### 2019 – 2020 College of Applied Arts Learning Community Abstracts

### **Determining Consumer Preferences for Food Safety in Their Food Purchase Decisions**

#### Dr. Pratheesh Omana Sudhakaran

News about food safety incidents is increasing in recent years and due to the advancement in telecommunications, the consumers are getting the information in real time. Government agencies such as FDA are coming up with measures to curb food safety incidents and track the food consumers eat. Since consumers are exposed to both negative and positive information regarding food safety, it is critical to understand consumers' perception and preferences on these issues. As a preliminary step, this study would like to collect information in Texas, particularly from Texas State University (TxState). However, the research topic has a national potential. The goal of the proposed project is to understand consumer preferences in terms of food safety issues and food safety regulations. To achieve this goal, the study will try to understand (1) Consumer perception of existing food safety issues and control measures in the market; (2) Determine the consumers' willingness to pay for safe products. An economic experiment will be developed to solicit consumer purchase preferences and to determine factors that affect their product purchase. The data from the purchase behavior and knowledge about the food safety regulation questions will be used to identify the different attributes or factors the consumers consider while food purchase, using multivariate regression analysis. Moreover, the answers from the experiment questions will be used to analyze the willingness to pay for each of these attributes using discrete choice regression analysis. The benefits from this research project are multi-faceted with its impacts on undergraduate education enhancement through research, the impact of the outcome on producers, and impact of research outcome on the policy. Through this project undergraduate students at TxState particularly, 4 undergraduates students majoring in agribusiness will be hired to conduct the research project who will be given training in economic experiment design, data collection, data management, and data analysis. Moreover, the research project has an indirect and bigger impact on the student population of TxState. Students from AG 3352, AG 3317 will be used as volunteers in testing the economic experiment which will introduce research concepts to them. Moreover, these students from these larger learning communities get exposed to the data collection process and research ethics. The results from this preliminary study will be used to write external research grant from the federal agencies such as US Department of Agriculture, National Science Foundation, and National Institute of Health; this research comes under one of the research priorities of these agencies.

# Developing Innovative Crop Inputs while Recovering Food Waste and Addressing Market Opportunities

Dr. Nicole Wagner

Innovative biotechnologies in the agricultural industry have witnessed significant recent growth, especially with increasing consumer demand for organic and local foods. This project investigates food waste recovery methods for development of novel biofertilizers to be used in local organic crop production. Biofertilizers developed in the laboratory will be analyzed for nutrient concentration and beneficial microbial activity, and then will be applied to crops to assess yield and plant health. Student researchers will gain knowledge of real-world food system challenges for which innovation is needed and entrepreneurial opportunities exist. Specifically, students will explore sustainable fruit and vegetable crop systems to meet growing consumer demands, reducing pesticide and synthetic fertilizer use through the application of microbial rich biofertilizers, and recovering nutrients through municipal food waste streams. Six undergraduate researchers will be in a peer-learning group that includes five graduate students; over 200 students will be exposed to aspects of this research through in-class demonstrations.

#### **SurveyCaTS (Survey Consortium at Texas State)**

Drs. Sean Patrick Roche and Angela M. Jones

Understanding how knowledge is gathered and constructed assists individuals in critical thinking, and much of what we know about the social world comes as a result of surveys. Thus, there is a strong need for mentoring and hands-on experience in the construction of clear, accurate, and useful survey questions; survey instrument design, sampling, and mode; and the analysis of survey data for use in descriptive and inferential research.

A consistent finding in research on Americans' attitudes toward police is respondents' race plays an important role in whether they like and/or trust the police. However, research has primarily focused on African-American versus White views. An understudied area is how other racial and ethnic groups, especially Latinx/Hispanic people, view the police.

This project proposes the creation of SurveyCaTS (Survey Consortium at Texas State) Learning Community for undergraduate students to participate in an original research project outside of the classroom to study public perceptions and attitudes toward the criminal justice system and its actors.

# Opportunities for Undergraduate Research in Human Development ad Family Sciences (OUR HDFS) Fellowship Program

Drs. Norma Perez-Brena and Priscilla Goble

The aim of the Opportunities for Undergraduate Research in Human Development and Family Sciences (OUR HDFS) Fellowship program is to identify 12 talented undergraduate students interested in family and child development and provide them with human capital and financial resources necessary for pursing graduate degrees. Fellows will be paired with one of four participating graduate students and one of two participating research faculty who will serve as mentors to facilitate their engagement in rich research experiences. Fellows will also receive mentorship around graduate school applications including developing a CV and personal statement. At the termination of a two-semester commitment, OUR HDFS fellows will be eligible for a \$500 stipend to support their preparation for and application to graduate programs.

Some of the main impacts of the OUR HDFS fellowship were:

- 12 undergraduates and 4 graduate students were impacted by our mentorship model.
- 10 (75%) undergraduate students presented at a research conference or worked on a manuscript. All 4 graduate students also presented as co-authors in these presentations.
- The OUR HDFS scholars made up 1/3 of ALL presentations in the Texas State
  Undergraduate Research Conference- Social and Behavioral Sciences section
- 8 applied for graduate school or began preparing their applications for Fall 2020.

Lastly, this quote encapsulates many of the OUR HDFS fellows' thoughts on the program:

In my opinion, the most valuable thing I gained from this fellowship is confidence in myself and future. The fellowship helped me gain knowledge and comfort in taking on a research project or furthering my interest in research. It has helped me choose a clear program for graduate school and path for my future.

#### A Study of Social Cognition in Middle Childhood

Dr. Amy A. Weimar

A team of 10-15 undergraduate and graduate students from within the Human Development and Family Studies program will have the opportunity to advance their professional and personal development as part of a learning community focused on conducting a community-impacting research project: A study of the social cognitive development of middle- schoolchildren. This team of students, led by Dr. Amy Weimer, will have the opportunity to gain invaluable experiential learning to assess children, consider the developmental levels of the middle childhood timeframe, and connect knowledge gained in the classroom with real-world applications. As undergraduate students engage in collaborative learning, interact with community members, and learn about the research process, they will likely become excited about pursuing graduate degrees in the new research track of the Human Development and Family Studies program, or related fields.

#### **Counter-Life Stories for Community and Workforce Development**

#### Dr. Shetay Ashford-Hanserd

During this project, Dr. Shetay Ashford-Hanserd will create a new course entitled "Counter-Life Stories for Community and Workforce Development", which will be recommended as an elective course in the undergraduate OWLS' BAAS, minor in African American Studies, and minor in Latina/o Studies degree programs. This new course builds upon and extends Dr. Ashford-Hanserd's existing community-engaged research project entitled "#ReclaimDunbar: Reclaiming the Lived Experiences and Lost Assets of the Dunbar Community" (IRB# 5879). The #ReclaimDunbar project has spurred local and regional public interest, and as a result, students (undergraduate and graduate) and faculty from various colleges and departments across the university have emphatically volunteered to assist with community engagement and research activities. This learning community provides a formal platform for students to engage in the #ReclaimDunbar project and similar projects of interest. A total of 50 undergraduate students annually are planned to participate in this effort.