



Pathways

TTUHSC Department of Public Health Newsletter, Spring 2020, Issue 7

Public Health in the Time of COVID-19

Thank you all for your patience as we all navigate the new world that COVID-19 has dealt us. Halfway through the spring, we moved all classes online and all APE projects out of the field. It has been a challenge for everyone, but you have shown great resilience and ability to adapt.

Summer classes are underway, and as always, they are 100% online. Please follow departmental announcements and emails for guidance on how we will continue into the fall semester. Most of all, please stay safe!

Fall classes
start
Monday,
August 17th!



MPH Trip to Philippines

In January this year, MPH and Nursing students travelled to Dumaguete, Philippines on a TTUHSC International Education Trip, led by the Office of Global Health. The MPH students included Savannah Forsyth, Aksha Upadhyay, Jnev Biros, Cain Lara, and Obi Udensi. Students were introduced to the Philippines health care system, and toured several hospitals and the Dumaguete public health department. Community needs assessment of Canday-Ong was conducted with the assistance of students from Siliman University. Students were accompanied by Drs. Theresa Byrd and Rubini Pasupathy.

Pictured (L to R): MPH students Cain Lara, Jnev Biros, M.D., Savannah Forsyth, Aksha Upadhyay

Announcements

- Fall registration is now open. Current students should contact their faculty advisor for guidance on fall classes
- Incoming online students will complete MPH orientation entirely online
- Fall 2020 orientation for new students is scheduled for August 10th

New additions

- Dr. Emily Bailey joined the department as an Assistant Professor on the Abilene campus in October, 2019. Dr. Bailey is an environmental scientist who comes to TTUHSC from a postdoctoral fellowship at Duke University.
- Dr. Lisa Gittner transitioned from part-time to full-time faculty in the department in August 2019. She is an Associate Professor on the Lubbock campus.

Recent Graduates

Summer 2019

Nathan Villalpando (MPA/MPH)
Robyn Wood
Jeanette Cala
Vianne Nanez
Ashley Roest
Ashley Sciba

Fall 2019

Verneicia Allen
Brittany Duhart
Samantha Guerra
Sally Lutes
Andres Martinez-Marin
Tyler Maylone
Abigail Sitton
Bridget Haney
Joan Mathew
Ricardo Casarez
Sidonie Ngangmi
Jaffer Samad
Dixon Santana, M.D.

Spring 2020

Savannah Forsyth
Amber Zickefoose
Kelsey Rosenberger
Shanice Latham (M.D./MPH)
Dena Helo
Danielle Goss
Kali Gentry
Kishor Bhende, M.D.
Jnev Biros
Chelsea Castnuela
Noah De Le Cruz
Rachel Farias
Julie Hamsa
Nicole Keirse (MPA/MPH)
Domitien Nibizi
Brittane Schaake
Obadeh Shabaneh
Kelsey Sprinkles
Aksha Upadhyay

(Dual degree graduates in parentheses)

**Congratulations to all of our
new MPH graduates!**

Faculty Activities & Honors

- **Dr. Courtney Queen** was named a Fulbright Scholar by the J. William Fulbright Foreign Scholarship Board, Department of State
- **Dr. Julie St. John** and **Liesl Wyett** were selected for the first cohort of the TTUHSC One Team Fellows Leadership program
- **Dr. Duke Appiah** received the Trudy Bush Fellowship for Cardiovascular Disease Research in Women's Health, American Heart Association Council on Epidemiology and Prevention
- **Dr. Emily Bailey** received a research award from the F. Marie Hall Institute for Rural and Community Health.
- **Dr. Courtney Queen** became an affiliate of the Virtual Institute for Transdisciplinary Research and Scholarship for Africa at Texas Tech University
- **Dr. Duke Appiah** was named Outstanding Teacher of the Year. The Graduate School of Biomedical Sciences.
- **Dr. Emily Bailey** will be partnering with ACU on COVID-19 testing for the fall semester.
- **Dr. Hafiz Khan** joined the *Journal of Alzheimer's Disease* editorial board as an associate editor
- **Dr. Jeff Dennis** joined the editorial board of *Alcoholism Treatment Quarterly*
- **Dr. Courtney Queen** was elected to the TTUHSC Faculty Senate
- **Dr. Courtney Queen** joined the Association of Schools and Programs in Public Health committees on Academic Affairs and the Global Health Network for Academic Public Health
- **Dr. Jeff Dennis** was selected for the TTUHSC Quality Enhancement Plan Steering Committee on student wellness

