# 2024 Summer Public Health Scholars Program Summary of Research Opportunities

Dr. Ben Ansa	2
Dr. Andrew Balas	3
Dr. Nicholas Colgrove	4
Dr. Steven Coughlin	5
Dr. Biplab Datta	6
Dr. Santu Ghosh	7
Dr. K. Monirul Islam	8
Dr. Ban Majeed	10
Dr. Lorriane Odhiambo	11
Dr. Jeane Silva	13
Dr. Ashwini Tiwari	14
Dr. Michael Vitacco	16
Dr. Lauren von Klinggraeff	18
Dr. Hongyan "Nathan" Xu	20

# Benjamin Ansa, MD, MSCR



bansa@augusta.edu

#### **Research Interest:**

- I. Chronic disease and cancer epidemiology, prevention and control
- II. Health disparities (inequities)
- III. Health outcomes and Health services utilization
- IV. Infectious disease epidemiology

# **List of Potential Projects:**

- I. Sex and racial disparities in allergic conditions among adults
- II. Colorectal cancer survival based on clinical and socio-demographic factors

# **Expectation for Summer Scholar:**

Scholars are expected to participate in following activities and to meet once weekly to discuss the progress of assigned work:

- I. Literature review
- II. Analysis of secondary data sets
- III. Poster presentation of results of data analyses
- IV. Manuscript preparation for publication

#### **Other Information:**

Abstracts may be submitted to local scientific conferences for presentation

- **Ansa, B. E.,** Lewis, N., Hoffman, ., Datta, B., & Johnson, J. A. (2021). Evaluation of Blood Stool Test Utilization for Colorectal Cancer Screening in Georgia, USA. Healthcare (Basel, Switzerland), 9(5), 569. https://doi.org/10.3390/healthcare9050569
- **Ansa, B. E.,** Hoffman, ., Lewis, N., Savoy, C., Hickson, A., Stone, R., & Johnson, T. (2019). Aspirin Use among Adults with Cardiovascular Disease in the United States: Implications for an Intervention Approach. J Clin Med, 8(2). doi:10.3390/jcm8020264
- Claridy, M. D., **Ansa, B.,** Damus, F., Alema-Mensah, E., & Smith, S. A. (2018). Health-related quality of life of African-American female breast cancer survivors, survivors of other cancers, and those without cancer. ual Life Res, 27(8), 2067-2075. doi:10.1007/s11136-018-1862-z
- Ansa, B. E., Coughlin, S. S., Alema-Mensah, E., & Smith, S. A. (2018). Evaluation of Colorectal Cancer Incidence Trends in the United States (2000-2014). J Clin Med, 7(2). doi:10.3390/jcm7020022
- White, S., Alva-Ruiz, R., Chen, L., Conger, J., Kuang, C., Murphy, C., ... **Ansa, B. E.** (2016). The Eating and Cooking Healthy (TEACH) Kitchen: A Research Protocol. J Ga Public Health Assoc, 6(2), 331-336. doi:10.21633/jgpha.6.2s20



andrew.balas@augusta.edu

#### Research interests

I am interested in identifying the productivity pathways leading to innovative research discoveries and reproducible results in life sciences. Our research on research studies focus on the evolution of most successful biomedical scientists and fast growing research institutions. To address the problem of research deficiencies, our projects also explore root causes of non-reproducibility and practice variation in research laboratories. Our lab members use techniques such as big data analysis, meta studies, programmed curation, experimental development, and knowledge engineering. The ultimate goal of these studies is to elevate the effectiveness of biomedical research in responding to societal needs and improving public health.

# **List of Potential Projects:**

- Better introduction of new clinical laboratory and therapeutic technologies: There are many new and powerful laboratory methods and treatments. The introduction is poorly understood and we need to learn from best practices. How can we introduce more beneficial innovations and much faster
- Making clinical trials of new laboratory methods more successful: There are 75 new clinical trials published every day, most of them are wasted. Results often turn out to be non-reproducible or uninformative (50-89). How can we prevent errors and make clinical trials more useful
- Content and curriculum development for teaching the methods of reproducibility: In the current research, a very large ratio of preclinical and clinical studies are non-reproducible. Research talent and scholar development programs need to respond to this crisis but unsure about the sources of errors and non-reproducibility. What needs to be covered in training for reproducible research

#### **Summer Scholar Expectations:**

Scholars are expected to participate in following activities and to meet once weekly to discuss the progress of assigned work: literature review, analysis of secondary data sets, poster presentation of results of data analyses, contribution to manuscript preparation for publication

- Aubert, C., **Balas, E. A.**, Townsend, T., Sleeper, N., & Tran, C. J. (2022). Data Integration for the Study of Outstanding Productivity in Biomedical Research. Procedia Computer Science, 211, 196-200.
- Mansour, N. M., **Balas, E. A.**, ang, F. M., & Vernon, M. M. (2020). Prevalence and Prevention of Reproducibility Deficiencies in Life Sciences Research: Large-Scale Meta-Analyses. Medical Science Monitor: International Medical Journal of Experimental and Clinical Research, 26, e922016-1.
- Balas, E. A., & Chapman, W. W. (2018). Road Map for Diffusion of Innovation In Health Care. Health Affairs, 37(2), 198-204.
- Vernon, M. M., **Balas, E. A.**, & Momani, S. (2018). Are university rankings useful to improve research. A systematic review. PloS one, 13(3), e0193762.

