

2018 – 2019 College of Applied Arts Learning Community Abstracts

Food Security Learning Community (FSLC), School of Family & Consumer Sciences



Bobcat Bounty

Dr. Hannah Thornton and Dr. Lesli Biediger-Friedman

The Food Security Learning Community (FSLC) is a group of undergraduate students, graduate students, dietetic interns, and faculty from the Nutrition and Foods program who worked together to identify and address problems of food insecurity. Through mentorship, FSLC faculty guided student researchers in the development of evidence-based community nutrition interventions. Working within the Nutrition Care Process model, the FSLC engaged in community-wide qualitative and quantitative assessment, planning and implementation of interventions, and ongoing monitoring and evaluation of projects. In 2018-2019, the group focused on evaluating the effectiveness of Bobcat Bounty and supporting the long-term sustainability of the intervention. Since its inception, the FSLC has directly engaged 30 dietetic interns, three graduate students, seven undergraduate interns, and over 60 undergraduate volunteers in planning, implementing, analyzing, and presenting our research.

- 27 Bobcat Bounty distributions held.
 - 2820 bags of groceries distributed.
 - 459 clients served in the Fall; 444 clients served in the Spring.
- 15 mini education campaigns delivered (added sugar, healthy eating on a budget, how to cook in a dorm room, label reading, etc.).
- 6 undergraduate poster/paper presentations.
- 5 FSLC undergraduates matriculated into the Master's in Human Nutrition program at Texas State.
- 2 FSLC undergraduates matriculated into other graduate programs.

Undergraduate Student Presentations

Walling K, Thornton H, Biediger-Friedman L. Impacts of utensil distribution on home cooking behavior among clients of a college food pantry. Texas Academy of Nutrition and Dietetics Annual Conference. Arlington, TX. April 11, 2019.

Cobb S, Duke E, Kincer A, Selinsky J, Thornton H, Biediger-Friedman L. Variables associated with on campus food pantry social media posts and follower engagement. Texas Academy of Nutrition and Dietetics Annual Conference. Arlington, TX. April 11, 2019.

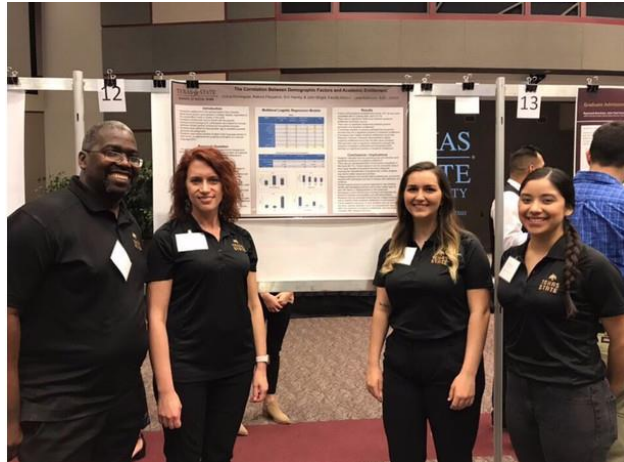
Miethe C, Ricano X, Figari P, Arora R, Lamkin K, Thornton H, Biediger-Friedman L. Clients at a university food pantry demonstrate similar interest in nutrition education distributed via print and social media. Texas Academy of Nutrition and Dietetics Annual Conference. Arlington, TX. April 11, 2019.

Menge L, Ziesemer B, Moser J, Gomez I, Thornton H, Biediger-Friedman L. Evaluation of the volunteer experience at a student-run campus food pantry. Texas Academy of Nutrition and Dietetics Annual Conference. Arlington, TX. April 11, 2019.

Walling K, Thornton H, Biediger-Friedman L. Impacts of utensil distribution on home cooking behavior among clients of a college food pantry. Undergraduate Research Conference. Texas State University. San Marcos, TX. April 24, 2019.

Weaver A and Lamkin K. Nutrient and Inventory Analysis of Foods Distributed at an On-Campus Food Pantry. Undergraduate Research Conference. Texas State University. San Marcos, TX. April 24, 2019

Research Lab Offers Original Research Project, School of Social Work



Research Lab for Academic Entitlement in Higher Education

Carla Ackerson

The Research Lab offered four undergraduate students in the School of Social Work an opportunity to participate in an original research project to study academic entitlement in higher education. Students enhanced their research skills through generating research questions, developing questionnaires, setting up and administering surveys, collecting, managing, and analyzing data, and finally, writing up and presenting their findings to others. The Research Lab met once a week and taught the students collegiality and the importance of collaborating within the university community to share ideas and find ways to participate in cross-discipline learning. Participating students were encouraged to apply for the Texas State University Undergraduate Research Fellowship and to present the finding at a regional or national conference.

- 4 undergraduate students presented at the National Conference of Undergraduate Research (NCUR) – Kennesaw State University.
- 4 undergraduate students received the Texas State University Undergraduate Research Fellowship.
- All 4 participating undergraduate students will be applying to graduate school in the Fall 2019 semester.