Recent Publications

- Anderson BD, Yondon M, **Bailey ES**, Duman EK, Greer AE, & Gray GC. Establishing Environmental Bioaerosol Surveillance in North Carolina Swine Farms: A Pilot Study. *Transboundary and Emerging Infectious Diseases*. (*Accepted for Publication 3/28/2020*).
- Appiah D**, Nwabuo CC, **Owoade DR**, **Samad J**, Ebong I, Winters SJ. Family history of premature myocardial infarction modifies the associations of bilateral oophorectomy with cardiovascular disease mortality in a US national cohort of postmenopausal women. *Menopause*. 2020 27(6):658-667
- Appiah D**, Winters SJ. Hormone therapy for preventing heart failure in post-menopausal women. *J Card Fail*. 2020;26:13-14
- Bailey ES**, Fieldhouse JK, Alarja NA, Chen DD, Kovalik GE, Zemke JN, Choi JY, Borkenhagen LK, Toh T-H, Lee JSY, Chong K-S, and Gray GC. First Sequence of Influenza D Identified in Poultry Farm Bioaerosols in Sarawak, Malaysia. *Tropical Diseases, Travel Medicine, and Vaccines*. (*In Press*)
- Bailey ES**, Greer AE, and Gray GC. A Feasibility Study of Conducting Surveillance for Swine Pathogens in Swine Slurry in North Carolina Swine Farms. *Scientific Reports*. (*In Press*).
- Ball S, **Dennis JA**, Bedanie G, Nugent K. (2020). Relation between mean platelet volume and C-reactive protein. *Baylor University Medical Center Proceedings* (pp. 1-6).
- Bradatan C,* **Dennis JA**,* Flores-Yeffal N, & Swain S. (2020). Child health, household environment, temperature and rainfall anomalies in Honduras: a socio-climate data linked analysis. *Environmental Health*, 19(1), 10.
- *denotes equal contributions. Listed alphabetically.
- Calderón-Mora J, **Byrd TL**, Alomari A, Salaiz R, Dwivedi A, Mallawaarachchi I, Shokar N. Group Versus Individual Culturally Tailored and Theory-Based Education to Promote Cervical Cancer Screening Among the Underserved Hispanics: A Cluster Randomized Trial. *Am J Health Promot*. 2020 34:15-24.
- Catov, JM, Sun B, Bertolet M, Snyder G, Lewis CE, Allen N, Shikany J, Ingram K, **Appiah D**, Gunderson EP. Changes in Cardiometabolic Risk Factors Preceding Gestational Diabetes: A Life Course Analysis in CARDIA Women. *Obesity* 2020. [*In press*]
- De-La-Cruz N**, **Shabaneh O**, **Appiah D**. The Association of Ideal Cardiovascular Health and Ocular Diseases in the US Population. *Am J Med* [*In press*]
- Dennis JA**. (2019). Bridging clinical perspectives with population health research. *The Southwest Respiratory and Critical Care Chronicles*, 7(31), 56-58.
- Dennis JA**. (2020). Racial/Ethnic Disparities in Triage Scores Among Pediatric Emergency Department Fever Patients. *Pediatric Emergency Care*. Published online first 3/2/2020.
- Dennis JA**, **Gittner LS**, **George AK**, **Queen CM**. In press. Opioid use disorder terminologies and the role of public health in addressing stigma. *Alcoholism Treatment Quarterly*.
- Dissanayaka AM, Mengel S, **Gittner LS**, **Khan HMR**. Vulnerability prioritization, root cause analysis, and mitigation of secure data analytic framework implemented with MongoDB on Singularity Linux containers. *Proceedings, 4th International Conference on Compute & Data Analysis*, pp. 58-66. 2020.
- Dissanayaka AM, Mengel S, **Gittner LS**, **Khan HMR**. Security Assurance of MongoDB in Singularity LXC: An Elastic & Convenient Testbed Using Linux Containers to Explore Vulnerabilities. *Cluster Computing*, submitted March 2019, accepted with minor revisions February 2020.
- Khan HMR**, **Rasmussen D**, **Gittner LS**, Rafiq A, **Blakely S**, **Shabaneh O**, **Reddy PH**. Gender differences in prevalence of myocardial infarction in rural West Texans, *J Public Health*, 2020.