# Nicholas Colgrove, PhD



NColgrove@augusta.edu

Education Background: PhD in Philosophy

Specialization in Bioethics and Philosophy of Religion

# **Research Interests:**

- 1. Reproductive ethics. (What is the moral or legal status of abortion, IVF, etc.?)
  - a. Moral and legal status of emerging assisted reproductive technologies. (How should "artificial womb" technologies be developed and used? What about CRISPR? etc.)
- 2. The role of religion in healthcare. (Does religion have a place in healthcare? Why or why not? How should stakeholders' religious views affect clinical practice?)
- 3. Virtue and normativity. (What makes someone a *good* clinician? How should patients be treated? What is the goal of healthcare, public health initiatives, etc.?)
- 4. The nature of disability. (what does it mean to have a disability, are disabilities inherently negative or merely different, etc.)

# **Expectation for Summer Scholar:**

First, find an area of interest in one of the four categories above (as it relates to public health). Second, review the most recent, relevant literature to identify an ethical issue that needs addressed. Third, work together on one or more co-authored manuscripts to address that issue.

#### **Some Publications:**

"Intrauterine Death and Preterm Delivery: What Does Philosophy Have to Offer?" The Journal of Medicine and Philosophy 48(3), 2023: 195-208. <a href="https://doi.org/10.1093/jmp/jhad016">https://doi.org/10.1093/jmp/jhad016</a>

"If You Love the Forest, then Don't Kill the Trees: Health Care and a Place for the Particular." The Journal of Medicine and Philosophy 46(3), 2021: 255–71. https://doi.org/10.1093/jmp/jhab003

## Steven Coughlin, PhD, MPH



scoughlin@augusta.edu

**Research Interest:** Preventive behaviors and social determinants of health among persons with chronic Diseases

# **List of Potential Projects:**

 Analyses of data from the National Health Interview Survey and the Behavioral Risk Factor Surveillance System

# **Expectation for Summer Scholar:**

- •Analysis of data with assistance from a biostatistician
- Preparation of a poster presentation

#### **Recent Publications:**

**Coughlin SS,** Datta B, Berman A, Hatzigeorgiou C. A cross-sectional study of financial distress among patients with multimorbidity. <u>Preventive Medicine Reports</u> 2021;23:101464.

**Coughlin SS**, Datta B, Vernon M, Hatzigeorgiou C, George V. Health literacy among cancer survivors: results from the 2016 Behavioral Risk Factor Surveillance System Survey. Medicine (Wolters) 2022, in press.

**Coughlin SS,** Datta B. Housing Insecurity among Cancer Survivors: Results from the 2017 Behavioral Risk Factor Surveillance System Survey. <u>Journal of Cancer Policy</u> 2022, in press.

**Coughlin SS**, Datta B. Predictors of Unhealthy Physical and Mental Days among Informal Cancer Caregivers: Results from the 2019 Behavioral Risk Factor Surveillance System Survey. Supportive Care in Cancer, in press.

**Coughlin SS**, Datta B, Guha A, Wang X, Weintraub N. Cardiovascular Health among Cancer Survivors: Cross-sectional Results from the 2019 Behavioral Risk Factor Surveillance System Survey, submitted for publication.

**Coughlin SS**, Datta B, Majeed B. Preventive Behaviors among Leukemia and Lymphoma Cancer Survivors: Results from the 2020 Behavioral Risk Factor Surveillance System Survey, submitted for publication.

**Coughlin SS,** Datta B, Guha A, Wang X, Weintraub N. Cardiovascular Health among Gynecologic Cancer Survivors: Results from the 2020 Behavioral Risk Factor Surveillance System Survey, submitted for publication.

**Coughlin SS**, Moore JX, Vernon M, Tingen M. Preventive Behaviors and Behavioral Risk Factors among Gynecologic Cancer Survivors: Results from the 2020 Behavioral Risk Factor Surveillance System Survey, submitted for publication.

Biplab Datta, PhD



bdatta@augusta.edu www.biplabdatta.com

#### **Research Interest:**

Role of psychosocial factors on health outcomes and health behaviors; health disparities; social determinants of health.

# **List of Potential Projects:**

- 1. Role of mass incarceration on population health outcomes
- 2. Role of voter suppression/ Gerrymandering on population health outcomes
- 3. Role of gun violence on population health outcomes
- 4. Role of student debt on health outcomes

# **Expectation for Summer Scholar:**

Data collection from secondary sources, literature review, data analysis, and writing.

