



## 2021 CoRS Summaries



# Mid- Implementation CoRS Report

## Airbnb and Public Safety Risks

Rui Qi, Ph.D.

Assistant Professor

Kemmons Wilson School of Hospitality and Resort Management The University of Memphis

### **Objective**

This study aims to quantify the role of safety perceptions in hospitality decision-making (Airbnb vs. hotels) during and after the pandemic. Furthermore, this study will evaluate the effectiveness of risk reduction efforts (the “enhanced cleaning” program) of Airbnb.

### **Rationale**

The COVID-19 pandemic illustrates that the lodging industry is highly vulnerable to public health crises (McKinsey & Company, 2020). Recent industry reports indicate that more than half of the hotel rooms in the U.S. remain empty (STR, 2020). Airbnb as a shared accommodation platform is facing unique challenges. The pandemic has created safety concerns associated with travel activities and mistrust between Airbnb hosts and guests. While hotels may have an advantage over Airbnb due to hygiene standards, Airbnb may also be preferred by consumers because of social distancing. As health and safety are becoming more critical to hospitality decision-making, this study will quantify how travelers perceived the safety risks of staying in Airbnb compared to hotels, as well as how these risk perceptions affect travelers’ preference and behavior.

To reduce the safety risks, hotels have established cleaning protocols and have adopted new technologies (e.g., service robots, QR codes), while Airbnb is requiring “enhanced cleaning” (e.g., sanitize surfaces, use cleaners approved by health experts, wear a mask and gloves, wash all linens on high heat). Airbnb also has banned parties in markets such as Memphis, as well as removing the “event-friendly” search filter from its site. Airbnb has been criticized for not considering the wellbeing of local communities. The pandemic may be an opportunity for Airbnb to take into consideration the wellbeing of its guests and hosts. Therefore, assessing the effectiveness of Airbnb’s safety measures is critical to developing resilience and being sustainable.

### **University and community partners**

We plan to work closely with Metropolitan Memphis Hotel & Lodging Association, Memphis Tourism, HospitalityTN, Smith Travel Research, American Resort Development Association, and local Airbnb hosts through Airhosts Forum.

### **Criteria for university and community partner selection**

The university and community partners are selected based on their knowledge of the tourism industry and their impacts on local communities.

### **Project work that has been completed through January 30, 2021**

We have completed the literature review and survey development through January 30, 2021.

### **Project work expected to be completed through April 30, 2021**

We will complete the IRB application, data collection, one manuscript submission, and one grant application through April 30, 2021.

# Covid-19 screening using pool testing in Memphis

Xichen Mou, Ph.D.

Assistant Professor

School of Public Health

## Objective

The general goal of the project, Covid-19 screening using pool testing in Memphis, is to develop a statistical model of pool testing data to correctly estimate the prevalence of the Covid-19 taking misclassification error into account.

## Rationale

Since the breakout of the pandemic one year ago, over 2 million people died from the Covid-19 in the world. As the winter has come, the Covid-19 outbreak gets worse, and the daily infections reached a new record. One important approach to contain the spread of the virus is to screen positive cases efficiently and accurately. By doing so, infected patients can be isolated in a timely manner, preventing future infections. A prompt diagnosis can also help decision-makers to understand the most up-to-date situation of the pandemic and make the reopening policies.

Pool testing, or group testing, is a time-efficient screening strategy to pool individual specimens (e.g., blood, urine, swabs, etc.) together, and test the pools for the presence of disease. When the pools are tested positively, everyone in the pool is retested separately to identify the disease status. Group testing saves laboratory time and money because numerous individuals can be diagnosed as negative using one single test.

One potential concern of the pool testing strategy is the misclassification error. No screening test is perfect. There is always a chance, usually small, to diagnose a diseased person as negative (false negative), or vice versa. When specimens are mixed, the situations become more complicated: A misclassification in the pool will affect the subsequent diagnosis of each member; the test accuracy may also be affected since the virus may be diluted by mixing healthy and diseased samples and thus harder to be detected. Without understanding the misclassification errors in the pool testing strategy, one can hardly interpret the results of pool testing correctly and cannot obtain a good estimation of the true prevalence. Thus, a statistical model accounting for the misclassification error is necessary to help the practitioners to understand the pool testing results.

## Criteria for university and community partner selection

The university and community partner should satisfy one of the following criteria:

- (1) Qualifications in laboratory work regarding pool testing data
- (2) Expertise in community-based research

## Community partner

Poplar Healthcare is a laboratory services company headquartered in Memphis. The company offers a variety of Covid-19 testing services for individuals and organizations in Memphis using the pool testing strategy.

## The project work that has been completed through Jan 30, 2021

We were actively seeking collaboration opportunities with the community partner, Poplar Healthcare, which has been providing Covid-19 pool testing to people in Memphis during the past year. The data connection between Poplar Healthcare and our team is close to completion.

## The project work expected to be completed through April 30, 2021

- (1) Complete the data-sharing agreement with Poplar Healthcare.
- (2) Build a statistical model to analyze the pool testing data provided by Poplar Healthcare to estimate the prevalence of the Covid-19, together with the sensitivity and specificity of the screening test.
- Summarize the finding of the proposed model and draft a grant application in the aspect of disease screening.

# It takes a team to break through invisible barriers to literacy

Deborah Moncrieff, Ph.D., Assistant Professor, School of Communication Sciences and Disorders

## **Objective**

The objective of this project is to use screening tools to measure the prevalence of children with auditory and visual processing weaknesses and to establish the efficacy of these tools for identifying children at risk of learning problems from these weaknesses.