Publications (continued)

- Khan HMR**, Rafiq A, **Gittner LS**, **Reddy PH**. Current Issues in Chronic Diseases: A Focus on Dementia and Hypertension in Rural West Texans, *Journal of Alzheimer's Disease*, 72:S59-S69, 2019.
- Kim C, Slaughter JC, Terry JG, Jacobs D, Parikh N, **Appiah D**, Leader B, Wellons, MF. Anti-Müllerian hormone and markers of systemic oxidative stress, inflammation, and endothelial dysfunction in the Coronary Artery Risk Development in Young Adults (CARDIA) Study. *Fertil Steril* 2020.
- Kopel J, **Dennis JA**, Nugent K. In press. Electronic cigarette survey characteristics. *Journal of Community Hospital Internal Medicine Perspectives*. doi: 10.1080/20009666.2020.1766841
- Lung J, Tsen A, Evans E, **Dennis JA**. In press. Financial safety net and subjective happiness in medical students. *College Student Journal*.
- Nwabuo CC, Yano Y, Moreira H, **Appiah D**, Vasconcellos HD, Aghaji Q, Viera A, Rana J, Shah RV, Murthy VL, Allen NB, Schreiner PJ, Lloyd-Jones D, Lima JAC. Long-term Blood Pressure Variability in Young Adulthood and Coronary Artery Calcium and Carotid Intima-Media Thickness in Mid-Life: The CARDIA Study. *Hypertension [In press]*
- Nwabuo CC, Yano Y, Moreira HT, **Appiah D**, Vasconcellos HD, Aghaji QN, Viera A, Rana JS, Shah RV, Murthy VL, Allen NB, Schreiner PJ, Lloyd-Jones DM, Lima JAC. Association Between Visit-to-Visit Blood Pressure Variability in Early Adulthood and Myocardial Structure and Function in Later Life. *JAMA Cardiol.* 2020 Apr 15. [Epub ahead of print]
- Nwabuo CC, **Appiah D**, Moreira HT, Vasconcellos HD, Yano Y, Muntner P, Reis JP, Shah RV, Murthy VL, Allen B, Sidney S, Lewis CE, Lloyd-Jones DM, Schreiner PJ, Gidding S, Lima JAC. Long-term Cumulative Blood Pressure in Young Adults and Incident Heart Failure, Coronary Heart Disease, Stroke, and Cardiovascular Disease: The CARDIA Study. *Eur J Prev Cardiol.* [In press]
- Nwabuo CC, **Appiah D**, Moreira HT, Vasconcellos HD, Aghaji QN, Ambale-Venkatesh B, Rana JS, Allen NB, Lloyd-Jones DM, Schreiner PJ, Gidding SS, Lima JAC. Temporal Changes in Resting Heart Rate, Left Ventricular Dysfunction, Heart Failure and Cardiovascular Disease: CARDIA Study. *Am J Med.* 2020 Jan 27. [Epub ahead of print]
- Pitalua Rodriguez MA**, Mengel S, **Gittner LS**, **Khan HMR**. Automated Hot-spot Identification for Spatial Investigation of Disease Indicators, IEEE Fifth International Conference on Big Data Computing Service and Applications, p.9-18, 2019.
- Rocha-Melogno L, Ginn O, **Bailey ES**, Soria F, Andrade M, Bergin M, Brown J, Gray GC, Deshusses M. Bioaerosols Sampling Optimization for Personal Exposure Assessment in Cities with Poor Sanitation: A One Health Cross Sectional Study. *Science of the Total Environment.* (In press)
- Wang X, **Bailey ES**, Qi X, Yu H, Bao C, and Gray GC. Bioaerosol Sampling at a Live Animal Market in A China: A Noninvasive Approach for Detecting Emergent Viruses. *Open Forum Infectious Disease (In Press)*.
- Xiu L, Binder, RA, Alarja NA, Kocheck K, Coleman KK, Than TS, **Bailey ES**, Bui VN, Toh TH, Erdman DD, Gray GC. A RT-PCR Assay for the Detection of Coronaviruses from Four Genera. *J Clin Virology.* (In Press).
- Yen LH, Khanh NC, Coleman KK, Nguyen TT, Son TT, Hai PH, Manh ND, Nghia ND, Dan PT, Phuong HVM, Long TP, **Bailey ES**, Warkentein TE, and Gray GC. Virus Detections Among Patients Hospitalized with Pneumonia, Northern Vietnam. *PLOS ONE (In press)*.

