



FRC

FAMILY  
RESILIENCY  
CENTER



Annual Report  
January - December 2017

# Letter From the Director



Identifying ways to strengthen families during challenging times so that they may thrive is a guiding principle for much of the work at the Family Resiliency Center (FRC).

2017 presented many challenges to families across the United States and the globe- ranging from natural disasters to increased stress in daily life. The 2017 Stress in America report released by the American Psychological Association revealed that nearly two-thirds of Americans reported significant amounts of stress in the past year. Researchers at FRC report back to me that they too have heard firsthand how the families that they talk with are experiencing increased levels of stress on a daily basis. The Abriendo Caminos Program includes sites in Houston and Puerto Rico. While our colleagues in Houston are up and running and families are putting their lives back together, our thoughts and prayers are still with the families in Puerto Rico who have yet to find some semblance of order in their daily lives. Resiliency is often defined

as the ability to “bounce back” after a challenge. We aim to develop and disseminate programs that assist families to find order and reduce stress even when faced with some of life’s grandest challenges.

In this annual report you will see evidence for hope. As previously mentioned, the Abriendo Caminos program is operating in five sites across the country to promote healthy habits for Hispanic families. This community-based program has already demonstrated effectiveness in decreasing the consumption of unhealthy foods. The JUS? Media Programme in Jamaica is promoting food-focused media literacy to teens and their mothers. I was fortunate to attend the first community stakeholders meeting in November. The enthusiasm to affect the health and wellbeing of teens across the country – and perhaps the entire Caribbean- was palpable. STRONG Kids is growing strong as well. With over 450 families enrolled in the project we are beginning to see how dietary habits are established at birth and may have long lasting effects into the preschool years.

These are but a few examples of the exciting research and outreach programs at FRC. I invite you to peruse the annual report and see that families are indeed resilient- with support and an appreciation of their daily challenges.

— Dr. Barbara Fiese

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**451**

Babies born to complete STRONG Kids 2 birth cohort



**70%**

Increase in Twitter followers gained



**\$9.9**

Million in current support for the FRC



**31**

Affiliate members of the FRC. A complete listing of affiliates can be found at [go.illinois.edu/FRCaffiliates](http://go.illinois.edu/FRCaffiliates).



**28%**

Increase in Twitter reach compared to 2016



**8**

#talkFRCResearch Podcasts available on iTunes and SoundCloud

# FOOD AND FAMILY LAB

## 2017 Christopher Family Foundation Grant Recipients

### *Gardening and Family Health: Elucidating the Role of the Human and Environmental Microbiota*

***“This has the potential to provide vital knowledge necessary to develop interventions that capitalize on human-environment interactions to promote family resilience to chronic disease.”***

***-Dr. Naiman Khan, Principal Investigator***

The Gardening and Family Health project is investigating the influence of gardening on individual health and to extend its benefits to family rituals and routines.

The research team will **investigate the impact of gardening on family routines and rituals** across diverse populations. It will also explore the effects of gardening on changes in the GI microbiota of the gardener in the household and family members. Finally, researchers will investigate the link between the soil microbiota and the GI microbiota of the gardener in the family.

Ultimately, the project is working to show that individuals and families that garden will engage in more healthful rituals and routines and **exhibit greater abundance of physical and physiological benefits.**



*Dr. Naiman Khan,  
Principal Investigator*

A complete list of the research team can be found <http://go.illinois.edu/FoodandFamily>



***“Gardening is a leisure activity that transcends cultures and is a tool for promising interactive environmental health promotion due to its potential to influence multiple aspects of health and family dynamics.”***

***-Dr. Naiman Khan, Principal Investigator***



## *Understanding the Nutritional Challenges of Cancer Survivors*

***“There is an urgent need to understand how challenges in obtaining appropriate foods may impact cancer survivors.”***

***- Dr. Anna Arthur, Principal Investigator***

The Understanding the Nutritional Challenges of Cancer Survivors project is working to identify the role that food security plays in cancer survivorship and how cancer survivors prioritize their nutrition and food needs. The **project aims to improve the lives of cancer survivors** by reducing food insecurity and better addressing survivors’ nutritional needs.