## **Rationale for the Project**

Many children struggle with learning disabilities that interfere with literacy. Because hearing or vision loss can interfere with learning, screening measures are mandated so that appropriate intervention can be provided when they are identified. Hearing and vision screenings test one ear or eye at a time, but children must be able to process sensory information arriving through both ears and eyes under all environmental conditions to fully develop language, learning and literacy skills. Simple tests of auditory and visual processing can go beyond assuring that each child can detect signals through their ears and eyes and further demonstrate that he/she can also process complex signals through pathways in the brain that underlie learning.

## **Community Partners**

University Partners- Marian Levy, DrPH, RD, FAND; Carolyn Kaldon, PhD; Jennifer Taylor, AuD; Katherine Mendez, MA

Community Partners- Melissa Zarn, OD, Southern College of Optometry; Anasa Franklin, Literacy Mid-South; Gay Landaiche, Bodine School; Campus School, Bodine School, Perea Elementary, Rossville Christian Academy, and Millington School District

## **Criteria for Partner Selection**

Partners were selected to provide: expertise with assessment and intervention of auditory and visual processing skills; direction regarding the selection of appropriate tools; an overview of the links between health-related weaknesses in school-age children that could have a negative impact on educational outcomes, assistance with the collection and analysis of data; opportunities to increase literacy.

## **Work Completed through January 30, 2021**

We have held several meetings to coordinate activities across members on our team. The auditory and visual processing screening instruments have been identified and some measures have been obtained under a previously approved IRB protocol. Two new schools are being enrolled in the project and a new protocol will be submitted for approval in the next 2 weeks. Graduate student researchers have screened children whose parents have signed consent forms to date and new researchers from the Southern College of Optometry will join the team next month.

## **Project Work Expected to be Completed through April 30, 2021**

All screening assessments will be completed at all enrolled schools, some in-person and some online. Data will be collected and analyzed to determine the prevalence of auditory and visual processing weaknesses. A written questionnaire will be developed and given to 3 parents who will provide information related to their child's experiences with the process and how they interpret their child's performance with respect to literacy. An external funding agency will be identified for submission of a grant application for an expansion of this project to produce evidence of the importance of identifying auditory and visual processing weaknesses that may undermine literacy development in young children.

# Social Action to Impact Homelessness and Medical Recuperation

Drs. Sachiko Terui and Joy V. Goldsmith, Department of Communication and Film

## Objective

In this project, we view homeless people as experts in knowing the barriers to and facilitators of achieving housing security. Our research community will recruit individuals who are facing homelessness and ask them to share their experiences of homelessness, health care services, and stigma they face on a daily basis.

## Rationale for the Project

In this project, Terui and Goldsmith and their team members view the unsheltered in Memphis as experts in knowing the barriers to and facilitators of achieving housing security. Manna House guests are sharing their experiences of homelessness, health care services, and stigma they face on a daily basis. Participants have received disposable cameras, captured 24 images of their life that underscore the themes of the project, and have shared their narratives that unpack the images.

## Partners

University Partners- Matthew Haught, Ph.D. (Associate Professor, Journalism and Strategic Media); Andrew Tawfik, Ph.D. (Assistant Professor, Instructional Design & Technology)

Community Partners- Pete Gathje, Ph.D. (Vice President of Academic Affairs/Dean Memphis Theological Seminary, Co-Director of Manna House); Elaine Hsieh, Ph.D., JD (Professor, University of Oklahoma);

## Criteria for Partner Selection

Partners were selected to contribute to: media theory and design central to the intervention messages produced; theory and resources central to homelessness, health policy and law; understanding of using and designing technologies to deliver educational content and deliver persuasive mobile content to both homeless/housing insecure individuals and members of the community; data collection and analysis and writing of manuscripts; overseeing the daily processes at the homeless facility and supporting the recruiting of individuals facing homelessness to serve as research team members

## Work Completed through January 30, 2021

We have: planned for future sessions; held discussions to broaden collaborations and goals; held discussions on external grant opportunities; held a workshop for homeless individuals to participate in PhotoVoice project; initiated the PhotoVoice project; held roundtable discussions associated with challenges faced by homeless individuals, theories, and approaches to create interventions; completed data collection and initiate data analysis; Held an event with community partners to review current efforts and struggles in assisting homeless individuals.

## Project Work Expected to be Completed through April 30, 2021

We will: Continue discussions for interdisciplinary projects based on PhotoVoice results; reflect on our efforts, changes in our knowledge and perspectives, and plans for upcoming research project and grants planning; complete PhotoVoice data analysis; initiate joint writing for a manuscript submission to a peer-reviewed journal; Hold workshops for homeless individuals to participate in a crowdsourcing contest; invite the community partners in CoRS meeting and jointly identify and initiate external grant opportunities; Manuscript submissions for a peer-reviewed journal; Hold an event for displaying PhotoVoice project to general public; Reflect the activities to submit CoRS report and review the upcoming plans; April 5, 2021 - Deadline for crowdsourcing contest submission; select the 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> prizes by April 25<sup>th</sup>, make an announcement and send the prizes (eGift cards) to the content participants.

# Water City- Phase 1

Farhad Jazaei, Ph.D., Assistant Professor, Department of Civil Engineering

## **Objective**

In this project, we view homeless people as experts in knowing the barriers to and facilitators of achieving housing security. Our research community will recruit individuals who are facing homelessness and ask them to share their experiences of homelessness, health care services, and stigma they face on a daily basis.