**Public health faculty, students, and alumni in bold text*

Departmental Grants and Funding

Dr. Duke Appiah

Funder: National Heart, Lung, and Blood Institute (NHLBI), R21

Title: Beyond black and white: Understanding skin tone as a driver of prepregnancy cardiometabolic health and birth outcomes

Role: Subcontract Principal Investigator

Funder: National Heart, Lung, and Blood Institute (NHLBI), Research supplement

Title: Characterizing Trajectories of Quantitative Changes in the Plasma Proteome across the Menopausal Transition

Role: Candidate (Project Principal Investigator)

Funder: Garrison Institute on Aging, Collaborative Seed Grant Program in Aging

Title: Mind your heart: the association of heart/vascular aging with mild cognitive impairment using data from project FRONTIER

Role: Principal Investigator

Funder: Garrison Institute on Aging, Collaborative Seed Grant Program in Aging

Title: Biopsychosocial predictors of cognitive stability, decline, and resilience in a sample of older, rural-dwelling West Texans: a retrospective cohort study using data from project FRONTIER

Role: Co-investigator

Funder: Department of Defense, Peer Reviewed Cancer Research Program

Title: Immunotherapeutic targeting of glioblastoma with oncolytic virus and listeria-based anti-cancer vaccine

Role: Biostatistician

Dr. Courtney Queen

Funder: TTUHSC Clinical Research Institute, CRI Seed Grant opportunity, pre-proposal award consideration

Title: Skin and Neglected Tropical Disease Image Repository and mHealth Tool for Image Recognition of Early Stage Buruli Ulcer Disease.

Role: Principal Investigator

Funder: National Science Foundation

Small Business Innovation Research Program/Small Business Technology Transfer, Phase I Pitch

Role: Principal Investigator

Drs. Lisa Gittner and Hafiz Khan

Funder: National Science Foundation

Title: Risk Modeling Using Big Data, NSF-2019-TTU-6-I/UCRC Cloud Autonomic Computing Center

Roles: Principal Investigator (Gittner); Co-Investigator (Khan)

Drs. Lisa Gittner and Jeff Dennis

Funder: Bureau of Justice Assistance. Category 2 Justice and Mental Health Collaboration Grant.

Title: Consistency and Coordination through Training: It all starts with training. PI: Lt. Misti Snodgrass

Role: Consultants

Faculty and Student Presentations

Ali K, Sawant N, Kumar S, Vijayan M, Ramasubramanian B, Adi PJ, **Gittner LS**, **Khan HMR**, Reddy PH. Is Alzheimer's a Lifestyle Disease: A Critical Assessment? Student Research Week, 2020.

Appiah D, Lewis CE, Carr J, Gross M, Jacobs DR, Sidney S, Shikany JM, Quesenberry CP, Gunderson EP. Lactation Duration Is Associated with Lower Visceral and Pericardial Fat Volumes in Parous Women: 25-Year Follow-up in the CARDIA Study (*Presented at the American Heart Association's Epidemiology and Prevention/ Lifestyle and Cardiometabolic Health Scientific Session, Phoenix, AZ*), March 5, 2020.

Appiah D, Nwabuo CC, Owoade DR, Samad J, Ebong I, Winters SJ. Family History of Premature Myocardial Infarction Modifies the Association between Bilateral Oophorectomy and Heart Disease Mortality in a National Cohort of Postmenopausal Women. (*Presented at the American Heart Association's scientific session, Philadelphia, PA*), November 18, 2019.