- 1. **Datta, B. K.**, Jaremski, J. E., & Johnson, J. A. (2024). Psychosocial well-being and firearm storage practices: evidence from five US states. Injury prevention.
- 2. **Datta, B. K.**, Gummadi, A., & Coughlin, S. S. (2024). Role of life satisfaction, emotional support, and feeling of social isolation on adherence to breast cancer screening recommendations among US women. Journal of Cancer Policy, 100467.
- 3. **Datta, B. K.**, Coughlin, S. S., Ayadi, J., Majeed, B., & Ansa, B. E. (2023). Relationship between social support, life satisfaction, and smoking status among US adults with cardiovascular risks. Behavioral Medicine, 1-10.
- 4. **Datta, B. K.**, Jaremski, J. E., Ansa, B. E., Odhiambo, L. A., Islam, K. M., & Johnson, J. A. (2023). Role of perceived social support in COVID-19 vaccine uptake among US adults. AJPM focus, 100104.
- 5. **Datta, B. K.**, Coughlin, S. S., Gummadi, A., Mehrabian, D., & Ansa, B. E. (2023). Perceived social support and cardiovascular risk among nonelderly adults in the United States. The American Journal of Cardiology, 209, 146-153.

# Santu Ghosh, PhD



sghosh@augusta.edu

#### Research Interest in Statistical Methods:

- I. Non-inferiority Clinical Trials
- II. Bootstrap
- III. Model Selection
- IV. High-Dimensional Data Analysis

Potential Projects: Analyses of data from the Behavioral Risk Factor Surveillance System

**Expectations of Summer Scholar: 1.** Construct one or more scientific hypotheses and analyze the Data with my support to validate the hypotheses. 2. Preparation of a poster presentation **3**. With my collaboration, aim for a peer-reviewed article

#### **Recent Selected Publications:**

# Journal Articles (Biomedical Sciences)

- H. H. Bussenius, D. Batisky, **S. Ghosh**, R. Hayes, and T. Marin, "Leveraging technology for early screening of pediatric blood pressure measurements," **The Journal for Nurse Practitioners**, vol. 20, 2024, p. 104 900.
- A. Buchanan, S. Ghosh, S. Kalathingal, H. Dalsania, and R. Raina, "Effect of three different disinfection methods on the image quality of photostimulable phosphor plates." Oral Surgery, Oral Medicine, Oral Pathology and Oral Radiology, in press, 2023
- Sarrah Hasanali, Daley Morera, Ronny Racine, Martin Hennig, Santu Ghosh, Luis Lopez, Marie Hupe, Diogo Escudero, Jiaojiao Wang, Huabin Zhu, Semih Sarcan, Ijeoma Azih, Michael Zhou, Andre Jordan, Martha Terris, Markus Kuczyk, Axel Merseburger, and Vinata Lokeshwar: "HYAL4-V1/Chase drives gemcitabine resistance and predicts chemotherapy failure in patients with bladder cancer". Clinical Cancer Research, 27, 4410-4421, 2021

# Journal Articles (Statistical Methodology)

- Santu Ghosh, Samiran Ghosh, and Wenge Guo: "A Hierarchical Testing Procedure for Three Arm Non-inferiority Trial". Computational Statistics & Data Analysis, 174, 107521, 2022.
- Arnab Maity, Sanjib Basu, and Santu Ghosh: "Bayesian criterion-based variable selection".
   Journal of Royal Statistical Society: Series C, 70, 835-857, 2021.
- Santu Ghosh, Deepak Nag Ayyala, and Rafael Hellebuyck: "Two-Sample High Dimensional Mean Test Based On Prepivots". Computational Statistics & Data Analysis, 163, 107284, 2021.

#### K. M. Monirul Islam, MBBS/MD, MPH, PhD



kislam@augusta.edu

# Research Interest:

Dr. Islam is an Associate Professor of Epidemiology at the IPPH and DPHS of the Medical College of Georgia at Augusta University and the Senior Program Director of MPH Program (interim) of Augusta University.

His current research foci are patient-centered outcomes research in cancer, infectious diseases, and interventions program evaluation. He is particularly interested in clinical epidemiology, including early detection, diagnosis, treatment, and disease outcomes. The Patient-Centered Outcomes Institute (PCORI) and other National funding agencies funded him as the Principal Investigator to conduct patient-centered outcomes research. He has several ongoing collaborative research projects in the nation and international settings.

Currently, he has actively funded research to assessing the Prevalence of Under-Reporting Sexually Transmitted Infections in Augusta, Georgia, and a CDC-funded project to improve colorectal cancer screening in Georgia.

Dr. Islam developed and taught several graduate courses during his tenure as faculty. Relevant classes that he taught are Epidemiology Methods, Infectious Disease Epidemiology, and Infection and Cancer Epidemiology. He also taught epidemiology and interdisciplinary clinical experiences for M2 students at the medical school.

# **List of Potential Projects:**

Students interested in outcomes and comparative clinical and public health research are encouraged to contact me.

- a) Incidence, mortality, and survival studies of Lung, Colon & Rectum, Liver, Pancreas, Gallbladder, and breast cancers.
- b) Global infectious diseases outcomes projects specifically, TB, MDR-TB, STIs, Malaria, and Hepatitis as well as childhood infections.
- c) Students are required to work with mentor faculty member to develop specific aims of the project after conducting a literature review. Then, work on the project to develop the study design, methods, data collection & analysis, write results and make the conclusion.

There will be some data analysis help from the mentor faculty member for the project.

# The expectation for Summer Scholar:

- a) Students will prepare a poster for presentation describing the project with the following sections: abstract, background, methods, findings/results, and conclusions.
- b) Students will draft a manuscript with the mentor based on the project with the goal of submitting the manuscript for publication.

