacp-new-investigator-award</u>
- 6. "American Heart Association Fellow Researches Genetic Markers of Heart Failure Unique to African-Americans" on the OSU College of Medicine website on August 8, 2014. URL: <u>http://medicine.osu.edu/news/archive/2014/08/08/american-heart-association-fellow-researches-genetic-markers-of-heart-failure-unique-to-african-americans.aspx</u>
- 7. "Impact Award: Jasmine Talameh Links Beta-Blocker Effectiveness to Genotype" on the UNC Eshelman School of Pharmacy website on May 7, 2013. URL: http://pharmacy.unc.edu/impact-award-jasmine-talameh-links-beta-blocker-effectivenessto-genotype/
- 8. "Doctoral Student Talameh Receives Hadzija Award" on the UNC Eshelman School of Pharmacy website on April 13, 2012. URL: <u>https://pharmacy.unc.edu/doctoral-student-talameh-receives-hadzija-award/</u>
- 9. "UNC Analysis Finds Beta1-AR Alleles Impact Survival in Patients Treated with Beta-Blockers" by Turna Ray in GenomeWeb Pharmacogenomics Reporter on March 29, 2012.

URL: <u>http://www.genomeweb.com/mdx/unc-analysis-finds-beta1-ar-alleles-impact-survival-patients-treated-beta-blocke</u>

PEER REVIEW

(number reviewed or edited)

Guest Editor

Frontiers in Pharmacology & Frontiers in Genetics (5) 2020

Grants

NIH CICS Study Section (2)	2020
University of Alabama at Birmingham Obesity and Health Disparities Research Center	2019
Pilot Grant Program (1)	
University of Michigan Center for Inter-Professional Education	2017
IP-X Research Stimulus Grants (5)	
Michigan Institute for Clinical & Health Research Pre-K Award (1)	2017
University of Sharjah Research Fund (1)	2015

Manuscripts

Frontiers in Pharmacology (1)	2023
Clinical and Translational Science (1)	2023
Future Cardiology (1)	2022
Journal of Personalized Medicine (1)	2022
Journal of Cardiovascular Pharmacology and Therapeutics (1)	2022
Pharmacotherapy (1)	2021
Circulation: Heart Failure (2)	2021
Pharmacotherapy (1)	2020
Clinical and Translational Science (1)	2020
Circulation: Heart Failure (1)	2019
British Journal of Clinical Pharmacology (1)	2019
Pharmacogenomics (1)	2019
Scientific Reports (1)	2019
Pharmacogenetics & Genomics (1)	2018
PLOS One (1)	2018
Clinical Pharmacology & Therapeutics (1)	2018
Circulation: Heart Failure (2)	2017
Therapeutics and Clinical Risk Management (1)	2016
The Pharmacogenomics Journal (1)	2015
American Heart Journal (1)	2015
The Pharmacogenomics Journal (1)	2014
Journal of Pharmacogenomics & Pharmacoproteomics (1)	2014
Journal of Personalized Medicine (1)	2013
Molecular Diagnosis & Therapy (1)	2013
Pharmacotherapy (1)	2012
Clinical Pharmacology & Therapeutics (1)	2012
Circulation: Heart Failure (1)	2011
Circulation Research (1)	2011
Journal of Cardiac Failure (1)	2011
Journal of Cardiac Failure (1)	2009

Pharmacotherapy (1)	2009
Meeting abstracts	
American College of Cardiology (20)	2021
American Association of Pharmaceutical Scientists (8)	2015
American Association of Pharmaceutical Scientists (4)	2014
American Association of Pharmaceutical Scientists (19)	2013
American College of Clinical Pharmacy (4)	2012
American Association of Pharmaceutical Scientists (2)	2012
Heart Failure Society of America (38)	2012
American College of Clinical Pharmacy (4)	2012
American Association of Pharmaceutical Scientists (6)	2011
Heart Failure Society of America (37)	2011
American College of Clinical Pharmacy (6)	2010
American Heart Association (17)	2010
Heart Failure Society of America (30)	2010
American Association of Pharmaceutical Scientists (4)	2010
American College of Clinical Pharmacy (3)	2009

PROFESSIONAL DEVELOPMENT IN RESEARCH

Precision Medicine Leaders Summit: Updates in Precision Medicine and Pharmacogenomics – March 2-3, 2023, Orlando, FL, USA

American Heart Association Scientific Session - November 4-7, 2022, Chicago, IL, USA

"Graphics for Proposals and Research Visualizations" – October 12, 2022, virtual, Offered by the University of Michigan Office of the Vice President for Research

"Pathway & Network Analysis for Omics Data" – July 25-27, 2022, virtual Offered by the University of Washington Summer Institute in Statistical Genetics (UW SISG)

American Society of Clinical Pharmacology & Therapeutics Annual Meeting – March 16-18, 2022, virtual

American Society of Clinical Pharmacology & Therapeutics Network & Community Experience – January 10-14, 2022, virtual

Health Disparities Research Institute – August 9-13, 2021 Offered by the National Institute on Minority Health and Health Disparities (NIMHD)

K to R01 Transition Workshop – July 21-23, 2021 Offered by the National Heart, Lung, and Blood Institute (NHLBI)

"Transition to First R01 Workshop" – May 6 & 21, 2021 Offered by the University of Michigan Institute for Health Policy and Implementation

American Society of Clinical Pharmacology & Therapeutics Annual Meeting – March 8-12, 2021, virtual

Responsible Conduct of Research Training for K Awardees – April 7, 24, and 29, 2020 Offered by the Michigan Institute for Clinical & Health Research (MICHR)

Wellcome Genome Campus Advanced Course - Genetic Analysis of Population-Based Association Studies – September 23-27, 2019, Hinxton, England

American Heart Association Scientific Sessions - November 10-12, 2018, Chicago, IL

American College of Clinical Pharmacy Global Conference – October 20-23, 2018, Seattle, WA

Heart Failure Society of America Annual Meeting – September 15-18, 2018, Nashville, TN

"Media Training: Promote Your Expertise and Research to a Global Audience" – October 11, 2018 Offered by the University of Michigan ADVANCE Program