Bailey ES, Ahong V, DiResi J, Gray GC. Farmers and Feces: A One Health Approach to Emerging Swine Zoonoses. (Oral Presentation) *American Society of Tropical Medicine and Hygiene (ASTMH) Annual Meeting November 2019 National Harbor, Washington, D.C.*

Brindle, A., Koganti, S., & **Pasupathy, R.** (2019). Dietary Supplement and Medication Use and Knowledge in Collegiate Athletes of Rural West Texas. American Association of Colleges of Pharmacy (AACP) Annual Meeting, Chicago, Illinois

Dennis JA, **Lara C**, **Ahmed H**, Patel B. Emergency department use for mental health symptoms, 2009-2015. American Public Health Association annual meeting, Philadelphia, PA. 11/04/19.

Dennis JA, Zhang Y, Zhang F, Mi N. Gender Differences in Mortality and Procedure for Patients Treated for Stroke at UMC from 2013-2016. Presented at 2019 Laura W. Bush Institute Gender-Specific Medicine and Women's Health Symposium, Lubbock, TX. October 25, 2019.

Dissanayaka AM, Mengel S, **Gittner LS**, **Khan HMR**. Vulnerability Prioritization, Root Cause Analysis, and Mitigation of Secure Data Analytic Framework Implemented with MongoDB on Singularity Linux Containers. Accepted by International Conference on Compute and Data Analysis (ICDA), 2020.

Lara S, **Khan HMR**, **Gittner LS**, **Rasmussen D**, **Blakely S**, Rafiq A. Breast Cancer Mortality of Rural West Texans in High-Risk Hale County, APHA's 2019 *Annual Meeting and Expo*, Philadelphia, PA, November 2-6, 2019.

Lara S, Rafiq A, **Blakely S**, **Rasmussen D**, Hossain A, **Gittner LS**, **Khan HMR**, "Breast Cancer Mortality of Rural West Texans in High-risk Hale County". Student Research Week, March 21, 2019.

Levine R, Grubb M, Salemi J, Wood S, **Gittner LS**, **Khan HMR**, Hennekens C. Infant Mortality and Youth Homicide Rates: United States, 1999-2016, APHA's 2019 *Annual Meeting and Expo*, Philadelphia, PA, November 2-6, 2019.

Presentations (continued)

Pasupathy, R., Gho, J., & **Duhart, B.** (2019). Content Analysis of Alcohol Consumption Messages in Korean Dramas. Presented at Qualitative Health Research (QHR) Conference, Vancouver, Canada.

Pasupathy, R., Gho, J., **Vugrin, M.,** & **Duhart, B.** (2019). Scoping Review of Alcohol Portrayal in South Korean Media. Presented at the American Public Health Association (APHA) Annual Meeting and Expo, Philadelphia, Pennsylvania.

Pitalua Rodriguez MA, Mengel S, **Gittner LS, Khan HMR.** Automated Hot-spot Identification for Spatial Investigation of Disease Indicators. 2019 IEEE Fifth International Conference on Big Data Computing Service and Applications (BigDataService), April 4-9, 2019, San Francisco East Bay, CA

Tu, Brittany **Pitalua Rodriguez M,** Mengel S, **Khan HMR, Gittner LS.** Building Effective Intervention Models Utilizing Big Data to Prevent Obesity Epidemic. April 03, 2019, Undergraduate Research Conference, Texas Tech University

Shabaneh O, Rasmussen D, Rafiq A, **Blakely S, Reddy PH, Gittner LS, Khan HMR.** Gender Differences in Prevalence of Myocardial Infarction in Rural West Texans. Student Research Week, March 20, 2019

Queen CM. Speaker: Pope Fellows in Public Policy. Abilene Christian University.

Queen CM. Homelessness, Housing, and Health. Community Foundation of Abilene.

Queen CM. SUD and infectious disease. Opioid Symposium: Collaborating to solve a crisis. Prevention Resource Center

Tu, Brittany **Pitalua Rodriguez M,** Mengel S, **Khan HMR, Gittner LS.** Building Effective Intervention Models Utilizing Big Data to Prevent Obesity Epidemic, APHA's 2019 *Annual Meeting and Expo*, Philadelphia, PA, November 2-6, 2019.

Zhang Y, **Dennis JA,** Lauche R, Cramer H, Munk N. Increasing trend of yoga practice among US adults: Findings from NHIS 2002 to 2017. American Public Health Association annual meeting, Philadelphia, PA. 11/04/19.

***Public health faculty, students, and alumni in bold**

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