#### **Other Information:**

During the summer, I will be in the office on most days from 8:30 AM to 5:00 PM with the exception of vacation and research-related travel. I will post my summer schedule soon.

- 1. Kurbaniyazova, G., Joncevska, M., Kalon, S., Kalmambetova, G., Mohr, T., Toktogonova, A., ..., Islam, K.M., Luelmo, Fabio. (2017). Results from GeneXpert MTB/RIF Implementation in Kyrgyzstan. The International Journal of Tuberculosis and Lung Disease. 21 (3):333-337
- 2. **Islam, K.M.**, Jiang, X., Anggondowati, T., Lin, G., & Ganti, A. K. (2015). Comorbidity and Survival in Lung Cancer Patients. Cancer Epidemiol Biomarkers Prev; 24 (7): 1079-85. doi

- 10.1158/1055-9965. EPI-15-0036.
- 3. **Islam, K.M.** and Wen, J. (2015). Prostate Cancer Patients Refusal of Cancer-Directed Surgery: A Statewide Analysis. Prostate Cancer. 829439. doi: 10.1155/2015/829439.
- 4. Simonsen, K. A., Shaikh, R. A., Earley, M., Foxall, M., Boyle, C., **Islam, K.M.**, . . . Margalit, R. (2015). Rapid HIV Screening in an Urban Jail: How testing at exit with linkage to community care can address perceived barriers. J Primary Prevent. DOI 10.1007/s10935-015-0408-1.
- 5. **Islam, K.M.**, Opoku, S., Apenteng, B., Fetrick, A., Ryan, J.E., Copur, M., . . . Ganti, A.K. (2015). Coping With an Advanced Stage Lung Cancer Diagnosis: Patients, Caregivers, and Providers Perspectives. J Cancer Educ. 2015 Apr 23. PMID 25900672.
- 6. **Islam, K.M.**, Wen, J., Jiang, X., Ryan, J.E., Fetrick, A. & Ganti, A.K. (2014). Developing a Web- Based, Patient-Centered Data Collection and Management Approach for a Multi-Center Lung Cancer Study. J of Integr Oncol, 3.121. doi:10.4172/2329-6771.1000121.
- 7. Jasem, J., Marof, K., Nawar, A., Khalaf, ., Al-Hamdani, F., Ali, S., . . . **Islam, K.M.** (2014). An epidemiological analysis of acute flaccid paralysis and its surveillance system in Iraq, 1997-2011. BMC Infectious Diseases, 14(1), 1-9. doi: 10.1186/1471-2334-14-448.
- 8. **Islam, K.M.**, & Araz, O.M. (2014). Evaluating the Effectiveness of Targeted Public Health Control Strategies for Chlamydia Transmission in Omaha, Nebraska: A Mathematical Modeling Approach. Advances in Infectious Diseases, 4(3), 142-151. doi: 10.4236/aid.2014.43021
- 9. **Islam, K.M.**, Opoku, S.T., Apenteng, B.A., Fetrick, A., Ryan, J.E., Copur, M., . . . Ganti, A.K. (2014). Engaging Patients and Caregivers in Patient-Centered Outcomes Research on Advanced Stage Lung Cancer: Insights from Patients, Caregivers, and Providers. J Cancer Educ. doi: 10.1007/s13187-014-0657-3
- 10. **Islam, K.M.**, High, R., Minhas, V., & Margalit, R. (2014). Sexually Transmitted Infections among African-American Population of the Midwest United States. Advances in Infectious Diseases, 4(1), 49-57. doi: 10.4236/aid.2014.41009.
- 11. **Islam, K.M.**, Copur, M., Tolentino, A., Vaziri, I., Ryan, J,E., Fetrick, A., & Ganti, A.K. (2014). Patient-Centered Outcomes Research In Advanced Stage Lung Cancer: Study Design and Population. International Journal of Cancer Studies & Research, 3(101).
- 12. **Islam, K. M.**, Vinson, L., Nared, S., Combs, I., Tibbits, M., Watanabe-Galloway, S., & Margalit, R. (2013). Combating STI Epidemic: Community Perspectives Learned from Mixed-Gender Focus Group Study. ISRN Infectious Diseases, 2013, 6. doi: 10.5402/2013/610271
- 13. **Islam, K.M.**, Shostrom, V., Kessinger, A., & Ganti, A.K. (2013). Outcomes following surgical treatment compared to radiation for stage I NSCLC: a SEER database analysis. Lung Cancer, 82(1), 90-94. doi: 10.1016/j.lungcan.2013.06.021

# Ban Majeed, PhD



bmajeed@augusta.edu

#### **Research Interests:**

- I. Disease and risk factor epidemiology
- II. Tobacco biomarkers of exposure
- III. Tobacco treatment (smoking cessation)
- IV. Resilience and character strength impact on successful cessation

#### **Potential Projects:**

Character Strength and Resilience-based Curriculum for Successful Tobacco Cessation: A Group Counseling Pilot Feasibility Trial

# **Expectation of Summer Scholar:**

Conducting and summarizing relevant literature Writing and co-authoring manuscripts Assisting with preparation of IRB protocols