"Precision Medicine World Conference" – June 6-7, 2018, Ann Arbor, MI

"Large-Scale Grants" – May 1, 2018 Offered by the Michigan Institute for Clinical & Health Research (MICHR)

"Faculty Leadership in Professional Societies" – January 29, 2018 Offered by the University of Michigan ADVANCE Program "University of Michigan Translational Research Symposium" – October 4, 2017 Offered by the Michigan Institute for Clinical & Health Research (MICHR)

"Advancing Precision Medicine Through Complex Systems Biology Symposium"- September 14, 2016 Offered by the University of Michigan Center for Systems Biology

"Leadership and Talent Management" – December 2, 2015 Offered by the Ohio State University Post-Doctoral Association

American Heart Association Scientific Sessions – November 7-11, 2015 Orlando, FL

"Tips for Successful Scientific Writing" – October 30, 2015 Offered by Nationwide Children's Hospital

"Communicating with Impact" – May 14, 2015 Offered by the Ohio State University College of Medicine

Pharmacogenomics Research Network (PGRN) Meeting - April 27-29, 2014 State College, PA

"Principles of Clinical Pharmacology" - September 4, 2014 to January 22, 2015 Offered by NIH

"Introduction to High Performance Computing (Ohio Supercomputer Workshop)" – November 20, 2014 Offered by the Ohio Supercomputer Center

"The Role of Health Information Technology and Informatics in Clinical Transformation" – September 3, 2014 Offered by the Ohio State University Department of Biomedical Informatics

Pharmacogenomics Research Network (PGRN) Meeting - April 2-3, 2014 Orlando, FL

"NHLBI Population Studies Workshop" – July 28-31, 2013 Offered by the National Heart, Lung, and Blood Institute

"Being a Principal Investigator at Ohio State" – June 20, 2013 Offered by the Ohio State University Office of Research

"Write Winning Career Development Award Proposals" – June 27, 2012 Offered by the North Carolina Translational and Clinical Sciences Institute

Duke University Center for Personalized Medicine Symposium – March 29, 2012 Durham, NC

American College of Cardiology Scientific Sessions - March 24-27, 2012 Chicago, IL

"Dissertation Writing" – January 23-27, 2012 Offered by the University of North Carolina Writing Center

"Presenting Data Professionally" - May 5, 2011 Offered by the North Carolina Translational and Clinical Sciences Institute

"Writing for Publication" - January 14, 2011 Offered by the University of North Carolina School of Nursing Center for Lifelong Learning

Globalization of Pharmaceutics Education Meeting – November 10-12, 2010 Chapel Hill, NC

"Write Winning Grants" – August 6, 2010 Offered by the North Carolina Translational and *Clinical Sciences Institute* "Grant Writing/Proposal Development" – March 11, 2010 Offered by the North Carolina Translational and Clinical Sciences Institute

International Workshop on Clinical Pharmacology of HIV Therapy - April 15-17, 2009 *Amsterdam, The Netherlands*

American Association of Pharmaceutical Scientists (AAPS) Meeting – November 16-20, 2008 *Atlanta, GA*

TEACHING EXPERIENCE

Clinicians

Pharmacogenomics Module in "From Concepts to Practice: A Guide to Cardiovascular Genomics" Jan 2022

Instructor – American Heart Association Continuing Education

- Recorded 1 hour webinar on pharmacogenomics for cardiovascular clinicians
- Developed pharmacogenetic patient cases and questions for live interactive learning session for cardiovascular clinicians

Clinical Genomics Education Bootcamp

Instructor - American Society for Human Genetics (ASHG) Annual Meeting

Recorded 1 hour virtual bootcamp on how to teach genomics to clinicians

Pharmacogenomics Journal Club

Facilitator – University of Michigan

Started, organized, and facilitated a monthly journal club that was open to anyone interested in learning more about pharmacogenomics (e.g., students, faculty, and clinicians). The journal club met monthly for 1 hour. Important articles in the field of pharmacogenomics were presented by expert faculty members and open for questions/discussion.

Continuing Education – Seminar

Instructor – University of Michigan Health System Heart Failure Conference Sep 2016-18

 Taught 1 hour interactive seminar on race and beta-blocker pharmacogenetics to 10 heart failure specialty cardiologists and fellows

Continuing Education - Online

Instructor – Ohio State University Wexner Medical Center and Nationwide Children's Hospital

- Taught 1 hour online course on "How to Teach Pharmacogenetics/genomics" and wrote 20 exam questions for the Faculty Development for Medical Educators Program (FD4ME)
- Available at: https://fd4me.osu.edu/modules/69

BSGP 8800.05 Genomic Medicine and Pharmacogenomics

Instructor – Ohio State University College of Medicine

• Taught 4 physicians in the Signature Program Translational Science Curriculum an interactive 2-hour lesson on "How to Design Clinical Pharmacogenomics Studies"

Continuing Education – Grand Rounds

Instructor – Ohio State University Wexner Medical Center

• Taught 1-hour seminar on cardiovascular pharmacogenetics for continuing medical education for the Department of Cardiology at Ohio State University Wexner Medical Center, with focus on the pharmacogenetic recommendations for clopidogrel, simvastatin, and warfarin

Fall 2016

Fall 2020

Mar 2016

Mar 2015

Jun 2015

Continuing Education – Conference

Co-Instructor – Heart Failure Management, Amelia Island, FL

• Co-taught 45-minute breakout luncheon workshop, an update on personalized medicine in cardiovascular disease with Mona Fiuzat, PharmD, with a focus on betablocker pharmacogenetics in heart failure

Continuing Education – Conference

Co-Instructor – Heart Failure Management, Amelia Island, FL

• Co-taught 45-minute breakout luncheon workshop, an update on personalized medicine in cardiovascular disease with Craig Lee, PharmD and Mona Fiuzat, PharmD, with a focus on beta-blocker pharmacogenetics in heart failure

PhD Students

CPTS850 Clinical Pharmacy Translational Science Seminar Fa Course Coordinator & Lecturer - University of Michigan College of Pharmacy

- Delivered 45 minute seminar on my research
- Created syllabus and schedule
- Created and managed course website