To our knowledge, **this is the first study to comprehensively examine the prevalence of food insecurity in cancer survivors**, and how food insecurity may be associated with factors such as quality of life, malnutrition, and prioritization of food in relation to other household and medical expenses.

This groundbreaking research will also **inform a larger national study** addressing the effectiveness of various interventions that are aimed at helping cancer survivors, the interventions’ effectiveness, and how they can be improved.



*Dr. Anna Arthur,  
Principal Investigator*

This project is a joint research study by Carle Cancer Center and the Family Resiliency Center at the University of Illinois at Urbana-Champaign. A complete list of the research team can be found <http://go.illinois.edu/FoodandFamily>

***The Food and Family Program is designed to support innovative transdisciplinary research that can unravel the complex connections between the family environment and healthy active lifestyles for all.***

# STRONG Kids

## STRONG Kids 2: Expansion and Milestones in 2017

The STRONG Kids 2 program continues to grow as **milestones are reached marking important data collection points** for this pioneering program.

STRONG Kids 2 is using a cells-to-society approach to explore how individual biology interacts with the family environment and the relationship the interaction has to childhood obesity risk. This transdisciplinary project is one of the first studies to take a longitudinal look at dietary habits, including milk and dairy consumption, and growth trajectories starting at birth. The **study includes a cohort of 451 children** who have been followed since birth.

The project received an additional \$548,000 in funding from the National Dairy Council (NDC) in early 2017. The increased support

from the NDC allows researchers to follow participants until they reach 5 years of age—a **critical point for children** as they become more vocal about their food preferences and transition to the school environment. The first data collection with a 5-year-old participant will take place during the summer of 2018. Dr. Sharon Donovan received additional support from the National Institutes of Health which will allow for a complete analysis of the microbiota as well as body composition at age 4.

STRONG Kids 2 involves the collection of biological samples, height and weight measurements from infants and toddlers are collected at 6 weeks, 3, 12, 18, 24, and 36 months, and 4 and 5 years. Mothers are surveyed about weaning, dietary

## STRONG KIDS 2: A Cells-to-Society Approach



Barbara Fiese, PhD  
Director, Family Resiliency Center,  
Professor, HDFS



Sharon Donovan, PhD, RD  
Interim Director, I-TOPP  
Professor, Nutrition and Health





*Dr. Sharon Donovan presenting a STRONG Kids 2 update to the National Dairy Council September 2017*

habits, household routines, children’s emotions, feeding styles, and milk and dairy consumption. Additional measures such as maternal height and weight are also being collected.

Fall 2017 marked the final 6-week and 3-month home visits and data collections. **FRC researchers now have full sets of data for participants at week one, six, and three-month checkpoints.** Publications on these initial time points are expected in 2018.

STRONG Kids 2 also expanded its breadth of research and transdisciplinary approach in 2017 with the inclusion of six new subprojects that are building upon the data set. **The subprojects will also deliver a better understanding of how biology and environment interact and holistically contribute to a child’s health and wellness.**

STRONG Kids 2 is currently funded through 2019. Ultimately, the findings of this research **will serve as the foundation for obesity prevention and intervention programs** to optimize infant growth, early life nutrition, and reduce childhood obesity risk.

### HDFS 494: STRONG Kids 2 Research Assistants

- Students conduct home visits to collect: biological samples, home food inventory, and H/W measurements
- Has included students from 20+ majors
- Course developed through a USDA Higher Education Challenge Grant



STRONG Kids 2 is built upon previous research from STRONG Kids 1 with preschool-aged children, documenting the relationship among genetic, child, and family factors in predicting BMI and dietary habits. The study sample includes 451 infants and their families located in small urban communities in central Illinois.

*This research is supported by grants from the National Dairy Council to Sharon Donovan and Barbara H. Fiese (Co-Principal Investigators) | The Gerber Foundation to Sharon Donovan | The Christopher Family Foundation to Sharon Donovan and Kelly K. Bost | Hatch ILLU 793-330 from the U.S. Department of Agriculture to Barbara H. Fiese, Kelly K. Bost, and Margarita Teran-Garcia | The National Institutes of Health DK 107561 to Sharon Donovan.*

*A complete list of the research team can be found <http://go.illinois.edu/strongkids2>*

# JUS Media? Programme

## *Research-Based Intervention:*

### *Changing The Way Jamaicans Consume Advertising and Food*

The JUS Media? Programme **showed remarkable results in 2017**, including participants living healthier lives, and is set to extend its global reach and impact in 2018.

