

I ILLINOIS

Family Resiliency Center

COLLEGE OF AGRICULTURAL, CONSUMER
& ENVIRONMENTAL SCIENCES



2018

ANNUAL REPORT



Letter from the **DIRECTOR**

Welcome to the Family Resiliency Center 2018 annual report. In looking over the highlighted programs, I note a common thread on program impact and reach. These are signs of both program maturity and the mission of the FRC. The programming and research supported by FRC addresses many societal grand challenges such as obesity prevention, exposure to environmental toxins, and planning career paths for young adults with autism. In order to develop effective programming and comprehensive research programs, stakeholders are often engaged in formulating research questions, program design, and in some cases providing feedback about program findings. This process leads to greater engagement by community members and can spark new ideas for future programming.

Another common thread is the consistent involvement of undergraduate students and hands-on learning opportunities. Abriendo Caminos has engaged primarily first-generation and underrepresented minority students in real-world problem solving, team building, and research skills. These students have gone on to medical school, dietetics programs, and graduate school. The intense support for these students has created the next generation of health professionals and health researchers.

FRC's reach extends beyond the classroom. We were pleased to host the First 1,000 Days Symposium in 2018, in partnership with the Beckman Institute for Advanced Science and Technology, Interdisciplinary Health Sciences Institute and the ACES Office of Research. This symposium brought together over 100 researchers and community partners to address this important period of development. I was particularly excited about our community showcase that concluded the day. Ten community partners ranging from visiting home nurse programs to public health departments participated. The engagement between researchers and community agencies was palpable and future collaborations were formed.

Thank you for taking the time to learn more about some of the exciting work being conducted at the Family Resiliency Center as we look forward to a productive and engaging 2019.

- Dr. Barbara Fiese

TABLE OF CONTENTS



4
Abriendo Caminos



6
CEHC/COTC



7
First 1,000 Days Symposium



8
Kids in the Kitchen



10
Sprouts



11
STRONG Kids 2



12
The Autism Program



13
Family Resiliency Center Staff

ABRIENDO CAMINOS

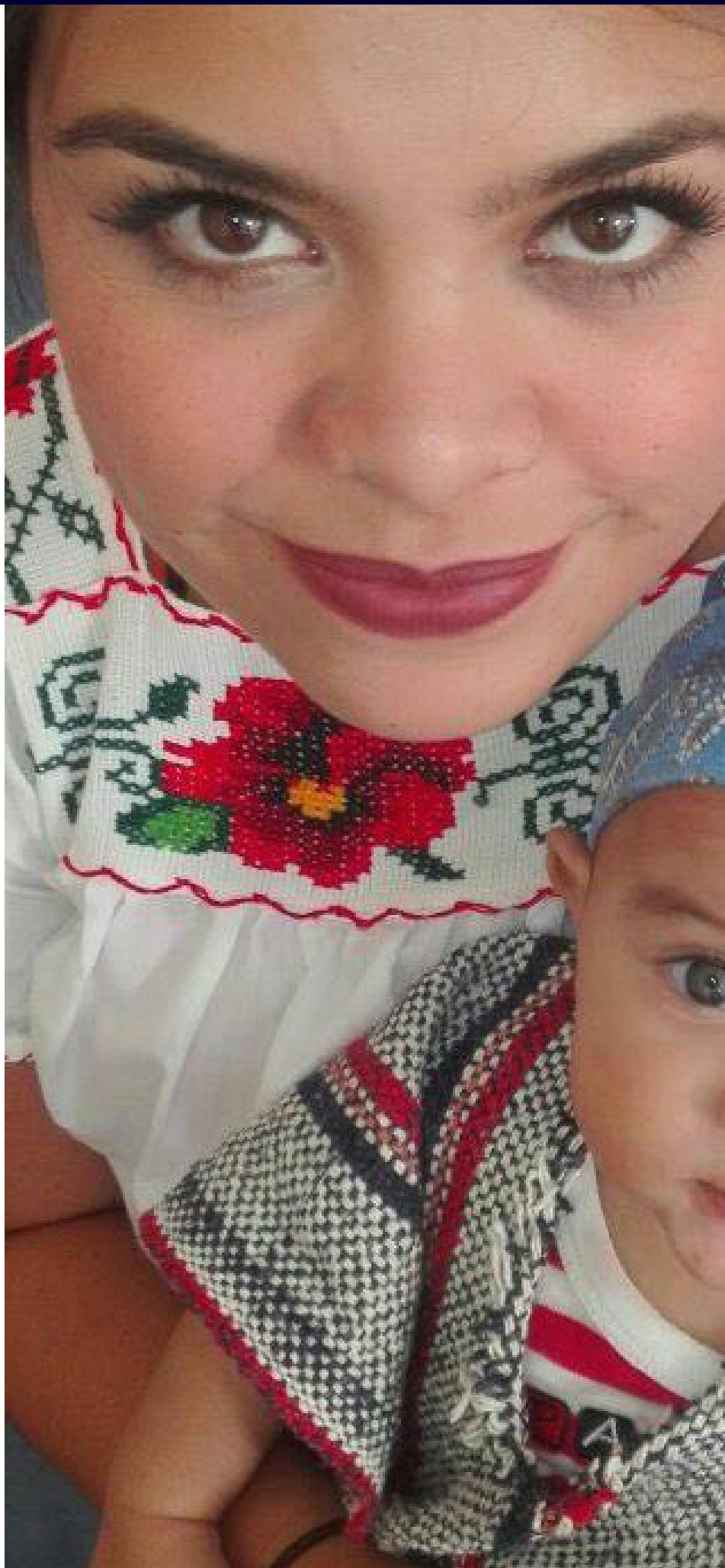
Obesity prevention efforts leading Hispanic-heritage families to healthier habits