## **Rationale for the Project**

During Phase-0, it was realized that there would be greater and more accessible funding opportunities if we focused on recently identified emerging problems in the urban water systems. So, Phase 1 focused on leveraging the collaboration potentials between the University of Memphis and nearby institutions such as the University of Tennessee (UT), University of Alabama (UA), Mississippi State University (MSU), and Auburn University (AU) to address recently identified emerging problems in the urban water systems.

## **Partners**

University of Tennessee (UT), University of Alabama (UA), Mississippi State University (MSU), and Auburn University (AU).

## **Criteria for Partner Selection**

Geographical location; expertise in studying soil and water interactions, contaminant transport modeling, watershed scale, and chemical analyses of water contaminants; access to advanced laboratory technologies; and access to graduate student assistance with research proposal preparation.

## **Work Completed through January 30, 2021**

We have decided to focus on microplastic pollution in urban detention ponds as an emerging concern. We have: collected preliminary data to support our hypotheses; contacted the municipality and received positive feedback from them; worked on sampling logistics to collect some data.

## **Project Work Expected to be Completed through April 30, 2021**

We will: contact the owners of three detention ponds in the Memphis, Chatanooga, and Auburn areas to collect some preliminary data; ship samples to Auburn University to be analyzed by their advanced machines; finish sampling by April 30<sup>th</sup>; finish the analyses.

# Examine the influence of the ongoing COVID-19 outbreak to health behaviors and mental health

Yong Yang, Ph.D., Associate Professor, School of Public Health

## Project's goal

We aim to examine the influence of the ongoing COVID-19 outbreak to health behaviors and mental health.

## Rationale for the Project

Beginning from the inception of 2020, the ongoing COVID-19 pandemic is continuing to shape human behaviors and the living environment. We are only beginning to understand the social, economic, and psychological disruptions resulting from the COVID-19 and the impacts of these disruptions on health and well-being. Under such circumstances, it is important to examine how Americans' health behaviors and mental health was/is influenced by the COVID-19 outbreak, in both short-term and long-term.

To address the above research question, we are conducting a longitudinal online survey among American adults to collect information including the influences of COVID-19 (e.g., employment, daily travel) and health outcomes/behaviors focusing on anxiety, depression, loneliness, physical activity, tobacco use, alcohol drinking, marijuana use, and vaccination. With the support of this CoRS fund, the baseline survey was implemented on April 2020, and followed by several waves over the year of 2020. However, the magnitude of the COVID-19 pandemic is larger and the duration is longer than most people can imagine and we are working to continue the survey for more waves to capture people's health and behaviors over a longer period.

Using the survey data, we will (1) estimate the trajectories of overall health, mental health, and major health behaviors among adults during the outbreak of COVID-19 on a detailed temporal scale; (2) assess how the change in patterns varies across the population, particularly for at-risk groups including older adults, socioeconomically disadvantaged persons, and racial and ethnic minorities; (3) examine the interactions among various health outcomes including, for example, the associations between stress and addictive behaviors and between stress and physical activity, and how physical activity may modify the relationship between stress and addictive behaviors.

Our findings will help design interventions to mitigate the adverse influence of COVID-19, to improve mental health, decrease unhealthy behaviors, and promote healthy behaviors.

## University and Community Partners

University Partners- Ken Ward, Ph.D. (Professor, Division of Social and Behavior Science, School of Public Health); Jim Murphy, Ph.D. (Professor, School of Psychology); Aram Dobalian, Ph.D. (Professor, Division of Health Systems Management and Policy, School of Public Health).

## Criteria for University and Community Partner Selection

The team members are experts in the substance use (e.g., tobacco use, and alcohol drinking) and people's reactions and behavior changes during disastrous events.

## Work Completed through January 30, 2021

We finished additional wave between November 2020 and January 2021.

## Project Work Expected to be Completed through April 30, 2021

We will have another wave during the April of 2021.

# Building Grantsmanship and Community Engagement within the College of Communication and Fine Arts

Melissa Janoske McLean, Ph.D., Associate Professor, Dept of Journalism and Strategic Media, CCFA Dean's Fellow for Research

## Project's goal

The workshop series has three main goals:

1. To have every faculty participant complete the series with a strong relationship to at least one community partner organization
  2. To have every faculty-community organization partnership have a well-developed research project planned
  3. To give every research project team the knowledge of potential external funding opportunities and a plan for submitting to the most appropriate outlet
- Additional goals include building stronger relationships between CCFA and community partner organizations overall, and to foster a deeper understanding within CCFA faculty of how to prepare for and submit for external funding, and the variety of opportunities that exist and are available to them.

## Rationale for the Project

This grant supports a four-part workshop for faculty within the College of Communication and Fine Arts (CCFA) at the University of Memphis. In this workshop series, faculty members will network and identify partnerships, gain access to a community partner index specifically designed for CCFA faculty, and work one-on-one with targeted community partners. Together with those community partners, faculty will also identify possible grant projects, access a community grant database appropriate for the combination of CCFA and community partners, and begin applications for grants that match the researcher's and community partner's joint project goals. Sessions 1 and 2 will focus on building community competence and relationships; Session 3 will look at connection for meaningful research and community outcomes; and Session 4 will wrap up with plans for research dissemination.