OUR FCD, School of Family and Consumer Sciences



Opportunities for Undergraduate Research in Family and Child Development (OUR FCD)

Dr. Priscilla Goble and Dr. Norma Perez-Brena

The Opportunities for Undergraduate Research in Family and Child Development (OUR FCD) Fellowship program identified 13 talented undergraduate students interested in family and child development and provided them with human capital and financial resources necessary for pursuing graduate degrees. OUR FCD fellows were paired with a faculty mentor who facilitated their engagement in rich research experiences. Upon completion, fellows have a greater connection to the program, research, and faculty. This sense of connection should manifest in higher retention rates, reduced research anxiety, increased interest in research and graduate education, and overall preparation for graduate education. At the termination of a two-semester commitment, fellows received a stipend for their own professional development (pay for the GRE, pay for graduate school applications, pay to attend a research training or research conference, etc.). This financial support helped reduce financial strains related to participating in research and applying to graduate programs.

- 13 undergraduate students accepted in to the program.
 - 3 research labs, 2 Texas State programs, and 3 universities benefited.
- 9 undergraduate students presented at University or regional research conferences.
- 1 undergraduate student will complete an undergraduate honors thesis 2019-2020.
- 9 undergraduate students plan to apply to graduate school in June 2019 or December 2019.

Undergraduate Student Presentations

Adams, K., Kotsonis, D., & Goble, P. (April 2019). The Effects of Bilingual Classrooms on Bilingual Children's Literacy and Language Skills. Poster Presented at the Texas State University Undergraduate Research Conference. San Marcos, TX. *Received Honorable Mention

Chapa, K., Baker, B., & Goble, P. (April 2019). Negative Teacher-child Interactions with Racial Minority Children. Poster Presented at the Texas State University Undergraduate Research Conference. San Marcos, TX.

Duncan, J., Jefferson, M., Martinez, M., Perez, R., Rizzo Esposito, A., & Perez-Brena, N. (February 2019). Examining the Association between Coparenting and Parenting Agency Among Adolescent Parents. Poster Presented at the Texas Council on Family Relations Annual Conference. Austin, TX.

Janysek, H., Wheeler, K., & Goble, P. (April 2019). Relations between Social Media Use and Personality Traits in Young Adults. Poster Presented at the Texas State University Undergraduate Research Conference. San Marcos, TX.

Increasing Sustainability in Hydroponics by Recovering Food Waste and Addressing Market Opportunities, Department of Agriculture



Hydroponics Lab on West Campus, Texas State University

Increasing Sustainability in Hydroponics by Recovering Food Waste and Addressing Market Opportunities

Dr. Nicole Wagner

Based on the need for improving water and nutrient resource efficiency in food systems, coupled with the growing consumer demand for local and organic products, this project explored the feasibility of fruit and vegetable crops grown in greenhouse-based hydroponic systems in Central Texas. Hydroponic systems offer advantages over field-based farming methods, such as 90 to 95 percent less water use, increased production on less land area per year, crop production on nonarable land, and adaptability to extreme weather. Additionally, indoor hydroponic production in or near urban areas has the potential to reduce food miles, which helps to lower food waste by decreasing the amount of time from harvest to consumption, while potentially increasing nutrition content and flavor. This project explored the ability of hydroponic production to create market opportunities, and focused on if locally sourced nutrients, such as from composted food waste, can be used as organically sourced nutrients.

Students had exposure to the transdisciplinary aspects of this project during crop and soil science courses, such that approximately 216 undergraduate students were impacted during the 2018- 2019 academic year.

- 10 undergraduate students constructed eight hydroponic systems with automation equipment.
- 5 undergraduate students presented at the Texas State University Undergraduate Research conference.

- 1 undergraduate student received the 2019 Undergraduate Research Fellowship.
- 2 undergraduate students submitting a paper to the Texas State Journal of Undergraduate Education.

Undergraduate Research Projects

De Leon, G. Evaluating Suitable Crops for Vertical Hydroponic Systems.

Glasscock, M. Effects of Increased Dissolved Oxygen Concentration on Beneficial Microbiology in Hydroponic Systems.

Godoy, L. Evaluating Nutrient Analysis Equipment in Hydroponic and Automatic Systems.

Gutierrez, M. Assessing Vermicompost Tea in Hydroponic Food Production.

Lash, K. Evaluating Four Strawberry Cultivars for Indoor Production in Central Texas.

Lauterbach, K. Exploring Nutrient Content of Hydroponically Grown Microgreens.

McAfee, J. Assessing Vermicompost Tea in Hydroponic Food Production.

Ovalle, A. Comparing Post-Harvest between Local Hydroponic Strawberries with Non-local Hydroponic and Field-Grown Strawberries using Refractometry.

Soza, M. Assessing Demand for Locally Grown Produce; Growing Pink Oyster Mushrooms (*Agaricus Bisporous*) within a Hydroponic System.

Wendt, E. Growing Pink Oyster Mushrooms (*Agaricus Bisporous*) within a Hydroponic System.

New Course: Civic Engagement as Global Citizenship, Department of Organizational, Workforce & Leadership Studies

Dr. Omar Lopez

The Department of Occupational, Workforce, and Leadership Studies announces a new course for spring 2019 titled, *Civic Engagement as Global Citizenship*. Students will engage in innovative approaches to learning about community-based issues within the context of global citizenship. After completing the course, students will be able to understand civic issues from different frames (e.g., social, economic, political, etc.), assess a civic issue to propose alternative interventions, and extend an issue to regional, state, national, and global levels.

For further information, please contact Dr. Omar S. Lopez, Associate Professor in the Department of Occupational, Workforce, and Leadership Studies via email OL14@txstate.edu.