Abriendo Caminos programming empowered Hispanic-heritage families with nutrition education and positively impacted their eating habits and lifestyles in 2018.

The Family Resiliency Center project establishes and contributes to obesity prevention interventions for Hispanic-heritage families, specifically focusing on those considered low income and low literacy. The program includes families in five locations: California, Illinois, Iowa, Puerto Rico, and Texas. Its community workshop-based curriculum includes healthy dietary behavior patterns and basic knowledge of nutrition, physical activity, and the organization of collective/shared family mealtimes.

“There is an urgent need to implement culturally-sensitive lifestyle interventions and educational programs to decrease this burden in Hispanic populations,” lead investigator and program officer Dr. Margarita Teran-Garcia emphasized.

2018 marked expansion and strengthened partnerships for Abriendo Caminos. Its research team worked with community groups across east central Illinois, including Illinois Extension and the Champaign-Urbana Public Health District. The research team also developed several bilingual handouts and games that help to support behavioral changes and increase the number of children and families that attain a healthy weight.





ABOUT DR. TERAN-GARCIA:

CNN en Español featured Abriendo Caminos' principal investigator, Dr. Margarita Teran-Garcia, as a guest to speak on behalf of decreasing the stigma and bias that children and families affected by obesity and overweight endure. Dr. Teran-Garcia's speaking engagements took her around the country increasing awareness for healthy weight and wellness management.

"The economic cost and emotional burden of managing obesity and obesity-related metabolic diseases are still increasing despite many public policies. There is much work to be done to address the problem of childhood obesity in families of Hispanic heritage," Dr. Teran-Garcia explained.

During the summer 2018, Abriendo Caminos researchers completed the data collection for focus groups in all five participating states, and will use their findings to compare regional findings exploring factors that facilitate or hinder healthy behaviors related to obesity prevention.

"Indeed, our data includes a self-selected sample of those families interested in our program. Overall, 225 families have participated in this randomized project [125 experimental; 100 control]. We have reported changes in behaviors and attitudes towards health and wellness. Our goal is to make those changes sustainable in the long term," Dr. Teran-Garcia explained.

Abriendo Caminos will launch a new phase of the program in 2019, as colleagues in Texas and Puerto Rico begin to recruit new families and increase impact.

TRAINING HISPANIC HEALTH AMBASSADORS

Abriendo Caminos offers unique learning experiences that arm students with the tools to become ambassadors of health and wellness for the Hispanic community when they graduate from the University of Illinois at Urbana-Champaign.

The "Hispanic Health Promotion" curriculum (HHP, HCD494/FSHN499) focuses on community immersion with real-world problem solving, team building, and communication skills necessary for "society-ready" graduates. Students are also mentored on research methods and analyses of the data collected during the implementation of the AC project.

In May 2018, 13 Abriendo Caminos students graduated from the University of Illinois at Urbana-Champaign. Most were first-generation and underrepresented minorities. Several graduates went on to pursue a graduate degree; others continued their community engagement or developed independent research projects with the Abriendo Caminos team. To date, in Illinois, four of the students participating in the program are now in medical school, two are in dietetics internships, and 11 are in graduate school in either a masters or Ph.D. program.