- Majeed BA, Linder D, Eissenberg T, Tarasenko Y, Smith D, & Ashley DA. Cluster Analysis of Urinary Tobacco Biomarkers among U.S. Adults: Population Assessment of Tobacco and Health (PATH) Biomarker Study (2013-2014). *Preventive Medicine*. 2020. November; 140:106218. https://doi.org/10.1016/j.ypmed.2020.106218
- Majeed BA, Nyman, A, Sterling K, & Slovic P. Little cigars and cigarillos: Affect and perceived relative harm among U.S. adults, 2015. Addictive Behaviors, 2018, Oct;85:107-112.
- Majeed BA, Sterling K, Weaver SR, , Pechacek T, & Eriksen M. Prevalence and harm perceptions of hookah smoking among U.S. adults, 2014–2015. Addictive Behaviors. 2017 Jun;69:78-86.
- Majeed BA, Weaver SR, Gregory K, Whitney C, Slovic P, Pechacek T, & Eriksen M. Changing Perceptions of Harm of E-Cigarettes Among U.S. Adults, 2012-2015. *American Journal of Preventive Medicine*. 2017 Mar;52(3):331-338.
- Majeed BA, Stanton C, Dube S, Sterling K, Burns J, & Eriksen M. Electronic Cigarette Use among Current Smokers: A Pilot Qualitative Study. *Health Behavior & Policy Review*. November 2016, pp. 590-596(7).
- Majeed BA, Dube SR, Sterling K, Whitney C, & Eriksen MP. Opinions about electronic cigarette use in smoke-free areas among U.S. Adults, 2012. *Nicotine Tob Res.* 2015 Jun;17(6):675-81.

Lorriane Odhiambo, PhD, MPH



LODHIAMBO@augusta.edu

#### Research Interests:

- I. Chronic Obstructive Pulmonary Disease (COPD)
- II. Cancer

# List of Potential Projects:

- Reasons for not receiving the HPV Vaccine (subject to change)
  - This project is part of a larger study that investigated the uptake of the HPV vaccine among college students. This part of the project will be an analysis of open-ended responses provided to the question 'what is the main reason you did not want to get this vaccine?' The data was collected in 2017 using an online survey sent to students (undergraduates and graduates) attending a public university in the Midwest. The dataset includes 563 respondents who responded to the question above and provided a reason for lack of HPV vaccine uptake.

# **Expectations of Summer Scholar:**

This is an opportunity for a student to learn some qualitative data analysis. This will be a manual analysis (in excel) conducted by at least two or more people independently (student and myself) then meet to review for consensus on themes that emerged. A student who can or is willing to learn how to conduct basic descriptive analysis (SPSS, SAS, R, etc.) would be ideal so they can also summarize the demographic characteristics of the sample. The main deliverable for this project is a manuscript submitted and hopefully published by the end of 2024. The detailed timeline will be determined during the first meeting with the student.

#### **Published Articles:**

- Odhiambo, L. A., Anaba, E., Stephens, P. C., Cheruvu, V. K., & Zullo, M. D. (2023). Community-Based Approach to Assess Obstructive Respiratory Diseases and Risk in Urban African American Churches. *Journal of Immigrant and Minority Health*, 25(2), 389-397. <a href="https://doi.org/10.1007/s10903-022-01405-w">https://doi.org/10.1007/s10903-022-01405-w</a>
- II. Casey, M., Odhiambo, L., Aggarwal, N., Shoukier, M., Islam, K. M., & Cortes, J. (2023). Representation of the population in need for pivotal clinical trials in lymphomas. *Blood*, 142(9), 846-855. <a href="https://doi.org/10.1182/blood.2023020052">https://doi.org/10.1182/blood.2023020052</a>

- III. Datta, B. K., Jaremski, J. E., Ansa, B. E., Odhiambo, L. A., Islam, K. M. M., & Johnson, J. A. (2023). Role of Perceived Social Support in COVID-19 Vaccine Uptake Among U.S. Adults. AJPM Focus, 2(3), Article 100104. https://doi.org/10.1016/j.focus.2023.100104
- IV. Maloney, M. E., Miranda-Galvis, M., Juarez, B. S., Mamouni, K., Odhiambo, L., Ibrahim, S., Islam, K. M. M., Markowitz, R. B., Desai, K., Rabinovitz, H., Buchanan, K., Patten, D., Davis, L. S., & Cortes, J. E. (2023). Teledermatology for skin cancer screening in rural Georgia utilizing teledermoscopy and distance learning: An ongoing report. *JAAD International*, 11, 140-142. <a href="https://doi.org/10.1016/j.jdin.2023.02.010">https://doi.org/10.1016/j.jdin.2023.02.010</a>
- V. Odhiambo, L. A., Marion, A. J., Callihan, T. R., Harmatz, A. E., Yala, J. A., Bundy, K., & Zullo, M. D. (2023). The Effectiveness of the DeskCycle in Reducing Sedentary Behavior Among Female Office Workers. *Journal of occupational and environmental medicine*, 65(8), E538-E544. <a href="https://doi.org/10.1097/JOM.000000000002882">https://doi.org/10.1097/JOM.00000000000002882</a>
- VI. Casey, M., Odhiambo, L., Aggarwal, N., Shoukier, M., Garner, J., Islam, K. M., & Cortes, J. E. (2022). Are Pivotal Clinical Trials for Drugs Approved for Leukemias and Multiple Myeloma Representative of the Population at Risk? *Journal of Clinical Oncology*, 40(32), 3719-3729. <a href="https://doi.org/10.1200/JCO.22.00504">https://doi.org/10.1200/JCO.22.00504</a>
- VII. Tsai, M. H., Moore, J. X., Odhiambo, L. A., Andrzejak, S. E., & Tingen, M. S. (Accepted/In press). Colorectal cancer screening utilization among breast, cervical, prostate, skin, and lung cancer survivors. *Journal of Cancer Survivorship*. https://doi.org/10.1007/s11764-022-01258-0