## University and Community Partners

University Partners- Jennifer Barker (Architecture); Marika Snider (Architecture); Lu Auz (Art); Kelsey Harrison (Art); Richard Lou (Art); Wendy Atkins-Sayre (Comm & Film); Tori Cliff (JRSM); Melissa Janoske McLean (JRSM); Joel Nichols (JRSM); Ruoxu Wang (JRSM); Jin Yang (JRSM); Heather Klossner (Music); Kevin Sanders (Music); Bill Shaltis (Music)

Community Partners- ArtsMemphis, Tracy Lauritzen-Wright; Playback Memphis, Virginia Murphy; Opera Memphis, Kerriann Otano; Creative Aging, Mia Henley; Carpenter Art Garden; Collage Dance Collective, Marcellus Harper; Tennessee Shakespeare Co, Stephanie Shine; Stax Music Academy, Melody Barnham

## Criteria for University and Community Partner Selection

Any faculty member within CCFA is eligible to participate. Community organizations were recruited with help from facilitator Carrie Brooks and Tracy Lauritzen-Wright at ArtsMemphis.

## Work Completed through January 30, 2021

The focus is and has been on faculty and community organization recruitment and building enthusiasm for the workshop series. Participants have also been asked to fill out a short survey indicating their research area(s) and/or research projects that they might be interested in working on so that the facilitator can identify potential research partnerships prior to the start of the workshop.

## Project Work Expected to be Completed through April 30, 2021

The workshop series begins on Friday, February 5, 2021, and runs for three additional sessions on February 26, March 19, and April 2. Sessions will run from 60-90 minutes each, and all participants will be asked to complete some hands-on activities during and between each session. The sessions will culminate in faculty-community organization partnerships identifying, accessing, and beginning the application process for external funding.



# University of Memphis Interdisciplinary Center for Public Health & Race

Katharine Traylor Schaffzin, Dean of Cecil C. Humphreys School of Law; Professor of Law

## **Project's goal**

Our goal is to institute the inaugural University of Memphis Interdisciplinary Center for Public Health & Race aimed to conduct interdisciplinary research to raise awareness of and support community initiatives to resolve racial disparities in healthcare access, delivery, and outcomes.

## **Rationale for the Project**

The Center will collect data, conduct policy research, and analyze the linkage between race and healthcare access, delivery, and outcomes across the fields of nursing, social work, law, criminal justice, public health, management, economics, and others. It will measure legal outcomes, health outcomes, and employment and unemployment disparities associated with healthcare access, as well as the impact of violence and racial trauma on health. Participating researchers will propose and study equitable healthcare solutions for underserved communities in Shelby County; track health disparities for the incarcerated in Shelby County.

## **University and Community Partners**

University Partners- Jacqueline Bowen Buford, Clinical Assistant Professor (Nursing); Dr. Elena Delavega, Associate Professor (Social Work); Demetria Frank, Associate Professor (Law); Dr. Latrice Pichon, Associate Professor (Public Health); Katy Ramsey Mason, Assistant Professor (Law); Dr. Angela Oigbokie, Clinical Assistant Professor (Nursing); Dr. Enrica Ruggs, Assistant Professor (FCBE).

## **Criteria for University and Community Partner Selection**

The group is working with the University Advancement Office to identify potential national foundations interested in supporting this work.

## **Work Completed through January 30, 2021**

1) Create a website to make white papers, factsheets, interdisciplinary research, legislation tracking, and other information available to national, state-wide, and local community partners, researchers, students, and the general public. 2) Raise awareness about the interdisciplinary aspects of race, culture, and public health through a speaker series in the 2021-22 academic year, featuring CoRS Scholars, external experts, community leaders, healthcare professionals, and law enforcement. 3) Collect data, conduct policy research, and analyze the linkage between race and healthcare access, delivery, and outcomes across the fields of nursing, social work, law, criminal justice, public health, economics, and others, through the following projects, for which grant funding will be sought: a. Juvenile Justice Consortium: evaluation of current data collection practices at Shelby County Juvenile Court, recommendations for broader data collection domains including, history of trauma, HIV/STI infection, educational attainment, and race/ethnicity, and analysis of these domains to identify potential racial disparities and recommend policy solutions. b. CDC HIV Testing & Behavioral Surveillance: development and recommendation of additional survey questions to identify potential racial disparities and recommend policy solutions. c. Workforce Diversification: develop pipeline and retention strategies to diversify the nursing, public health, and social work professions.

## **Project Work Expected to be Completed through April 30, 2021**

The group will meet again with Advancement in early February to share funding leads for these priorities. The group will identify its discrete Phase One Research Project at that time and conceptualize a grant proposal in support of that project by April 30, 2021.

# Part art, part social science: Creating a Mentorship Program for CCFA students

Kate Roberts, Assistant Professor, Ceramics and Dr. Teri Del Rosso, Professor of Journalism and Strategic Media

## Objective

The goal of this project is to grow to include Music, Dance, Theatre, and Communications and Film.

## Rationale for the Project

Using funding from the CORs grant to establish a Mentorship Program between students in the College of Communication and Fine Arts and local professionals in Memphis.

## Partners

1. Dana James Mwangi, founder of Cheers Creative, a local design and branding firm;
2. Brit McDaniel, founder of Paper and Clay, a small business specializing in functional ceramic wares;
3. Milton Howery, Director of Public Relations at Memphis Tourism and founder of Milton Entertainment;
4. Jennifer L. Sharp, communication specialist for Shelby County Health, founder of Sharp Lifestyle Communications, focusing on communication strategies for small to medium businesses and non-profit organizations .