This research is supported by the Agriculture and Food Research Initiative of the USDA National Institute of Food and Agriculture as part of the AFRI Childhood Obesity Prevention Challenge (2015-68001-23248) to the University of Illinois at Urbana-Champaign.

CEHC/COTC

Children's Environmental Health
Community Outreach and Translation
Core (COTC)



Researchers at the Children's Environmental Health Center at Illinois (CEHC Illinois) are investigating the effects of exposures to endocrine-disrupting chemicals such as bisphenol A (BPA), phthalates, and perfluoroalkyl (PFAS) on child development. The Community Outreach and Translation Core (COTC) of the CEHC Illinois, which is based at the Family Resiliency Center, is focused on providing information to child care providers and the general public about sources of exposure and reasonable actions that can be taken to reduce exposures. In 2018, the COTC excelled at translating and disseminating children's environmental health research to those who can benefit from it.

Research and FRC affiliate, Dr. Janice Juraska, was featured in a #talkFRCResearch podcast, "Plastic Chemical Exposure Linked to Brain Development," which discussed her research findings that indicate phthalate exposure is related to deficits in cognitive function in a rat model. Studying rats allows researchers to mimic how environmental exposures might affect human cognitive ability.

CEHC Illinois is also a lead collaborator of the Children's Environmental Health Centers Social Media Workgroup (SMW) which received additional funding by the National Institute of Environmental Health Sciences.

In addition to offering social media training webinars and providing a social media toolkit and message campaign, the SMW organized a social media workshop which was held at the National Institute of Environmental Health Sciences (NIEHS) Children's Environmental Health Center's meeting in October 2018. The workshop trained over 50 educated scientists, researchers, and communications specialists from around the country on establishing effective ways to incorporate social media as an outreach tool in public health. FRC communications specialist, Ryann Monahan, was selected to be a panelist during the interactive training. The workshop was organized by the Social Media Workgroup, which includes representatives from CEHC from Illinois, University of Southern California, and Emory University.

More information can be found at:

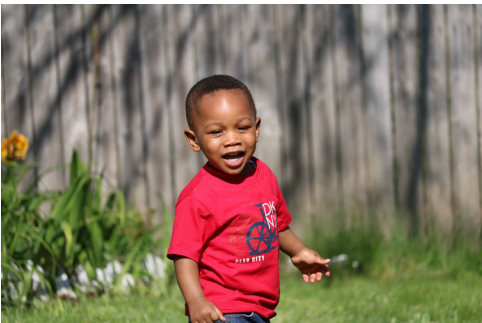
familyresiliency.illinois.edu/research/COTC

And on Twitter at:

[@CEHCIllinois](https://twitter.com/CEHCIllinois)

CEHC Illinois is jointly funded by NIEHS and the United States Environmental Protection Agency.

FIRST 1,000 DAYS SYMPOSIUM



The First 1,000 Days Symposium was held September 4–5, 2018 at the I Hotel and Conference Center in Champaign, Illinois. The event was hosted by the Family Resiliency Center, in partnership with the Beckman Institute for Advanced Science and Technology, Interdisciplinary Health Sciences Institute, and the College of ACES Office of Research.

The symposium focused on the first 1,000 days of life—the time spanning roughly between conception and a child’s second birthday. This span of time represents a unique period of opportunity when the foundations of optimum health, growth, and neurodevelopment across the lifespan are established. Multiple factors, including nutrition, stress, and environmental toxins, can interact with the child’s genetics during the first 1,000 days of a child’s life, and can cause lifelong implications on their physical, mental, and emotional health. The event highlighted the basic and applied transdisciplinary research being conducted at the University of Illinois at Urbana-Champaign that is addressing this critical window of development using a cells-to-society framework.

The First 1,000 Days Symposium united more than a hundred researchers and community partners studying or contributing to work on this critical window of development. Representation was wide-reaching, spanning four higher education institutions, two University of Illinois campuses, six colleges, 16 departments, three schools, six centers, two institutes, three health departments, and 11 organizations. In addition, 10 community partners that offer valuable resources to families across east central Illinois also took part in the event.