# Jeane Silva, PhD, MPA, EdS., EdD., MB(ASCP)<sup>CM</sup>



jsilva@augusta.edu

#### Research Interests:

- 1. Biomarkers to predict multiple myeloma resistance
- 2. Quality of Life in Patients with Drug-Resistant Multiple Myeloma
- 3. Obesity biomarkers: Monogenetic variants of severe obesity

# **Potential Projects**

- 1. Understanding the Relationship Between Social Determinants of Health and Quality of Life in Patients with Drug-Resistant Multiple Myeloma.
- 2. Clinical Manifestations in African American Males with Multiple Myeloma: Moving Beyond CRAB Symptoms
- 3. Association between Melanocortin-4 receptor (MC4R) variants and obesity
- 4. Monogenetic variants of severe obesity: A systematic review

# **Expectations of Summer Scholar:**

Scholars are expected to participate in the following activities and meet once a week to discuss the progress of assigned work:

- 1. Literature review
- 2. Data collection, data analysis, and writing.
- 3. Poster presentation and Manuscript preparation for publication

#### **Peer-Reviewed Publications**

- Kendra Bufkin, Karim Zubair, & Jeane Silva. (2024). Review of the Limitations of Current Biomarkers in Acute Kidney Injury Clinical Practices. SAGE Open Medicine. SOM-23-0959.R1. https://doi.org/10.1177/20503121241228446
- Jeane Silva, Nivin Omar, Vinoth Sittaramane, John K Cowell. (2023). An exploratory study of small molecules screen to identify compounds that suppress cell invasion and metastasis promoted by WASF3 activation. Heliyon-Biochemistry, Molecular and Cell Biology, Oct; 9(10), 2023 [HELIYON-D-23-13761R1 [230704-006379] Published online 2023 Oct 10. doi: 10.1016/j.heliyon.2023.e20662. PMID: 37867831
- **Silva, J.,** Hawthorn, L., & Cowell, J. K. (2020). Inactivation of Lgi1 in murine neuronal precursor cells leads to dysregulation of axon guidance pathways. Genomics, 112(2), 1167-1172. doi: 10.1016/j.ygeno.2019.07.001. PMID: 31276752
- **Silva, J.**, Qin, H., & Cowell, J.K. (2019). Selective inactivation of LGI1 in neuronal precursor cells leads to cortical dysplasia. Genesis, 57(2), 1-6, doi: 10.1002/dvg.23268. <a href="mailto:pmlic:asymptotics.new">PMID: 30489685</a>

# Access Publications online using the link below

URL: <a href="https://www.ncbi.nlm.nih.gov/myncbi/jeane.silva.1/bibliography/public/">https://www.ncbi.nlm.nih.gov/myncbi/jeane.silva.1/bibliography/public/</a>

# Ashwini Tiwari, PhD, MS



atwiari@augusta.edu

#### **Research Interests:**

Child maltreatment and youth resiliency Biobehavioral and stress outcomes and trajectories among youth victims Physiological responses to evidence-based trauma treatments

# **List of Potential Projects:**

# Child Marriage- A scoping review of risk factors and outcomes

# **Project Aims:**

- 1. To identify qualitative literature on child marriage highlighting micro-macrolevel factors influencing child marriage, as well as behavioral, social, physical outcomes in the short and long-term
- 2. To develop a validated for child marriage in the US and globally.

# **Expectations for Summer Scholar:**

The summer student is expected to develop an abstract on the qualitative literature that will be submitted for national presentation. The student will be expected to create results tables that will be used towards manuscript submission in Fall 2024. The student may be asked to assist with development of items that will be tested in the child marriage measure.

# Trauma-Informed Care in Pediatric Primary Care Settings (pending) Project Aims:

1. To understand attitudes and practices in Trauma-Informed Care within outpatient pediatric primary care settings

**Expectations of Summer Scholar:** To assist with development of survey and qualitative interview guides to be used in data collection. The summer scholar may also collect and analyze survey data among pediatric providers.

# **Select Publications:**

- 1. **Tiwari, A.,** Recinos, M.\*, Garner, J. Self-Brown, Durbha, S.\*, Momin, R.\*, Emery, V., O'Hara, K., Perry, L.\*, Stewart, R., & Wekerle, C. (2023). Reviewing the Use and Effects of Technology in Evidence-Based Programs for Child Maltreatment- A Scoping Review. *Frontiers in Digital Health*. 5. 10.3389/fdgth.2023.1224582
- 2. **Tiwari, A.\*\***, Datta, B.K.\*\*, Haider, M.H., & Jahan, M. (2023). The Role of Child Marriage and Marital Disruptions on Hypertension in Women- A Nationally Representative Study from India. *SSM: Population Health. 22,101409*. https://doi.org/10.1016/j.ssmph.2023.101409.