The JUS Media? Programme is a new transdisciplinary global health intervention designed to combat the **influence of US cable/media on the eating habits** of youth and families in Jamaica by improving their critical thinking skills about food advertising.

The J(amaican and) U(nited) S(tates) Media? Programme team is both **transdisciplinary** and international, involving scholars in Human Development, Advertising, Media, and Nutrition, who are split across the University of Illinois, USA, and the University of the West Indies Open Campus, Jamaica.

*Pictured: Top (L-R): Dr. Michelle Nelson, Dr. Rachel Powell, McKenzie Martin, Arianne Anderson, Brenda Koester, Cagla Giray, Candice Wray |Bottom (L-R): Prof. Julie Meeks, Dr. Barbara Fiese, Dr. Gail M. Ferguson, Tashaine Morrison*

The JUS Media? Programme is a **food-focused media literacy intervention** developed in response to the findings of Dr. Gail Ferguson's Culture, Health, and Family Life Study.

Findings from that study indicated that **adolescents and their mothers who adopt a part-American identity in Jamaica through remote acculturation watch more US cable TV daily, which is then linked to eating more unhealthy foods.**

The JUS Media? Programme launched its pilot intervention programming in Jamaica in Spring 2017. Teenage students and their mothers in Kingston deconstructed food advertisements based on media literacy principles, then **subverted the advertising** by creating counter-ads to expose their pernicious messages.

**The USA-based members of the JUS Media? Programme Study team returned to Jamaica in Fall 2017.** The team convened a stakeholder's workshop, conducted feedback focus groups with prior participants in their Spring 2017 intervention, and presented research findings at a local conference demonstrating the efficacy of their program.





- Jamaican teenagers watch 30-50% more U.S. cable TV than Jamaican channels like TVJ

Bravo

TLC

Discovery CHANNEL

oxygen

food NETWORK



- 59% of food and beverage advertisements on Kingstown billboards show unhealthy foods (e.g., sugary snacks, soda, fast-food)
- Less than 1% showed healthy foods
- KFC is the #1 food advertiser in billboard and newspaper advertising in Kingstown



- 67% of food and beverage advertisements in *The Observer* and *The Gleaner* featured processed snacks, soda, and fast-food restaurants
- Less than 1% featured fruits or vegetables

MUSIC TELEVISION

abc

Lifetime

NICKELODEON



***“The efficacy study found promising preliminary results — families who received the JUS Media? Programme reported higher fruit consumption and media literacy than those who did not receive the Programme.”***

***- Dr. Gail Ferguson, Principal Investigator***

International transdisciplinary research training and mentoring for 10+ graduate-level research assistants and 15+ undergraduate-level research assistants at UIUC and UWI.

Research Assistant McKenzie Martin was awarded two competitive undergraduate research grants in Fall 2017 to travel to Jamaica with the team to collect data for an honors research project within the SMS/texting arm of the JUS Media? Programme.



*Pictured: (L-R): Dr. Gail M. Ferguson, McKenzie Martin*

More information and complete list of the research team can be found at <http://go.illinois.edu/jusmedia>



JUS Media? Programme

# The Autism Program

## TAP IMPACT CONTINUES DESPITE FINANCIAL UNCERTAINTY

The Autism Program (TAP) persevered through financial turmoil in 2017, expanding its reach across east central Illinois and serving more than 800 families and training nearly 200.

TAP at the Family Resiliency Center fought a hard won battle to keep its doors open in 2017 while continuing to address and meet the needs of the community and academic programming for students.

Not only did the State of Illinois budget crisis threaten TAP's programming, but also the uncertainty of whether and when funding would arrive once a budget was passed.

***"It's been a volatile few years and puts an enormous strain on the program,"***

***- Linda Tortorelli, TAP Director***

Tortorelli's leadership and relentless grit secured private funding in 2016 that allowed the doors to stay open and services to continue in 2017. A significant gift to the College of Agricultural, Consumer and Environmental Sciences and funds from a collection of donors, including Carle, Christie Foundation, grateful parents, and others helped fund critical programs.