Presentation videos from the event can be found here:

go.illinois.edu/First1000Days

KIDS IN THE KITCHEN

Involving children in mealtime planning and prep leads to healthy habits

By Stephanie Henry

The struggle is real: getting kids to select nutrient-packed fruits and vegetables over other, not-so-healthy, choices. Do you bargain with them to take another bite of broccoli at the dinner table? Or do you find yourself giving in once again to your child's favorite fast food restaurant?

Family Resiliency Center (FRC) researchers get it—the challenges parents face over food. They also know how important it is to help children build healthy eating habits and relationships with food early in life. Now, their new research shows that getting kids into the kitchen might just be the perfect way to help them make healthier choices.

The FRC is a transdisciplinary food and family research lab in ACES Department of Human Development and Family Studies.

Barbara Fiese, director of the FRC and professor in human development and family studies, and a team of ACES researchers focus on research that sheds more light on children and healthy food habits. One of the FRC's flagship programs, STRONG Kids 2, will provide insights into how individual biology interacts with the family environment, with the goal of promoting healthy eating habits in young children. The team also studies multiple factors—genetic, family, community, child care, cultural, and media—that may contribute to childhood obesity, health behaviors, and health beliefs.

The STRONG Kids 2 team hopes ultimately to provide information to build obesity prevention and intervention programs.

Getting kids involved in planning, shopping for, or preparing family meals has been one area of research. Results from a recent study by Fiese and human

development and family studies doctoral student Jessica Metcalfe show that kids as young as 3 tend to make healthier choices when they help with meal prep or shopping. In the study, children who helped out when they were 3 years old ate more fruits and vegetables as opposed to items like fast food offerings when they were 4.

“The important thing to emphasize is how early this involvement can start,” Fiese says. “Three to 4 years of age seems to be kind of a sweet spot, because that's when kids' exposures to new tastes and textures are really expanding.”

The preschool years are a time when kids are growing cognitively and beginning to seek their autonomy and assert themselves, Fiese adds. “Every parent or grandparent has dealt with a 3- or 4-year-old who says, ‘No, I want to do it myself.’ Use that drive to have a child do things like stirring or pouring in the kitchen.”

And that's the key—finding age-appropriate tasks that children can help with. Can they plan a meal with you? Can they help shop for ingredients? Put together the ingredients in a salad?

“Find ways to encourage kids' confidence so that whatever you're asking them to do is not way above their development level,” Fiese says. “You're not going to give a knife to a 4-year-old—you want to be safe. And you're also not going to ask a preschooler to read a complicated recipe; you'll wait for that to come later. To start, you want to build kids' confidence and expose them to a variety of foods.”

While you're fostering healthy food relationships and habits by letting your kids help, they can be learning many other lessons by assisting in the kitchen. Fiese

“Find ways to encourage kids’ confidence so that whatever you’re asking them to do is not way above their development level.”

explains, “If you think about it, getting kids involved in the kitchen is a perfect learning environment. It’s not only about the food—it’s about creating cognitive skills, social-emotional skills. The children learn basic math, such as quantities, and eye-hand coordination skills.

“It’s also a great bonding time. I just received a photo of my granddaughter and my daughter-in-law, standing in the kitchen with their arms around each other, looking at a cookbook. Kitchen time creates those memories as well, memories that can start at the preschool age.”

By now many parents may be thinking, “This sounds great, but I don’t have time to prepare meals, let alone get my child involved in meal planning.”

It might surprise you that research has already determined that family mealtimes usually last only 18 to 20 minutes. And, further, most people in the United States spend 40 minutes or less a day in meal preparation, including cooking and cleaning up. “That’s really just an hour,” Fiese says. “Do you know how long people watch TV in a day? It’s a lot more than an hour for adults.

“People assume the problem is not enough time. But it’s more how you choose to allocate time. Of course, there are real time constraints, like if you work long hours and you’re a commuter. But if you are someone who feels pressured for time, it’s likely you’re highly stressed, and that may present a different set of barriers,” she says.

Does this sound like you? If so, start small. Maybe set a goal of having your kids help prepare one meal per week. Or to set the table, or mix up the dinner salad.

Visit the FRC website for resources, such as Mealtime Minutes and the Sprouts curriculum, that can help families develop healthy food habits with their children.

familyresiliency.illinois.edu



SPROUTS

Sprouts Growing Healthy Habits curriculum launches

Teachers, childcare providers, and after-school programs now have access to new FRC resources focused on helping children develop healthy habits. The FRC's research team has developed the Sprouts Growing Healthy Habits curriculum over the last several years, with 2018 marking development completion and the start of dissemination to help foster the development of children's healthy habits across the country.