- 3. Garner, J.\*, Self-Brown, S., Emery, V., Wootten, K.\*, **Tiwari, A.** (2023). COVID-19 and Child Maltreatment Risk Factors: A Year in Review (*Trauma, Violence, & Abuse*). *1-17*. https://doi.org/10.1177/15248380231158609
- 4. Datta, B. K., Haider, M. R., **Tiwari, A.,** & Jahan, M. (2022). The risk of hypertension among child brides and adolescent mothers at age 20 s, 30 s, and 40 s: Evidence from India. *Journal of Human Hypertension*, 1-8. <a href="https://doi.org/10.1038/s41371-022-00730-9">https://doi.org/10.1038/s41371-022-00730-9</a>

Michael Vitacco, PhD



mvitacco@augusta.edu

#### **Research Interest:**

Dr. Vitacco s research interests are focused on forensic evaluation of criminal behavior and outcomes of individuals found not guilty by reason of insanity (NGRI) and returned to the community. In addition, he is interested in aspects of clinical-forensic evaluations including methodologies that improve forensic assessment and predict violence. Multiple projects are ongoing including looking at aspects of the conditional release programs for the evaluation and community return of NGRI acquittees and the use of social media in forensic evaluations.

# **List of Potential Projects:**

- 1. We are currently in the process of developing a research collaboration with the Department of Juvenile Justice researching the long-term impact of Adverse Childhood Experiences on outcome post-adjudication. In addition, we are collaborating with the Department of Juvenile Justice looking at the efficaciousness of TARGET, a treatment program. This research will consider the influence of psychopathy and trauma on treatment effectiveness.
- 2. A study on how individuals with intellectual disabilities perform on forensic mental health assessments, especially competency to proceed to trial and evaluations of feigning. This is a long-term project that has multiple collaborators across the United States. Currently, we are working with state forensic hospitals in Georgia to obtain permission to work with their forensic individuals to complete this study. In addition, I am working on
- 3. Several studies are possibly to study the effect of social media on forensic evaluations and how forensic evaluators rely on these data in making decisions and recommendations for the court.

A specific schedule will be developed if a student chooses any of these projects. Students will be expected to work both collaboratively and independently throughout the course of the summer. Schedule will vary by week and there are potential possibilities to observe forensic evaluations and testimony.

# **Recent Publications:**

#### **BOOKS**

Batastini, A.B. & Vitacco, M.J. (Eds). (2020). Forensic Mental Health Evaluations in the Digital Age: A Practitioner's Guide to Using Internet-Based Data. New ork, Springer International Publishing.

# **Journal Articles**

**Vitacco**, M.J., Batastini, A.B., & Smith, C. (in press). Conditional release and cannabis use: Concerns and challenges for community reintegration. *Behavioral Sciences & the Law*.

Kastner, R.M., **Vitacco**, M.J., Anderson, K., & Batastini, A.B. (in press). Risk assessment and provisional discharge: Predictive validity of the HCR-20. *Psychology, Public Policy, & the Law*.

- Gottfried, E., Mulay, A.M., Schenk, A.M., & Vitacco, M.J. (In press). MMPI-2-RF differences between violent offending and institutional violence among incarcerated women. Violence and Victims.
- Roberson, A., & Vitacco, M.J. (in press). Jail-based competency restoration: What is out there and what is missing. *Journal of Correctional Health Care*.
- Vitacco, M.J., Randolph, A.M., Nelson Aguiar, R.J., & Porter Staats, M.L. (2021). Limitations using neuroimaging to reconstruct mental state after a crime. *Cambridge Quarterly Clinical Neuroethics*, 4, 694-701.
- Batastini, A. B., **Vitacco**, M. J., Jones, A. C. T., & Davis, R. M. (2021). Perceived credibility of social media data as a collateral source in criminal responsibility evaluations using an experimental design. *International Journal of Forensic Mental Health*, *20*, 317-332.
- Mulay, A., Gottried, E., Mulis, D., & Vitacco, M.J. (2021). The use of telehealth videoconferencing in forensic Evaluations: Moving forward in times of COVID-19. *Journal of Forensic Psychology Research and Practice*, 1-17.

Lauren von Klinggraeff, PhD, MPH



lvonklinggraeff@augusta.edu

# **Research Interests**

Dr. von Klinggraeff's (Dr. vK) research focuses on the relationship between access to daycare and summer day camp, and short- and long-term health outcomes. This includes children's engagement in healthy behaviors like physical activity, screen time, healthy eating, and sleep as well as longer term health outcomes like weight trajectories and cardiovascular health. She hopes that the work from her lab can help to advance interventions and policy initiatives designed for real-world, wide-spread implementation to ensure all children have the opportunity to be healthy all year long.