CPTS822 Research & Clinical Applications of Pharmacogenomics Winter 2019-Pres *Course Coordinator & Lecturer* - University of Michigan College of Pharmacy

- Designed brand new course and 7 lectures for 3-5 PhD students per year in Clinical & Translational Pharmaceutical Science
- Created and managed course website and exams

Research Forum

Faculty Leader & Evaluator – University of Michigan College of Pharmacy

- Led group of 6 PharmD students in the review of 4 PhD students research posters for 1.5 hours
- Led group discussion with PharmD students on the review of the 4 PhD students' posters
- Provided feedback to the PhD students on their posters

PHARMCL7550 Research Applications of Clinical Pharmacology

Co-Instructor – Ohio State University College of Medicine

- Adapted tool for evaluation of clinical pharmacology research and grading rubric
- Created and presented an example for thorough evaluation of pharmacology literature

DPET831 Quantitative Methods in Clinical Research

Super Teaching Assistant - University of North Carolina Eshelman School of Pharmacy

- Designed weekly case-based statistical problem for 20-25 graduate students to solve with SAS programming, such as data transformations, descriptive, parametric, and non-parametric statistical approaches used in clinical research
- Facilitated hands-on SAS programming during weekly recitation for 10-15 graduate students

Winter 2018-2021

Jul 2011

Fall 2019 & 2022

Jul 2012

Spring 2011

Spring 2015

Jasmine A. Luzum (formerly Talameh), PharmD, PhD, FHFSA, FAHA Curriculum Vitae

- Integrated scientific writing skills into weekly case reports of SAS statistical output
- Created and completed grading rubrics to provide standardized weekly feedback

Pharmacy Residents & Fellows

Resident Research Series

Guest Instructor – University of Michigan College of Pharmacy

- Taught two 1.5 hour classes on statistics for approximately 30 residents, including a 48minute recorded lecture, 10-question practice quiz for BCPS exam, 30 minute review of quiz answers using Poll Everywhere, creating a worksheet to determine appropriate statistical test for their research project, and creating a plan for facilitated group discussion of their statistical analysis plan
- Facilitated a 1.5 hour session and group discussion on writing specific aims and hypotheses for their research project

Department of Clinical Pharmacy Fellow Seminar

Guest Instructor - University of Michigan College of Pharmacy

- Attended every 2 hour session and participated in question & answer session after each fellow presented their research, and participated in career development discussion topic
- Facilitated a 1.5 hour session for about 10 fellows and 5 faculty, including a 1-hour practice job talk by one of the fellows, a 20-minute presentation by research administration, and 15-minute interactive presentation on campus resources available and useful for fellows (October 2017)
- Designed and facilitated a 1.5 hour interactive session on mentor-mentee agreements for about 10 fellows and 5 faculty (October 2016)

PharmD Students

Advance Pharmacy Practice Experience (APPE)

Co-Preceptor – University of Michigan College of Pharmacy

Created a video and assignment for COVID-19 Non-traditional APPE

P718 Modern Biopharmaceutics and Pharmacogenomics

Course Coordinator & Lecturer - University of Michigan College of Pharmacy

- Redesigned one-half semester course on clinical pharmacogenomics for 85 P3 students
- Designed and recorded 2 hours of lecture on cardiovascular pharmacogenetics
- Created and managed course website

P718 Modern Biopharmaceutics and Pharmacogenomics

Guest Judge - University of Michigan College of Pharmacy

 Judged 16 group presentations of 15 minutes each by students showcasing a genedrug pair using a standardized rubric

P612 Therapeutic Problem Solving

Skills Evaluator – University of Michigan College of Pharmacy

2016-Present

April 2020

Winter 2019

Spring 2018

2017-2018

2017-Present

• Evaluated 12 students on performance of their skills in use of a glucometer and mixing, drawing up, and administering insulin

P730 PharmD Seminar

Advisor - University of Michigan College of Pharmacy

• Develop topics and advise 2 PharmD students per year on the development and delivery of their seminar

P602 Therapeutic Problem Solving

Patient Simulator & Skills Evaluator - University of Michigan College of Pharmacy

- Served as pretend hypertension patient and evaluator of blood pressure measurement technique for nine P2 PharmD students using grading rubric in ExamSoft
- Observed, graded and led discussion of three different coronary artery disease patient cases for P2 PharmD students using grading rubric in ExamSoft

P504 Pharmacy Practice Skills

Facilitator – University of Michigan College of Pharmacy

• Facilitated and demonstrated blood pressure measurement, blood glucose measurement, and discussion of health professional skills in 3.5 hour session for a small group (n = 6) P1 PharmD students

P614 Principles of Research and Problem Solving

Guest Judge - University of Michigan College of Pharmacy

Judged 5 individual student research poster presentations for 1.5 hours

P501 Lifelong Learning

Guest Speaker – University of Michigan College of Pharmacy

• Discussed an academic pharmacy career with a group of 7 students for 1 hour

PHR7006 Introductory Pharmacy Practice Experience 5

Facilitator - Ohio State University College of Pharmacy

- Facilitated literature evaluation and discussion for 2 groups of 6-8 PharmD students
- Completed grading rubric of group to provide standardized, written feedback

PHCY444 Cardiology/Nephrology

Clinical Instructor - University of North Carolina Eshelman School of Pharmacy

Wrote multiple choice exam guestions for PharmD student heart failure module

DPET813 Advanced Cardiovascular Pharmacotherapy

Clinical Instructor - University of North Carolina Eshelman School of Pharmacy

- Assisted in the design of chronic heart failure and pharmacogenomics modules for class size of 30 PharmD students: objectives, patient case, and required readings
- Facilitated heart failure patient case discussion for groups of 6 PharmD students
- Designed and delivered 30 minute interactive lecture for pharmacogenomics module with emphasis on clopidogrel and warfarin pharmacogenomics

2017-Present

Fall 2017-Present

Spring 2017

Fall 2017

Fall 2016

Spring 2014

Spring 2013

Fall 2009-12

• Created clopidogrel and warfarin pharmacogenomics patient cases and questions and facilitated pharmacogenomics case-based discussions for groups of 6 PharmD students