Led by University of Illinois postdoctoral research associate Carolyn Sutter, the healthy habits curriculum is targeted for children ages 4 to 6, and seeks to increase awareness and knowledge of healthy routines—like healthy eating habits or sleeping patterns—that can be implemented in daily life.

“Early childhood is a time of opportunity to help children develop healthy habits that can last a lifetime,” Sutter explained.

The curriculum includes nine lessons that can be taught by educators and childcare providers and incorporates hands-on activities and interactive book reading. The curriculum has been piloted at local elementary schools and pre-K programs, as well as been reviewed for use by childcare providers and afterschool/community-based programs.

“Children in the United States spend a lot of time in out-of-home care. Because of this, schools, childcare, and afterschool programs can play an important role in promoting learning and development around health and wellness,” Sutter said.

The curriculum materials can be purchased or accessed online for free through the Family Resiliency Center website:

go.illinois.edu/sprouts

This project is supported by the Christopher Family Foundation Food and Family Program.



STRONG Kids 2

New milestones offering new insight into childhood obesity risk factors



The STRONG Kids 2 program is marking important data collection points that offer new insight into how a child's biology and environment work together to contribute to risks for childhood obesity and other health factors.

The STRONG Kids 2 research program is a pioneering, transdisciplinary longitudinal research study involving 451 children who have been tracked since they were one week old. Researchers will follow their biology and environment for several years, investigating everything from gut microbiome to their kitchen pantries. Researchers will take it a step further when these kids turn 5 years old, as they investigate how body weight influences their cognitive abilities.

May 2018 marked the final collection of data analyzing participants' introduction to solid foods. In August 2018, the final child to enter the study's birth cohort turned 1 year old, which means the final 12-month home data collection visit was completed.

These significant data collection points offer researchers long-awaited information that will contribute valuable insight into risks for childhood obesity. Family Resiliency Center STRONG Kids 2 researchers presented recent findings to the National Dairy Council in December 2018.

STRONG Kids 2 is expected to play a key role in the future of childhood obesity prevention and intervention programs.

Learn more by listening to the podcast "Childhood Obesity: An inside look at a cells-to-society approach to research and intervention," found on SoundCloud, iTunes, and the FRC website.



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 at go.illinois.edu/strongkids2.

THE AUTIMS PROGRAM



New programming offering new possibilities



The University of Illinois at Urbana-Champaign launched pioneering programming targeting university students on the autism spectrum in 2018. The goal is to improve the social skills needed for effective teamwork and positive workplace relationships.

“We are increasing training to help students navigate all of the social experiences at the university, gain employment, and thrive in the workplace,” Linda Tortorelli, TAP coordinator, explained.

The new programs are part of the Microsoft Accessibility Lighthouse initiative to further reduce barriers to employment for students on the autism spectrum. In June 2018, Microsoft announced it would be investing \$200,000 in the Accessibility Lighthouse Program, a collaboration that includes The Autism Program (TAP) in the College of Agricultural, Consumer and Environmental Sciences at the University of Illinois.

New programming from this initiative begins Spring 2019 and will offer two options for a combination of either individual or group sessions. These sessions will address improving essential soft skills needed for effective self-evaluation, organization, teamwork, and positive self-advocacy and workplace relationships.

“We want to focus on outcomes. Not just whether they completed their college degree, but career success and employment success,” Tortorelli said. TAP continues to address the goal of improving employment outcomes by focusing on projects that address short- and long-term challenges.



TAP’s Resource Room thrived in 2018, serving more than 800 families while offering autism resources, including thousands of visual support materials that are often scarce or difficult to access. TAP’s Resource Center is open daily to anyone seeking autism resources and to university students seeking hands-on experience.



TAP’s Registered Behavior Technician (RBT) internship program continues to train university students. RBT offers University of Illinois at Urbana-Champaign students a unique opportunity to get hands-on experience in the field of behavior analysis.

FRC STAFF

Family Resiliency Center staff and bios



Barbara H. Fiese *Phone: 217-244-3967 | Email: bhfiese@illinois.edu*

Barbara H. Fiese, Ph.D., is a clinical and developmental psychologist whose research focuses on family factors that promote health and wellbeing in children. She holds the Pampered Chef, Ltd., Endowed Chair in Family Resiliency and is a professor and Director of the Family Resiliency Center at the University of Illinois at Urbana-Champaign, with affiliated appointments in the Departments of Pediatrics and Psychology. She is considered a national expert in the area of shared family mealtimes and the role they play in promoting health.