## Criteria for Partner Selection

Professionals were chosen based on their relationship to art and strategic communication, their track record of mentorship, and their relationship to the University of Memphis. All of the mentors selected are University of Memphis alumni, which we hoped would bolster students to see a direct connection to their own education and possibilities after graduation.

## Work Completed through January 30, 2021

Each mentor was provided with the profiles of students interested in the pilot mentorship program and selected their mentees based on shared professional interests and goals. Prior to meeting with their mentors, the mentees filled out a mentorship contract, completed a pre-program survey, and attended a short workshop to establish their responsibilities, how to prepare, and how to create goals that are achievable in the time frame. After the mentees were on-boarded, the mentors came together for a short orientation and Q&A. Mentees then began reaching out to their mentors.

## Project Work Expected to be Completed through April 30, 2021

For the next three months beginning in February, each mentor and mentee pair will meet at least once a month. These meetings will focus on strategies to complete a student-driven goal.

Students are asked at the end of each month to reflect on their experience in the form of a journal entry. Projects range from branding personal businesses to growing social media followings. We hope students will gain skills in the form of collaboration, creative problem solving, leadership, project planning, research and self-development, to invest in one's self and continuously improve towards one's goals.

At the end of April, we will collect data on the efficiency of the mentorship program through a combination of surveys and narratives from students and a focus group with mentors to determine how we can improve the program. Though the official project ends April 15th, we foresee these relationships continuing. They may not meet once a month, but this guided connection can provide the students with the confidence to seek more.

# Effect of Koru Mindfulness Training on Professional Orchestral Musicians' Music Performance Anxiety

Ryan Fisher, Ph.D., Associate Dean, School of Music

## **Objective**

The purpose of this study is to examine the effect of Koru mindfulness training on professional orchestral musicians' music performance anxiety.

## **Rationale for the Project**

The research question guiding this study is, what impact does Koru mindfulness training have on professional orchestral musicians' perceived stress level, depression, mindfulness, music performance anxiety, music performance self-efficacy, and fear of negative evaluation? According to Kenny et al. (2012) professional orchestral musicians exhibit concerning patterns of anxiety and depression that may impact their occupational health. Music performance anxiety is one trait that has been intensely examined among musicians and numerous treatments have been researched. Over the past few years, research on the impact of mindfulness training on anxiety and other psychological disorders has been conducted. Koru mindfulness training has been shown to significantly improve college students' sleep quality, mindfulness, and self-compassion while reducing students' perceived stress. This specific mindfulness training may prove beneficial in reducing music performance anxiety in professional musicians, but no research to date has examined this treatment in this context.

## **Partners**

Memphis Symphony Orchestra, Rudi E. Scheidt School of Music.

## **Criteria for Partner Selection**

Participants, professional orchestral musicians primarily from the Memphis Symphony Orchestra and professional musicians in the Rudi E. Scheidt School of Music, will be randomly assigned to either the treatment group or the wait-list control group.

## **Work Completed through January 30, 2021**

To date, we have recruited participants for the study from the MSO and professional musicians in the Rudi E. Scheidt School of Music

## **Project Work Expected to be Completed through April 30, 2021**

We will implement the first Koru training on February 1, 2021 with the goal of completing all mindfulness training by the end of March. Data analysis will be conducted in April.

# Differences of Opinion and Stock Price Crash Risk

Konstantin Sokolov, Ph.D., Assistant Professor, Department of Finance

## Objective

Finance literature shows that differences of opinion (disagreement) among investors affect trading volume (Karpoff, 1986), stock returns (Carlin, Longstaff, and Matoba, 2014), and volatility (Chen, Hong, and Stein, 2001; Hong and Stein, 2003). We plan to develop a novel measure of investor disagreement constructed from twitter sentiment and explore whether such disagreement constitutes a risk factor predicting stock returns.

## Rationale for the Project

Hong and Stein (2003) provide an intuitive explanation of how differences of opinion play a central role in stock price crashes. Chen, Hong, and Stein (2001) provide an early empirical support of Hong and Stein (2003) model using trading volume as a proxy for investor disagreement. In a concurrent working paper, Chang et al. (2020) establish a causal link between investor disagreement and stock price crash risk. They use several existing indirect proxies of investor disagreement. In this paper, we propose to empirically examine the Hong and Stein (2003) model by using a more direct measure of investor disagreement constructed from twitter sentiment data.

## Partners

University Partners- Dr. Pankaj Jain, Professor, Department of Finance; Rasheek Irtisam, Doctoral Candidate, Department of Finance.

Community Partners- FISC includes industry experts and Fintech leaders from First Horizon Bank (Stephen K. Valadié, CFA. SVP, Fintech Strategy / AI. First Horizon Bank).

## Criteria for Partner Selection

CoRS team members will collaborate with the FISC center to organize workshops on topics such as, 'Textual Analysis in Finance', 'Twitter Sentiment Data from Bloomberg' etc.

## Work Completed through January 30, 2021

We developed research questions, identified relevant grants, applied for external grants (applied to 1 grant - NBER), measured Stock Price Crash Risk.

## Project Work Expected to be Completed through April 30, 2021

We will run multivariate regressions, research presentations and feedback, collaborate with FISC and conduct workshops, and complete final report. We will apply for external grants in August 2021.