PHCY446 Neurology/Psychiatry

Teaching Assistant - University of North Carolina Eshelman School of Pharmacy

 Administered and graded multiple choice examinations for approximately 100 PharmD students

PharmD Student Recitations

Clinical Instructor - University of North Carolina Eshelman School of Pharmacy

Facilitated multiple 60-minute case-based discussions for groups of approximately 10 PharmD students on the following clinical topics: tobacco cessation, hyperlipidemia, schizophrenia, asthma, malignant pain, sexually transmitted diseases, ischemic heart disease, gastroesophageal reflux disease/peptic ulcer disease, otitis media, and heart failure

PHCY413 Pharmacokinetics

Teaching Assistant – University of North Carolina Eshelman School of Pharmacy

• Administered and graded multiple choice examinations for about 100 PharmD students

Undergraduate Students

P212 Contemporary Research in the Pharmaceutical Sciences

Course Coordinator – University of Michigan

- Designed and coordinated a brand new 1-credit hour course to showcase 13 diverse pharmaceutical researchers from the College of Pharmacy, College of Medicine, pharmaceutical industry, and the FDA
- Created and managed course website
- Collected and graded weekly guestions on reading assignments, attendance, participation, and term paper

P200 Science of Medicines

Guest Lecturer - University of Michigan

- Designed and delivered three 1.5-hour interactive and multimedia lectures on recreational and performance-enhancing drugs for approximately 35 undergraduates
- Innovative teaching strategies included the incorporation of active learning (1 minute papers), technology (Poll Everywhere word clouds and review questions), and multimedia (recorded remote webcam interviews with Olympian PharmD alumni, links to online news articles, and YouTube videos)
- Wrote 15 total guiz guestions

PHARM5600 Introduction to General Pharmacology

Guest Lecturer – Ohio State University College of Medicine

- Designed and delivered seven, 30-minute online lectures for 45 students
- Wrote approximately 150 multiple choice and case-based quiz and exam questions

Spring 2009

Fall 2008-12

Winter 2018-Pres

Fall 2008

Fall 2017-Present

Fall 2013-Spring 2014

- The online courses can be accessed in Internet Explorer with an OSU login and password:
- Estrogens and Androgens: <u>https://macprlessons.org.ohio-</u> <u>state.edu/PHARMCL_5600/Articulate/Module_26/Estrogens_And_Androgens/presentati</u> <u>on_html5.html</u>
- Immunosuppressants: <u>https://macprlessons.org.ohio-</u> state.edu/PHARMCL_5600/Articulate/Module_41/Immunosuppressants/presentation_ht ml5.html
- The Autonomic Nervous System: <u>https://macprlessons.org.ohio-</u> <u>state.edu/PHARMCL_5600/Articulate/Module_04/The_Autonomic_Nervous_System/pre</u> <u>sentation_html5.html</u>
- Cholinergic Agonists: <u>https://macprlessons.org.ohio-</u> <u>state.edu/PHARMCL_5600/Articulate/Module_05/Cholinergic_Agonists/presentation_html5.html</u>
- Cholinergic Antagonists: <u>https://macprlessons.org.ohio-</u> <u>state.edu/PHARMCL_5600/Articulate/Module_06/Cholinergic_Antagonists/presentation</u> <u>html5.html</u>
- Adrenergic Agonists: <u>https://macprlessons.org.ohio-</u> <u>state.edu/PHARMCL_5600/Articulate/Module_07/Adrenergic_Agonists/presentation_ht_ml5.html</u>
- Adrenergic Antagonists: <u>https://macprlessons.org.ohio-</u> state.edu/PHARMCL_5600/Articulate/Module_08/Adrenergic_Antagonists/presentation_ <u>html5.html</u>

CHEM110 General Chemistry I

Undergrad-Teaching-Undergrads - University of Pittsburgh College of Arts and Sciences

- Assisted course coordinator in design of weekly recitations
- Led weekly recitation with instruction in general chemistry problems for 15 undergraduate students
- Administered and graded weekly quizzes

Interprofessional Education (IPE)

IPE in Action

Facilitator – University of Michigan

• Facilitated complex patient case discussion with 10 students for 2 hours from the following schools/colleges: medicine, dentistry, social work, public health, nursing, and kinesiology

TEACHING AWARDS

- Boka W. Hadzija Award for Distinguished University Service 2012
 - Recognizes the single graduate or professional student with the most outstanding character, scholarship, leadership, and service to the University of North Carolina at Chapel Hill

Fall 2003

Fall 2018

Future Faculty Fellowship

2012

2011

- A competitive, 5-day course preparing selected graduate students at the University of North Carolina at Chapel Hill for a faculty position
- Super Teaching Assistant
 - o Graduate students in the University of North Carolina Eshelman School of Pharmacy with outstanding performance as a teaching assistant in their first year are selected for this award that provides a more in-depth and independent teaching experience in their second year of graduate school

PROFESSIONAL DEVELOPMENT IN TEACHING

American Association of Colleges of Pharmacy Annual Meeting - July 18-22, 2019 Chicago, IL

"Teaching Workshop" – August 4-5, 2014 Offered by the Ohio State University College of Pharmacy

"Teaching Portfolios" – October 11, 2011 Offered by the University of North Carolina Center for Faculty Excellence

"Classroom Management" – September 16, 2010 Offered by the University of North Carolina Center for Faculty Excellence

"Teaching to Different Levels of Students" - September 8, 2010 Offered by the University of North Carolina Center for Faculty Excellence

MENTORSHIP

Post-Doctoral Fellows

Alessandra Campos-Staffico, RPh, PhD 2020-present University of Michigan College of Pharmacy, Ann Arbor, MI "Prevalence of discordant drug recommendations in atherosclerotic cardiovascular disease risk estimators" "Clinical outcomes of different atherosclerotic cardiovascular disease risk estimators" "Genome-wide association study of bleeding risk on DOACs"

Tyler Shugg, PharmD, PhD

2018-2019

University of Michigan College of Pharmacy, Ann Arbor, MI "Identification of Sex Hormone Homeostasis Genetic Predictors of the QT Interval: Implications for Personalized Medicine" and "Precision Medicine for Chemotherapy-Induced Cardiotoxicity: A Pharmacogenetic Investigation of Carvedilol"