With the doors open, Tortorelli and her staff were able to continue doing what they do best - offering much needed and often hard to find, autism resources to families and autism training across east central Illinois.





▲ TAP interns creating free visual supports for local teachers.

## TRAINING A NEW ERA



TAP trained nearly 200 people throughout the region arming them with a better understanding of autism, education on how to be more effective in their work, and strategies to improve the lives of people living with autism and their families. Trainings included members of law enforcement, first responders, teachers, doctoral students, Rape Crisis Center, and mental health professionals.



TAP's 2017 programming is also helping train a new era of behavior health professionals through its Registered Behavior Technician (RBT) internship program at the University of Illinois at Urbana-Champaign. RBT gives students hands-on experience and exposes the students to the career of applied behavior analysis. Several past interns are now going on to receive their master's degree in the field.



Daily, TAP's Resource Center doors are open to anyone seeking autism resources and to students seeking hands-on experience. The Center hosts a revolving door of parents, teachers, and community members seeking information and tools. University of Illinois students also have a constant presence applying what they learn in the classroom and creating visual support and teaching materials to those in need of it. Thousands of visual support materials are available and hundreds of families received assistance in 2017.

***Moving into 2018, TAP's leadership strives to stabilize funding. TAP is working diligently to diversify their financial resources, creating sustainability in community services and student learning experiences.***



# Abriendo Caminos

*Clearing the Path to Hispanic Health*

## Improving Health and Decreasing Childhood Obesity Rates of Hispanic Children

Abriendo Caminos implemented new focus groups in Puerto Rico and Texas in 2017, growing in numbers and impact. The new focus groups mark an exciting milestone for Abriendo Caminos as it seeks to develop an effective, low-cost obesity prevention program that can be disseminated by educators and community agencies across the U.S.

*“Our preliminary findings indicate that participants in Abriendo Caminos consume significantly less sugar-sweetened beverages, fruit juice, fried foods, and fast food after participating in the program.”*

*-Dr. Margarita Teran-Garcia, Principal Investigator*

The project’s six-week community-based program is **designed to significantly increase the basic knowledge of nutrition and dietary health among Hispanic-heritage children** ages 6 to 18 years old. A curriculum that will be adapted at each site to meet the cultural and local needs of the Hispanic communities they serve.



## Educating Future Professionals

Abriendo Caminos’ integrated program is training future professionals to work and meet specific needs of underserved population groups. Students have the opportunity to attend the **“Hispanic Health Programs”** course. More than two dozen underrepresented minority or first-generation students at the University of Illinois have enrolled and will receive hands-on experience inside and outside the classroom.

The majority of undergraduate students enrolled in the course have stated that they plan to continue to graduate or attend medical school when they have completed their undergraduate degree. This aligns well with the **long-term goal of training future minority professionals** who will work on bringing impactful changes in health and wellness to the community.



# CHILDREN'S ENVIRONMENTAL HEALTH IMPACT REPORT

Family Resiliency Center based research is on the front lines of the new Children's Environmental Health Impact Report.

The Children's Environmental Health Center (CEHC) at Illinois is one of 23 centers across the country conducting research towards reducing the burden that environmentally induced diseases place on children.

The Children's Environmental Health Impact Report is a combined effort of each center's scientific investigation and research. CEHC at Illinois' contribution to the report focused on researching the impact of bisphenol A (BPA), phthalates, and other endocrine disruptors on child development. CEHC at Illinois research is a collaborative effort by researchers from the Family Resiliency Center and the Beckman Institute.

The Children's Environmental Health Centers and Impact Report are funded by National Institutes of Environmental Health Sciences (NIEHS) and United States Environmental Protection Agency (EPA) in an effort to #ProtectKidsHealth.



## #talkFRCResearch Podcast Series



### Check out the new #talkFRCResearch Podcast Series

Listen on the FRC Website | Subscribe and Listen on iTunes

#### Highlights

#### Exploring The Influence of Diet & Obesity On Children's Brain Functioning & Development

An eye-opening look at how a child's body weight and nutrition may influence their brain functioning and brain development. FRC affiliate, Dr. Naiman Khan, discusses his trailblazing new and ongoing research. This podcast also explores how Dr. Khan and his research team are contributing to the Family Resiliency Center's innovative STRONG Kids Program.