# **Impact of Virtual health educational program and horticultural therapy in self management skills and quality of life among people with cardiovascular risk factors: Type II Diabetic Mellitus and Hypertension**

Annapoorna Mary, MSc(N), PhD, RN, CNE, Associate Professor, PhD Program Director, Loewenberg College of Nursing

## **Objective**

The research endeavor is focused on preventing cardiovascular risk factors in the community. The purpose of phase I study is to develop a Virtual Integrated Horticultural health education program and integrated preventive health educational and horticultural training clinic for improving health outcomes, self management skills, and quality of life among people with cardiovascular risk factors: Type II diabetic mellitus and hyper tension.

## **Rationale for the Project**

Therapeutic gardening offers multiple health benefits including physical, mental, and social wellbeing. In addition, therapeutic gardening promotes self care, and empowerment in self-management of chronic disease conditions. Though the benefits of therapeutic garden have been known by humanity for a long time, very few systematic implementations to improve the health outcomes have been observed. In particular, previous studies have addressed the psychosocial and rehabilitative benefits of the therapeutic garden. However, very few integrated therapeutic gardening implementations have been practiced to control HTN and DM, thereby leading to prevention of CVD.

## **Partners**

Community Partners- Dr. Fedoria Rugless, Director of Research at Church health; the Church Health; WKNO Family Plot program, the UT Extension Horticulture program, and the Memphis Garden Club.

## **Criteria for Partner Selection**

The primary community partnership for the implementation of the project was established with Church Health with the approval of Dr. Fedoria Rugless. During the implementation process, internal collaboration was obtained for the project including the Church Health Nutrition Hub, Behavioral Health, and IT departments, to develop Virtual Heart Health Education. To develop the Virtual Horticulture education and therapeutic garden, in addition to the Church Health team, external partnerships were obtained with WKNO Family Plot program, the UT Extension Horticulture program, and the Memphis Garden Club.

## **Work Completed through January 30, 2021**

Developed Virtual Heart Health Education content, Developed Virtual Horticulture Education content Identified and received approval for a therapeutic gardening site at Crosstown Concourse where Church Health is located; Memphis Garden Club is assisting with building the garden.

## **Project Work Expected to be Completed through April 30, 2021**

The project will be completed by developing: the Virtual Integrated Horticultural health education program, an Integrated preventive health education and horticultural clinic, and a system of integrated preventive health education programming. The project will be ready for the Phase II : a pilot study of this research project.

# Mid-South Metabolism, Immunity, and Inflammation Community of Research Scholars

Brandt D. Pence, Ph.D., Assistant Professor, College of Health Sciences

## Objective

The goal of the interest group is to promote collaborative research at the intersection of metabolism, inflammation, and immunity. To this end, we are initially focusing on research community development through the establishment of a regional research conference. Additionally, we hope to promote interdisciplinary grant submissions within these disciplines, involving multiple investigators from the interest group.

## Rationale for the Project

The interest group covers a variety of related disciplines, including immunometabolism, metaflammation, mitochondrial function, muscle metabolism, nutrition, exercise, microbiome, inflammation and disease, and other areas. There is a critical mass of research-active investigators in the Memphis area and across the Mid-South. A formal interest group will help facilitate interactions between its members, which will enhance collaborative research relationships. This is critically important for competitiveness for funding from federal sources, which prioritize interdisciplinary and high-impact research.

## Partners

University Partners- Faculty members and trainees from Health Sciences, Biology, Biomedical Engineering, Public Health of UM.

Community Partners- Faculty members and trainees from Medicine, Pediatrics, Health Professions, Pharmacy, Surgery of University of Tennessee Health Science Center.

## Criteria for Partner Selection

The only requirement for membership is an active interest in the topical areas, although the planned activities are primarily focused on active researchers in these areas.

## Work Completed through January 30, 2021

The interest group has taken as its official name Metabolism, Immunity, and Inflammation of the Mid-South (MIIMS), and websites for the interest group and the interest group's scientific meeting are under construction. We established a scientific conference, bringing together experts in metabolism, inflammation, and immunity from across the Mid-South and Tennessee region. At least one grant application has been submitted from Community faculty.

## Project Work Expected to be Completed through April 30, 2021

A number of additional grants will be submitted in the coming months by MIIMS members, including several to the upcoming Cycle I NIH deadline. We expect to complete websites for the MIIMS group. The virtual conference will be held on April 16th, 2021, and we anticipate that this will be an annual or biennial symposium held ideally on a rotating basis at regional institutions. Additional CoRS work will focus on facilitating active collaborations between members, to enhance competitiveness for external grant submissions.

# Capacity Building for Broader Impacts

Fedora Rugless, Ph.D., CCRP, Research Assistant Professor, College of Health Sciences, Director of Research, Church Health

## Objective

The goals of these sessions will be to enhance the individual ability to foster and develop relationships with nonprofits and community organizations with whom they may collaborate with, and who also may fit within their overall research interests.

## Rationale for the Project

We will focus on building individual capacity for broader impacts with an emphasis on community competence and relationships, along with building partnerships for broader impacts, connecting for meaningful research and community outcomes, and communicating those broader impacts through dissemination. Participants will learn how to ensure that the partnership and research is meaningful for all parties involved (i.e. practitioners and community partners), and that it is a true collaborative process. And ultimately being able to adequately write up concluding information, including content about the partners, key elements of the process, and dissemination of results not only to those in their respective fields, but also to the community and various stakeholders. This project will assist in maintaining service to the field of research and service to the community at large. These efforts will support further research and strengthen newly created partnerships and relationships.