Masters in Public Health Capstone Project

Jonathan Kim "Association of genetic polymorphisms in CYP3A5 with bleeding risk on DOACs"

PhD Student Rotations

Shana Littleton

40

2020-2021

"Genes most commonly implicated in inconsistent clinical pharmacogenetic recommendations" Ozioma Edokobi 2020 "Comparison of Survival Benefit from Angiotensin Inhibitors in Patients with Self-Reported Black & White Race in the GUIDE-IT trial" 2019 Logan Smith "Comparison of pharmacogenetic results from candidate gene studies versus GWAS" Ciao-Sin "Chelsea" Chen 2019 "Machine learning to develop decision trees for managing statin-associated muscle symptoms" Ana Lopez Medina 2019 "Pharmacogenetics of drug-induced QT prolongation"

MICHR Summer Immersion Research Program

Ozioma Edokobi, BS – University of Michigan College of Pharmacy 2020 "A Comparison of the Response to Angiotensin Inhibitors in Black and White Patients with Heart Failure and Reduced Ejection Fraction"

Joseph English, BS – University of Michigan College of Pharmacy 2018 "Association of Genetic Polymorphisms in the Beta-1 Adrenergic Receptor with Recovery of Left Ventricular Ejection Fraction in Patients with Heart Failure" "Precision Medicine for Chemotherapy-Induced Cardiotoxicity: A Pharmacogenetic Investigation of Carvedilol"

Residency Research Projects

Christopher Ting, MD – Henry Ford Health System Internal Medicine Residency Class of 2019, Detroit, MI "A Cardiac-Specific Regulatory Genetic Variant for Protein Kinase C α is Significantly Associated with Mortality in Patients with Heart Failure"

Bradley Kay, MD – University of Michigan Internal Medicine Residency Class of 2018, Ann Arbor, MI "Precision Medicine for Chemotherapy-Induced Cardiotoxicity: A Pharmacogenetic Investigation of Carvedilol"

Daniel Perry, MD – University of Michigan Internal Medicine Residency Class of 2019 Ann Arbor, MI "Precision Medicine for Chemotherapy-Induced Cardiotoxicity: A Pharmacogenetic Investigation of Carvedilol" and "Atorvastatin may be Associated with a Lower Risk of Discontinuation due to Muscle Pain and/or Weakness Compared with Other Statins"

Pharmacy "Phamily"

University of Michigan College of Pharmacy - Ann Arbor, MI

• Biannual review and one-on-one discussion of students' CV's, short-term and long-term SMART goals, and extracurricular activities Subaita Chowdhury, PharmD Class of 2026

Nishant Shah, PhD Class Expected 2025

2017 – Present

2017 - 2019

Sophia Guo, PharmD Class of 2025 Meiyan Kailainathan, PharmD Class of 2024 Sun Min (Sunny) Jung, PharmD Class of 2023 Bayan Chbib, PharmD Class of 2023 Siyu Liu, PharmD Class of 2022 Devon Stonerock, PharmD Class of 2021 Brandon Holbrook, PharmD Class of 2020 Crystal Sun Lee, PharmD Class of 2020 Naba Khan, PharmD Class of 2019 Anthony Patros, PharmD Class of 2018

PharmD Student Investigation Research Projects

2017 - Present

University of Michigan College of Pharmacy - Ann Arbor, MI

Wesley Wright, Class of 2025 "Survival benefit of angiotensin inhibitors in Black versus White heart failure patients"

Jessica Orizu, Class of 2025 "Survival benefit of angiotensin inhibitors in Black versus White heart failure patients"

Jenny Shang, Class of 2024 "Association of Self-Identified Black and White Race with Beta-Blocker Hospitalization Benefit in Heart Failure Patients"

Kim (Tk) Nguyen, Class of 2023 "Interaction of CYP2D6*4 with beta-blocker benefit in the recovery of anthracycline-induced cardiomyopathy"

Jared Shinners, Class of 2023 "Percentage of patients reported statin-associated muscle symptoms that continue to take statins"

Derek Linskey, Class of 2021 "Association of genetic polymorphisms with myopathy caused by atorvastatin"

Joseph English, Class of 2021 "Association of ABCC4 with statin association muscle symptoms"

Wilson Chen, Class of 2021 "Comparison of changes in statin therapy in patients with and without statin-associated muscle symptoms"

Rebekah Mahoney, Class of 2020 "An Evaluation of Drug-Drug Interactions Associated with Statin-Induced Myopathy"

Melinda Cook, Class of 2020

"Evaluation of beta-blocker dose response in African-Americans"

PharmD Student Seminars University of Michigan College of Pharmacy - Ann Arbor, MI

2017 - Present

Oniversity of Michigan Conege of Finannacy - Ann Aibor, Mi

Tk (Kim) Nguyen, Class of 2023 "Factors Associated with Anthracycline Induced Cardiomyopathy"

Jared Shinners, Class of 2023 "The Continuation of Statin Therapy After Experiencing Statin-Associated Muscle Symptoms (SAMS)"

Ana Lopez Medina, Class of 2022 "Addressing Social Determinants of Health in the Care of Patients With Heart Failure"

Andrew Barish, Class of 2022 "Race versus Ancestry in Cardiovascular Drug Response"

Anthony Mack, Class of 2021 "Polygenic Scores in Pharmacogenetics"

Derek Linskey, Class of 2021 "Association of genetic polymorphisms with myopathy caused by atorvastatin"

Wilson Chen, Class of 2021 "Does Coenzyme Q10 Relieve Statin Associated Muscle Symptoms?"

Rebekah Mahoney, Class of 2020 "Machine Learning to Discover Novel Drug-Drug Interactions Associated With Statin Associated Muscle Symptoms"

Alex Smith, Class of 2020 "Pharmacogenomic GWAS: Where are we now?"

Ming-Hei Tai, Class of 2019 "Why are there no effective drugs to treat heart failure with preserved ejection fraction? A Story of Failure."

Bianca London, Class of 2019 "Inconsistencies Among Clinical Recommendations for Pharmacogenetics: What is a Pharmacist To Do?!"