# **List of Potential Projects**

A. Title: Systematic Review of Free-Living Measures of Pediatric Cardiovascular Health

# **B. Project Aims:**

- a. Identify what free living measures of pediatric cardiovascular health are currently used in the research literature.
- b. Identify the populations and protocols currently used in the literature.
- c. Summarize the validity and reliability of these measures and how they may impact research findings.
- d. Summarize the utility of these measures for differing types of free-living research studies.
- C. **Summer Scholar Role**: Learn how to conduct a systematic review including developing a search strategy, identifying eligible articles, extracting relevant data, and summarizing findings.
- A. **Title**: Scaling Up Access: Identifying Strategies for Expanding K-12 Summer Programming

# B. Project Aims:

a. To conduct qualitative focus groups and interviews with senior staff at summer program for K-12 children across Georgia and South Carolina.

- b. 2. Characterize the experiences and perceptions of senior staff at summer program for K-12 children across Georgia and South Carolina during periods of program change.
- c. 3. Identify strategies and adaptions (useful and otherwise) used by senior staff at summer program for K-12 children across Georgia and South Carolina during periods of change.
- C. **Summer Scholar Role**: Learn about qualitative research while assisting with recruiting, scheduling, and interviewing study participants, as well as participate in coding qualitative data and analysis.
- A. **Title**: Implementation Mapping the Expanding Parents' Access to Nontraditional Delivery (EXPAND) Grant

# B. Project Aims:

- a. Describe how the EXPAND grant is being implemented
- b. Identify determinates of successful implementation initiation
- c. Identify existing implementation strategies and potential outcome evaluation metrics
- D. **Summer Scholar Role**: Learn about implementation mapping and qualitative research while assisting with recruiting, scheduling, and interviewing study participants, as well as participate in coding qualitative data and analysis, and implementation mapping.

# Select Publications

**von Klinggraeff L,** Pfledderer CD, Sarah B, Beets MW. Balancing Frameworks with Reality in Behavioral Intervention Development: A Survey of Investigators Funded by the National Institutes of Health to Conduct Preliminary Studies. Transl. Behav. Med.

Pfledderer CD, Burkart S, Dugger R, Parker H, **von Klinggraeff L**, Okely AD, Weaver RG, Beets MW. What does it mean to use the mean? The impact of different data handling strategies on the proportion of children classified as meeting 24-hr movement guidelines and associations with overweight and obesity. *JASSB* 

**von Klinggraeff L**, Ramey K, Pfledderer CD, Burkart S, Armstrong B, Weaver RG, Beets MW. The mysterious case of the disappearing pilot study: a review of publication bias in preliminary behavioral interventions presented at health behavior conferences. *Pilot Feasibility Stud.* 9, 115 (2023). https://doi.org/10.1186/s40814-023-01345-8

Weaver RG, White III JW, Finnegan O, Armstrong B, Beets MW, Adams EL, Burkart S, Dugger R, Parker H, **von Klinggraeff L**, Bastyr M, Zhu X, Bandeira AS, Reesor-Oyer L, Pfledderer CD, Moreno JP. Understanding Accelerated Summer BMI Gain by Tracking Changes in Children's Height, Weight, and BMI Throughout the Year. Childhood Obesity. 2023. DOI:10.1089/chi.2023.0029.

# Hongyan "Nathan" Xu, PhD



hxu@augusta.edu

# **Research Interest:**

- I. Genetics of Human Diseases
- II. Genomics
- III. Machine Learning and Artificial Intelligence

# **List of Potential Projects:**

- 1. Analysis of Whole Genome Sequencing data from All of Us project
- 2. Identifying variables contributing to human diseases
- 3. disease risk modeling and prediction

#### **Expectation of Summer Scholar:**

Scholars are expected to participate in following activities and to meet once weekly to discuss the progress of assigned work:

- I. Literature review
- II. Analysis of secondary data sets
- III. Poster presentation of results of data analyses
- IV. Manuscript preparation for publication

#### **Recent Publications:**

Le B, **Xu H**, Weaver FM, Huo , Avidano R, Hurlburt P, Morgan S, Carbone L. Association of Calcium and Vitamin D Supplements with Fractures in Persons with a Traumatic SCI. Topics in Spinal Cord Injury Rehabilitation. 2024 Feb 1;30(1):98-112.

Dougherty MP, Poch AM, Chorich LP, Hawkins A, **Xu H**, Roman RA, Liu H, Brakta S, Taylor HS, Knight J, Kim HG. Unexplained Female Infertility Associated with Genetic Disease Variants. The New England journal of medicine. 2023 Mar 16;388(11):1055-6.

Brakta S, Hawkins A, Sahajpal N, Seman N, Kira D, Chorich LP, Kim HG, **Xu H**, Phillips III JA, Kolhe R, Layman LC. Rare structural variants, aneuploidies, and mosaicism in individuals with Mullerian aplasia detected by optical genome mapping. Human Genetics. 2023 Feb 17:1-2.

hao , Riching AS, Knight WE, Chi C, Broadwell LJ, Du , Abdel-Hafiz M, Ambardekar AV, Irwin DC, Proenza C, **Xu H**. Cardiomyocyte-Specific Long Noncoding RNA Regulates Alternative Splicing of the Triadin Gene in the Heart. Circulation. 2022:10-161.