## Partners

University Partners- Faculty from the University of Memphis College of Health Sciences, College of Communications and Fine Arts, and other disciplines, along with representatives from community organizations that are involved in research and collaborative efforts.

Community Partners- Church Health, For the Kingdom, Girls Inc., Life Doc Health, Medical Education and Research Institute, Memphis Area Legal Services, Memphis Leadership Foundation, Methodist LeBonheur Healthcare, Metropolitan Inter-Faith Association, Orpheum, Refugee Empowerment Program, Shelby County Crime Victims and Rape Crisis Center, Shelby County Schools, and Vitalant.

## Criteria for Partner Selection

The project include targeted faculty and partners that could have projects in common or attended the previous promoted sessions.

## Work Completed through January 30, 2021

We communicated with faculty leads, got feedback, created marketing materials, questionnaires and a customized curriculum, selected session dates. The first session has been completed which included faculty only, to set expectations, map current connections, and build group knowledge in order to engage more community participants.

## Project Work Expected to be Completed through April 30, 2021

Forthcoming will be the remaining sessions which will be held virtually on Fridays, February 19, March 12, and April 16, 2021 from 9:00-10:30 AM. Sessions two through four will include both faculty and community organizations working together to identify projects in common that have a research component and potential funding sources to which they may apply jointly to pursue the projects.

# USRC CORS FY 2021

Carolyn Ransford Kaldon, Ph.D., Research Associate Professor, Center for Research in Educational Policy (CREP)

## Objective

Goals include: seek externally funded research to submit to at least one grant opportunity over the next year; host 2021 grant writing competition to stimulate submissions to external sponsors, and award submissions to support the development of new proposals; host a Lunch & Learn networking session in Feb to launch the 2021 USRC Grant Writing Award competition and to support the grant writing and mentoring efforts of our scholars, host a USRC Research Showcase in late Spring 2021 to showcase the ever-expanding USRC research partnerships; expand our membership in 2020-21 with 5 or more new members to include representation from all Colleges and/or Departments that are interested in partnership with the University Schools.

## Rationale for the Project

The USRC continues to create and support lasting and dynamic partnerships between inter-disciplinary faculty, the University Schools, and community partners. The USRC also continues to stimulate new sponsored research activity and support existing research projects in the University Schools. To disseminate the knowledge gained from USRC affiliated research and share with our community partners, the USRC will showcase successful research-school partnerships and to share what is learned from these innovative, interdisciplinary research opportunities.

## Partners

University Partners- Faculty and leaders from the University of Memphis and University Schools.

## Criteria for Partner Selection

Our criteria for University and Community partner selection are: 1) a desire to conduct research in partnership with our University Schools; 2) actively engaging in our interdisciplinary and community network; 3) seeking to conduct or currently conducting USRC-approved research in our University Schools; and 4) having a commitment to obtaining externally funded interdisciplinary research incorporating University Schools (preschool – grade 8).

## Work Completed through January 30, 2021

Since awarded in November 2020, Dr. Kaldon has been planning the upcoming Lunch & Learn session to kick off the USRC Grant Writing Competition, with a focus on coordinating with research professional development opportunities in the College of Education. She also been in active discussion with the University School leaders to identify ideal research areas of interest so that USRC partners can be actively involved in USRC networking to seek additional members, with 2-4 interested faculty partners in discussion at this point.

## Project Work Expected to be Completed through April 30, 2021

Forthcoming, through April 30, 2021, Dr. Kaldon will coordinate and lead the virtual Lunch & Learn networking session, 2021 Grant Writing Competition and USRC Research Showcase.



# Health Spaces & Technology Research Community (HSTRC)

Irma Singarella, Ph.D., Associate Professor, Health Sciences Library

## Objective

The 2021 HSTRC team continued to aim to build the capacity to conduct interdisciplinary research and community service focused on reducing health disparities among underserved populations in Memphis, TN.

## Rationale for the Project

The CoRS team is conducting the 2020 community needs assessment. We used a quantitative cross-sectional design to collect data, and a convenience sampling to recruit participants. We have 119 responses. The original research deadline was December 30, although the deadline has now been extended until February 29, 2021. The CoRS team shared the preliminary data results with MPL will disseminate the results in publications and professional meetings. Other activities include an accepted abstract submission to the Southern Nursing Research Society (SNRS) and the development of a mobile device application.

## Partners

University Partners- Dr. Sohye Lee, Assistant Professor, Loewenberg College of Nursing; Dr. Seok Won Jin, Assistant Professor, School of Social Work; Dr. Y'Esha Williams, Clinical Associate Professor, Loewenberg College of Nursing; Dr. Susan Elswick, Associate Professor, School of Social Work; Dr. Kathryn Hicks, Associate Professor, Department of Anthropology; Dr. Christine Bertz, Research Assistant Professor, Center for Research in Educational Policy.

## Criteria for Partner Selection

The members of HSTRC team should focus on developing community health needs assessment via the Memphis Public Libraries system to expand the community health outreach by enhancing collaborations with U of M scholars and community partners.

## Work Completed through January 30, 2021

Partnering with the Memphis Public Libraries, the HSTRC team developed an online survey to assess community health-related needs. We submitted a proposal to the National Network of Libraries of Medicine, and it was approved; updated a new email address to facilitate communication, announced and presented the CoRS 2021 goals and activities and promoted the 2020 Community Health Needs Assessment to the University Libraries Administration Council; began to collect data for the Memphis Public Library (MPL) Community Needs Assessment; submitted abstract and got the accept for the presentation of Southern Nursing Research Society (SNRS) Meeting; hosted monthly Zoom meeting to keep in touch with ongoing topics.