Jason Cheung, Class of 2018 "Clinical Controversy: Do Cardiologists Require Higher Standards of Evidence for Pharmacogenetics than Other Specialties?" Pauline Kim, Class of 2018 "Clinical Controversy: Are Pharmacogenetic Tests Held to a Higher Standard than Other Clinical Tests?"

Undergraduates

Independent Study

Juliet Jacoby – University of Michigan College of Pharmacy "Risk Factors for Severe Bleeding on Direct Oral Anticoagulants"	2021-2023
Angel Edwards – Michigan State University	2020-Present

Angel Edwards – Michigan State University "Risk Factors for Severe Bleeding on Direct Oral Anticoagulants"

Latino & Latin American Space for Enrichment and Research (LASER) 2014

Ohio State University College of Pharmacy – Columbus, OH Ariela Lopez, Class of 2017

• Provided one-on-one monthly mentoring for a pre-pharmacy undergraduate major on pre-pharmacy coursework, pharmacy school application process, preparation for the pharmacy college admission examination, and research and internship opportunities

Honors Biology Project

Lydia Schiopota – Aurora High School, Aurora, OH "Scientists Classify and Understand the Risks of Genetically Modified Organisms"

CLINICAL EXPERIENCE

Clinical Pharmacy

Ohio State University Outpatient Heart Failure Clinic

Clinical Pharmacist - Columbus, OH

- Discussed with heart failure team whether patients are receiving optimal, heart failure guideline recommended therapies
- Recommended to heart failure team the presence and resolution of drug-related problems, such as untreated indications, improper drug or dose selection, adverse drug reactions, drug-drug interactions, drug-food interactions, drug treatment without indication, cost efficiency, non-adherence, and access to medications

University of North Carolina Outpatient Heart Failure Clinic

Clinical Pharmacist – Chapel Hill, NC

- Ensured patients are receiving optimal, heart failure guideline recommended therapies
- Identified and resolved drug-related problems, such as untreated indications, improper drug or dose selection, adverse drug reactions, drug-drug interactions, drug-food interactions, drug treatment without indication, cost efficiency, non-adherence, and access to medications
- Consolidated home medication regimen, non-prescription medications, and drug allergies in the electronic medical record
- Assessed heart failure symptoms and recommended changes to diuretic therapy if necessary
- Monitored lab values and patient for drug efficacy and toxicity
- Educated patients and heart failure team regarding complexities of drug therapy

University of North Carolina Inpatient Heart Failure Service

Clinical Pharmacist - Chapel Hill, NC

- Rounded with heart failure team to identify and resolve drug-related problems
- Performed medication reconciliation at admission, discharge, and during hospitalization to minimize medication errors
- Performed therapeutic drug monitoring, *i.e.* with inotropes and pulmonary artery catheterization and vancomycin or digoxin dosing and plasma concentrations

University of North Carolina Inpatient General Cardiology Service 2009

Clinical Pharmacist- Chapel Hill, NC

- Rounded with cardiology team to identify and resolve drug-related problems
- Educated patients on medication regimens, especially those starting warfarin therapy

Southwest General Hospital General Cardiology Service

Student Pharmacist - Middleburg Heights, OH

- Rounded with cardiology team to identify and resolve drug-related problems
- Educated patients on medication regimens, especially those starting warfarin therapy

2010-2011

2014-2016

2010-2012

Jasmine A. Luzum (formerly Talameh), PharmD, PhD, FHFSA, FAHA Curriculum Vitae

Cuyahoga Falls Hospital Pain Management Clinic

Student Pharmacist – Cuyahoga Falls, OH

- Designed and monitored pain medication regimens in collaboration with health care team
- Monitored and educated patients on abuse and misuse of pain medications

University of Pittsburgh Medical Center Infectious Disease Service 2007

Student Pharmacist – Pittsburgh, PA

- Rounded with infectious disease team to identify antibiotic related problems
- Monitored antibiotic efficacy, toxicity, and drug interactions

Community Pharmacy

Wal-Mart Pharmacy

Pharmacist - Durham, NC and Columbus, OH

- Provided medication therapy management and immunizations
- Reviewed prescriptions for accuracy and drug-related problems
- Counseled patients on proper use of medications, adherence, indication, and adverse reactions
- Resolved third party payment issues
- Maintained drug inventory

Nationwide Children's Hospital Outpatient Pharmacy

Pharmacist - Columbus, OH

- Reviewed prescriptions for accuracy and appropriateness of drug and dosing based on the child's weight, age, indication, concomitant medications, and body surface area where necessary, drug-drug interactions, drug-food interactions, allergies, and cost efficiency
- Counseled patients and parents on the proper use and adherence to medications
- Supervised and educated pharmacist interns, especially in compounding medications to pediatric dosage forms

Inter-Faith Council Homeless Shelter Clinic

Volunteer Pharmacist – Chapel Hill, NC

- Collaborated with nurse practitioner to identify free medications available to treat patients' indications
- Dispensed and counseled on free medications

Hometown Pharmacy

Pharmacist Intern – West Mifflin, PA

- Filled and counseled prescriptions
- Contacted prescribers to verify prescription accuracy and recommend changes
- Performed blood pressure screenings

2008-2016

2013-2015

2007-2008

2010

 CVS Pharmacy Student Pharmacist – Pittsburgh, PA Filled, dispensed, and counseled prescriptions 	2007
 Rite Aid Pharmacy Student Pharmacist – Washington, DC Filled, dispensed, and counseled prescriptions 	2007
 Birmingham Free Clinic Volunteer Student Pharmacist – Pittsburgh, PA Interviewed patients with medical students for potential indications Dispensed and counseled on free medications 	2007 for free medications
Mail Order Pharmacy	
Medco Health Solutions, Inc. – North Versailles, PA <i>Pharmacist Intern</i>	2005
 Entered prescriptions into electronic prescription system Performed various research projects and reports, such as evidence switching between manufacturers for narrow therapeutic index drug Educated pharmacy staff with "lunch and learn" seminar 	0
Consulting	
 DalCor Pharmaceuticals – San Mateo, CA Scientific Advisor Discussed clinical implementation of pharmacogenetic testing for the dalcetrapib 	2018 ne CETP inhibitor
 L.E.K. Consulting – San Francisco, CA Pharmacogenomics Consultant Discussed clinical implementation of pharmacogenetics 	2017
 Gnome Diagnostics, LLC. – Powell, OH <i>Clinical Consultant</i> Evaluated and interpreted pharmacogenetic test reports Educated clinicians on pharmacogenetic testing 	2014-2018
LICENSURE & CERTIFICATIONS	
Research Study Coordinator	2018-Present