#### Picky Eating and How Nature & Nurture May Influence Eating Behavior In Young Kids

A Family Resiliency Center podcast featuring newly published research exploring how nature and nurture may be influencing children's eating behavior. This podcast is hosted by Ryann Monahan, Family Resiliency Center Communications Specialist. It features Natasha Cole, a doctoral student in the Division of Nutritional Sciences and lead author of the study.

# Staff and Advisory Board

## FRC Staff



### **DR. BARBARA FIESE, DIRECTOR**

A Professor in the Department of Human Development and Family Studies and The Pampered Chef Endowed Chair in Family Resiliency, Dr. Fiese has been the Family Resiliency Center Director since August 2008. Her research explores topics such as family mealtimes, family routines, household food insecurity and child well-being, child obesity prevention, and child and family health. Dr. Fiese received her PhD from the University of Illinois at Chicago in 1987.



### **BRENDA KOESTER, ASSISTANT DIRECTOR**

As the Assistant Director of the Family Resiliency Center, Brenda Koester is involved in everything from supporting research projects, staff supervision, directing policy work, assisting with grant writing and budgeting, directing media and communication efforts, and coordinating public engagement. She holds a BS in Speech Communication and an MS in Labor and Industrial Relations from the University of Illinois at Urbana-Champaign.



### **RYANN MONAHAN, COMMUNICATIONS SPECIALIST**

Ryann Monahan is the Family Resiliency's Communications Specialist. She is a former broadcast journalist and has worked in higher education instruction since 2012 as an adjunct instructor in the University of Illinois Urbana-Champaign Department of Journalism. Monahan is also a founder and director of Project Athletes, a non-profit organization. She holds a BS in Media Studies and a MS in Journalism from the University of Illinois at Urbana-Champaign.



### **DIANE DAVIS, OFFICE MANAGER**

Diane Davis assists with the day-to-day operations of the FRC and is an integral member of the team. Originally from Indianapolis, Diane has been with the University of Illinois for over 30 years in a variety of roles and offices, including more than 14 years of service working for Residential Life in Student Housing where she was able to assist various student groups like I Guides or Women of Color.



### JEN THEMANSON, PROJECT COORDINATOR

As the STRONG Kids 2 Project Coordinator since 2011, Jen Themanson helms one of the FRC’s flagship research projects. In her role, she develops data collections, oversees statistical analysis, and develops research skills in undergraduate students. Jen has a BS in History Secondary Education and MEd in College Student Personnel Administration from Illinois State University.



### ASHLEY NEEF, PROJECT COORDINATOR

Ashley Neef started working for the Family Resiliency Center in November 2017. She spent three years working in clinical research, including two years as a regulatory specialist and one year as a research coordinator. She assists with the FRC’s numerous projects. Ashley completed her undergraduate degree from the University of Illinois at Urbana-Champaign in May 2014 earning a BS in Biology.



### DR. CAROLYN SUTTER, RESEARCH ASSOCIATE

Carolyn Sutter, PhD is a postdoctoral research associate with the Family Resiliency Center. Her research and outreach efforts focus on how social relationships with parents and peers relate to children’s developing eating behaviors and risk of childhood obesity. She received a BA in human development from the University of California, San Diego, and her MS in child development and PhD in human development both from the University of California, Davis.



### DR. SALMA MUSAAD, RESEARCH BIOSTATISTICIAN

Research Biostatistician Salma Musaad, MD, PhD, has more than 10 years of experience in clinical research, including 1.5 years in ophthalmology and stem-cell research; 4 years in molecular epidemiology in academia; and 4 years in clinical research organizations focusing on clinical trials and public health research.

A complete staff listing along with bios can be found at [go.illinois.edu/FRCstaff](http://go.illinois.edu/FRCstaff).

## FRC External Advisory Board

ROBIN BROWN, Midwest Dairy Council

GARY EVANS, Cornell University

JEREMY EVERETT, Texas Hunger Initiative

ANDREW FULIGINI, UCLA

MARLENE SCHWARTZ, University of Connecticut

ELAINE WAXMAN, Urban Institute

THOMAS S. WEISNER, UCLA

Complete profiles of the external advisory board can be found at [go.illinois.edu/FRCadvisory](http://go.illinois.edu/FRCadvisory).