## Project Work Expected to be Completed through April 30, 2021

We will keep recruiting participants for the Community Health Needs Research, analyze and Interpret the results. With the approved proposal, and the collaboration between the University of Memphis Community of Researchers, and the Memphis Public Libraries, we will provide access to COVID-19 related information to an underserved population, in the Memphis Area to implement a virtual education program by April 30, 2021. We will develop a game-based community health and wellness app based on another approved proposal. It designed to motivate users to take care of their mental health and physical well-being using daily supportive evidence-based tips and reminders provided through push-notifications, it allows users to track and report their healthy daily living activities. The CoRS members will submit manuscripts to publish. The first manuscript will be drafted by developing the topic that we will present at the SNRS conference.

# Memphis Women+'s Mentorship Network

Leah C. Windsor, Ph.D., Research Assistant Professor, Institute for Intelligent Systems

## Objective

The broad goals of the Memphis Women+'s Mentorship Network are to promote gender parity in the academic environment among students, faculty, and staff. We are building a mentoring community among women+ at The University of Memphis to share knowledge and best practices about retaining and promoting women+ at all levels in academia. Through this network we will workshop research ideas, connect mentors and mentees, and foster mentorship across rank attainment and disciplines. The CORS grant is supporting our efforts to increase outreach, awareness, and participation within the University.

## Rationale for the Project

We believe that this project has the potential to genuinely create a community of scholars, from undergraduate through graduate and professional programs, to post-doctoral and contingent faculty, to junior tenure track and senior tenured faculty, and to also include women+ staff members seeking mentorship. Mentorship networks are the fibers that knit together ideas, scholars, and successful collaborations that keep women+ in academia. As Windsor and Crawford (2020) suggest, the metaphor for women+ leaving academia is not a "leaky pipeline" as has been the standard description; rather, it is like the game of "chutes and ladders." Women+ climb the ladders at greater rates when they have access to mentorship and avoid the chutes when they have support and resources to help them navigate the career terrain. This involves a mix of substantive skill-building (e.g., grant-writing and publishing peer reviewed articles), learning the hidden curriculum, providing networking opportunities, and fostering a community of supportive men+ mentors. Additionally, there is a paucity of research on best practices for starting mentoring networks, so we plan to conduct research with academics who have created these networks.

## Partners

University Partners- Faculty from multi-disciplines across campus; other mentorship and scholarly efforts across campus.

## Criteria for Partner Selection

The faculty, staff, and students who is engaging in this project at the University of Memphis.

## Work Completed through January 30, 2021

The In December 2020 we developed the ethnographic survey for interviewing other women+ scholars who have created mentorship networks about their goals and strategies. We have developed a database of mentorship networks in the United States and have contacted ten women+ scholars to participate in our survey. In January 2021, we launched the Memphis Women+'s Mentorship Network website. We held our first virtual meetup on January 29th and have six more online meetups planned for this semester.

## Project Work Expected to be Completed through April 30, 2021

We are in the process of matching mentors and mentees and have six more virtual meetups as well as a virtual conference in May 2021. We are in the process of identifying which grant(s) we want to apply for. We continue to distribute the ethnography survey and will analyze those results, and incorporate them into a journal for peer review with a submission target date of July 2021. We have also started a conversation with the CIO of the University about the logistics of hosting the internally queryable database of mentors and mentees.

# Exploring video game playing in the COVID-19 pandemic: a comparison between competitive gamers and recreational gamers

Jin Yang, Ph.D., Professor, Department of Journalism and Strategic Media

## Objective

The objective of the project is to explore the popular activity of video game playing during the Covid-19 pandemic. Specifically, it is to address how video game playing facilitates overcoming the pandemic isolation and provides a sense of relief. In other words, we would want to find out to what extent video game playing relieves the social isolation due to the pandemic outbreak. Another special question is to address how competitive gamers and recreational gamers compare in terms of motivations to game and the satisfaction or gratifications obtained from gaming during this special time of history.

## Rationale for the Project

The pandemic outbreak makes a great impact on people's life especially their social life. The push to spend more time at home frees up more time for people to engage in activities online. And gaming is one of the attractive alternative online activities. Quantitatively, in terms of hours, there has been a significant increase (Stubbs, 2020). However, qualitatively, in terms of psychological, mental and intellectual well-beings, there are no published studies to pinpoint the effect. The project is fill this void.

## Partners

Community Partners- Lang Whitaker, general manager of Grizz Gaming.

## Criteria for Partner Selection

The criterion to have this partner is based on the assistance and help needed to enrich the project. This project involves gaming both recreationally and competitively. While recreational gaming insight can be obtained from our acquaintances and friends nearby, competitive gaming insight must be gathered and learned from professional teams.

## Work Completed through January 30, 2021

We completed the literature review writing part and questionnaire building and testing part, developed a plan to recruit participants to take our questionnaire -use snowballing technique to identify several video game players first then their friends who play recreational/competitive video games, set up a questionnaire in Qualtrics for the last round of testing and proofreading.

## Project Work Expected to be Completed through April 30, 2021

The data collection will start on Feb. 1. Hopefully within two or three weeks, the data collection will be finished. March is the time to analyze the data, put together the result and write the paper. We expect to submit the paper to a national conference named Association for Education in Journalism and Mass Communication. The deadline is April 1, 2021.