Applied Pharmacology	2015-Present	
American Board of Clinical Pharmacology	0045 0040	
Immunizing Pharmacist	2015-2016	
American Pharmacists Association	0045 0040	
Basic Life Support (CPR & AED)	2015-2016	
American Heart Association		
Registered Pharmacist		
Ohio license # 03132402-1	2012-2016	
North Carolina license #19956	2008-Present	

CLINICAL CONFERENCES

American College of Clinical Pharmacy – October 15-18, 2022 San Francisco, CA

Heart Failure Management – July 2012 Amelia Island, FL

Heart Failure Management – July 2011 Amelia Island, FL

Heart Failure Management – July 2010 Amelia Island, FL

American Pharmacists Association – March 2008 San Diego, CA

PROFESSIONAL ORGANIZATIONS

STRIPE (Standardizing Laboratory Practices in Pharmacogenetics)	2021-Present
Evidentiary Standards Subcommittee	2021-Present
HFSA Heart Failure Research Network	2021-Present
IGNITE (Implementing Genomics in Practice) Network	2021-Present
American Society of Health-System Pharmacists	2021
American Society of Clinical Pharmacology & Therapeutics	2018-Present
Biomarkers and Translational Tools Steering Committee	2020-2021
American College of Clinical Pharmacy	2017-2020
American Association of Colleges of Pharmacy	2016-2018
Heart Failure Society of America	2016-Present
Publications & Scientific Statements Committee	2019-2021
Pharmacogenomics Research Network (PGRN)	2013-Present
Founding Member	2020
Translational Pharmacogenetics Project (TPP)	2013-2016
Expression Genetics in Drug Therapy (XGEN)	2013-2016
Clinical Pharmacogenetics Implementation Consortium (CPIC)	2013-Present
American Heart Association Leadership Committee for the Council on Genomics and Precision Medicine	2013-Present 2019-Present
Diversity Champion for the Council on Genomics and Precision Medicine Council Operations Committee Diversity Subcommittee Data Science & Precision Medicine Science Subcommittee	2019-Present 2020-Present 2020
Professional & Public Education & Publications Committee	2020-Present
Ohio State University Post-Doctoral Association	2013-2016
NIH Student Loan Repayment Program Ambassador Network	2011-Present
University of North Carolina Eshelman School of Pharmacy Recruitment Ambassador Program Elected position: Lead PhD Recruitment Ambassador	2010-2012
Graduate Student Organization at the University of North Carolina Eshelman School of Pharmacy Elected position: Senator	2008-2012
Graduate and Professional Student Federation at the University of North Carolina	2008-2012
Society for Neuroscience	2006

Rho Chi National Pharmacy Honor Society	2005-2008
Lambda Kappa Sigma Pharmaceutical Fraternity Elected position: Recruitment Chair Elected position: Vice President	2004-2011
American Association of Pharmaceutical Scientists	2004-2010
American Pharmacists Association	2004-2008
Order of Omega Greek Leadership Honor Society	2004-2005
Kappa Delta Sorority Elected position: Guard	2003-2008

ACADEMIC AWARDS

•	PhD Student Shana Littleton selected for the Bouchet Honor Society Named for the first African American doctoral recipient in the United States (Physics, Yale University, 1876), the Edward Alexander Bouchet Graduate Honor Society (Bouchet Society) recognizes outstanding scholarly achievement and promotes diversity and excellence in doctoral education and the professoriate. The Bouchet Society is a network of preeminent scholars who exemplify academic and personal excellence, foster environments of support and serve as examples of scholarship, leadership, character, service, and advocacy for students who have been traditionally underrepresented in the academy. In the spirit of Bouchet's commitment to these ideals, inductees into the honor society must demonstrate significant achievement in these five areas.	2023
•	 PhD Student Ana Lopez Medina selected as a Scholar for the American Heart Association's National Hispanic Latino Cardiovascular Collaborative (NHLCC) The vision of the National Hispanic Latino Cardiovascular Collaborative is to promote the treatment and prevention of cardiovascular diseases and stroke, in support of the Hispanic community, by reducing and eliminating health disparities that prevent people from living a full, optimal life. 	2023
•	Women in Leadership Panel University of Michigan College of Pharmacy	2017-2019
٠	Teva Pharmaceuticals Outstanding Student Award	2008
•	Lambda Kappa Sigma Mission Sister Award	2007
•	Pennsylvania Chain Drug Endowment Scholarship	2006
٠	Pennsylvania Chain Drug Endowment Scholarship	2005
٠	Frank Miller Coad Memorial Scholarship	2004
٠	Dean's List, University of Pittsburgh School of Pharmacy	2004-2008
•	Dean's List, University of Pittsburgh College of Arts and Sciences	2002-2004
•	University of Pittsburgh Academic Scholarship	2002-2006
•	Phi Beta Kappa Award	2002
•	Virginia Perryman Award in College Freshman Writing	2002

ACADEMIC PROFESSIONAL DEVELOPMENT

"Leadership Conference" – April 25, 2023 Offered by the University of Michigan Frankel Cardiovascular Center

"Personal Leadership Development" – October 17, 2022 Offered by the American College of *Clinical Pharmacy*

"Teaching Race and Ethnicity in Therapeutic Problem Solving" – August 19, 2022 Offered by the University of Michigan College of Pharmacy

"Project Based Assessments" – August 19, 2022 Offered by the University of Michigan College of Pharmacy

"Basic Science Course Assessments" – August 19, 2022 Offered by the University of Michigan College of Pharmacy

"Exam Writing Flaws Workshop" – August 18, 2022 Offered by the University of Michigan College of Pharmacy

"Words We Use" – February 16, 2022 Offered by the University of Michigan ADVANCE Program

"Hacking Academic Paperwork" – June 23, 2021 Offered by the University of Michigan Medical School Office for Faculty Development

"Strategies for Surviving and Thriving when Working from Home During a Global Pandemic" – January 28, 2021 Offered by the University of Michigan Institute for Health Policy and Implementation

"Self Care During Times of Transition" – January 25, 2021 Offered by the University of Michigan Faculty and Staff Counseling and Consultation Office (FASCCO)

"Shoulda, Woulda, Coulda: Moving Beyond Failure and Actively Cultivating a More Equitable Academy" – November 17, 2020 Offered by the University of Michigan ADVANCE Program

"Essential Skills for Successful Leadership in the Research Setting" – October 27, 2020 Offered by the University of Michigan Office of Faculty Affairs & Faculty Development

"Microaggressions: A Workshop" – March 2, 2020 Offered by the University of Michigan College of Pharmacy

"American Heart Association Council Operations Committee Diversity Summit" – December 3, 2019 Dallas, TX

"American Association of Colleges of Pharmacy Annual Meeting" – July 13-17, 2019 Chicago, IL, USA

"Effective Communication and Conflict Resolution" – June 5, 2019

Offered by Beyond Interactive Training, LLC

"Workshop on Recruiting Faculty for Diversity and Excellence" – November 28, 2018 Offered by the University of Michigan STRIDE Committee (Strategies and Tactics for Recruiting to Improve Diversity and Excellence)

"Unconscious Bias & Facilitating Diversity, Equity, and Inclusion Discussions" – June 8, 2017 Offered by the University of Michigan DEI Education and Training Office for Health Equity and Inclusion

"Salary Negotiations" – May 11, 2015 Offered by the OSU Post-Doctoral Association

"Strategies for Success: Key Ways for Enhancing Your Professional Style" – February 19, 2015 Offered by the OSU Post-Doctoral Association

"Vitae and Cover Letters" – September 15, 2014 Offered by the OSU Career Counseling and Support Services

"Preparing for the Academic Job Search" – September 8, 2014 Offered by the OSU University Center for the Advancement of Teaching

"Post-doc to Professorship" – January 27, 2014 Offered by the OSU Postdoc Association

"Finding Your Faculty Niche" – January 15, 2014 Offered by the OSU Professional Development Series for Women Faculty

"Building a National Reputation as a Clinician" – January 13, 2014 Offered by the OSU Center for Faculty Advancement, Mentoring, and Engagement

"How to Be a More Successful Writer" – December 4, 2013 Offered by the OSU Postdoc Association

"Future Faculty Fellowship Program" – May 7-11, 2012 Offered by the UNC Center for Faculty Excellence

ACADEMIC PRESS RELEASES

"Jasmine Talameh earns second doctorate, this time from Univ. of N.C." in the Record-Courier on May 30, 2013. URL: <u>http://recordpub.com/lifetimes/2013/05/30/jasmine-talameh-earns-2nd-doctorate</u>

ACADEMIC SERVICE

National

Chalmers Award Committee

Member – American Association of Colleges of Pharmacy

 Reviewed dossiers for 5 candidates for the 2018 AACP Robert K. Chalmers Distinguished Pharmacy Educator Award

Campus

BSPS Admissions Committee *Member* - University of Michigan College of Pharmacy

Review applications for admission to the BSPS program

PhD Admissions

Member – University of Michigan College of Pharmacy Department of Clinical Pharmacy

 Work with Student Affairs Program Manager and co-members to create plan for application process to new PhD program in department

PharmD Admissions Committee

Member - University of Michigan College of Pharmacy

- Review the applications and interview reports for PharmD program applicants to inform vote to admit/defer/reject for admission to PharmD program
- Review PharmD program applications and provide comments to inform vote to admit, defer, or reject an invitation to interview
- Co-interview PharmD program applicants with a current PharmD student and evaluate the applicant using a standardized rubric on general interview questions and a standardized situational question
- Re-review applicants (applications and interview reports) that were deferred for admission post-interview to reassess and recommend for admission
- Review applications to waive prerequisite requirements
- Reviewe and revise documents for accreditation standards related to admissions

Phi Delta Chi Diag Takeover

University of Michigan College of Pharmacy

• Served as preceptor in the University of Michigan "diag" for 4 PharmD students speaking to the public about the opioid epidemic, pharmacy as a career, and common drug-alcohol interactions for college students

Search Committee for Clinical Instructor in Pharmacogenomics Implementation 2017 *Member* – University of Michigan College of Pharmacy

Student Affairs Committee <i>Member</i> – University of Michigan College of Pharmacy	2016-present
Student Society of Health-System Pharmacists Mock Interview Event Interviewer – Ohio State University College of Pharmacy	2014
Denman Undergraduate Research Forum	2014

2017-2020

2017

2021-present

2017-present

2017

University of North Carolina Alumni Pharmaceutical Science Mentoring Program 2014	
Mentor – Ohio State University	

Reorganization of the Office of Student Affairs <i>Student Representative</i> – University of North Carolina Eshelman School of Phar	2012 macy
Strategic Plan Student Review Committee <i>Member</i> - University of North Carolina Eshelman School of Pharmacy	2011
Graduate and Professional Student Federation Senator - University of North Carolina	2011-2012
Recruitment Ambassador Program <i>Lead PhD Ambassador</i> - University of North Carolina Eshelman School of Pharr	2011-2012 nacy
Recruitment Ambassador Program <i>PhD Ambassador</i> - University of North Carolina Eshelman School of Pharmacy	2010-2011
Pre-Graduate Education Advisory Panel <i>Member</i> - University of North Carolina	2010-2011
Pharmaceutical Sciences Recruitment Weekend Student Host <i>Host</i> - University of North Carolina Eshelman School of Pharmacy	2009
Biochemistry and Anatomy & Physiology Tutoring Program <i>Tutor</i> – University of Pittsburgh School of Pharmacy	2006
Undergrad-Teaching-Undergrads Program <i>Student Teacher</i> – University of Pittsburgh College of Arts & Sciences	2003