She is a principal investigator or co-investigator on multiple federally funded projects aimed at examining environmental and biological factors contributing to early nutritional health. These projects include the STRONG Kids 2 Project, which takes a cell-to-community approach to dietary habits from birth, and the I-TOPP program, an innovative transdisciplinary M.P.H./Ph.D. training program in obesity prevention. She is also the PI on several projects aimed at increasing the efficiencies of summer and afterschool feeding programs for food insecure children and youth.

She is past-president of the Society of Family Psychology, editor of the *Journal of Family Psychology*, and inaugural editor of *Advances in Child and Family Policy and Practice*.



Brenda Davis Koester *Phone: 217-244-6486 | Email: bkoester@illinois.edu*

Brenda Davis Koester is Assistant Director of the Family Resiliency Center. Her research and policy work centers around food insecurity; children's feeding programs; effective community collaborations; and translating research into policy and practice. She also serves as co-PD and co-PI on several externally funded projects. She has experience supporting and coordinating transdisciplinary teams and co-instructs the HDFS 494 Undergraduate Transdisciplinary Research course.

As assistant director, she supervises staff and directs the professional development, communication, and policy work of the center. She also provides pre- and post-grant support for FRC projects and affiliates. She holds a B.S. in communication and an M.S. in labor and employment relations from the University of Illinois at Urbana-Champaign.



Jen Themanson Phone: 217-244-5119 | Email: jthemans@illinois.edu

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 B.S. in history secondary education and M.Ed. in college student personnel administration from Illinois State University.



Ellie Fujimoto Email: efujimo2@illinois.edu

Elinor Fujimoto is a Project Coordinator for the Family Resiliency Center. She is responsible for coordinating activities for the Children's Environmental Health Center's Communication Outreach and Translation Core and several other projects. She holds a B.S. in interdisciplinary health sciences, B.F.A. in dance, and M.P.H. from the University of Illinois at Urbana-Champaign, where she developed a passion for health equity and research translation. In prior roles, she has coordinated health science research in academic and clinical settings, working with diverse populations such as caregivers of veterans, perinatal women, and epilepsy patients. Fujimoto has also served on the Board of Directors for Champaign County Health Care Consumers since 2015.



Carolyn Sutter Email: carolyns@illinois.edu

Carolyn Sutter, Ph.D. 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 B.A. in human development from the University of California, San Diego, and her M.S. in child development and Ph.D. in human development both from the University of California, Davis. She has experience conducting research, supporting intervention programming, and designing educational materials for parents and school settings, from preschool through high school.



Kelly Uchmia Email: uchima2@illinois.edu

Kelly Uchmia is a Project Coordinator for the Family Resiliency Center and has been an integral part of the STRONG Kids 2 research project since 2013. As an undergraduate, she learned to conduct field work and data collection that contributed to studying childhood health and discovered a deep interest in research. Upon graduating with a B.S. in agricultural and consumer economics and a minor in communication from the University of Illinois Urbana-Champaign, Kelly became a Strong Kids family specialist and gained experience conducting research, coding, and collaborative academic publications.



Linda Tortorelli Phone: 217-244-1395 | Email: ltortore@illinois.edu

Since 2005, Linda Tortorelli has been the Coordinator for The Autism Program at Illinois on the Urbana-Champaign campus, which is a collaborative initiative between the Departments of Special Education and Human Development and Family Studies. Linda is a dynamic force behind community education about autism, as well as providing direct service to families. Linda was recently the recipient of the College of ACES Professional Staff Award for Innovation and Creativity, and she is a driving force behind TAP's vibrant presence in the local community.



Anne Hall Phone: 217-244-1395 | Email: annehall@illinois.edu

Serving as Resource Room Coordinator for The Autism Program at Illinois, Anne Hall oversees the day-to-day operations of TAP's resource room, which is dedicated to helping individuals with autism in the local community. Integral to the TAP team, Anne also supervises the University of Illinois student interns who assist in TAP's programming for local families.



Salma MUSAAD Phone: 217-244-0179 | Email: smusaad@illinois.edu

Research Biostatistician Salma MUSAAD, M.D., Ph.D., 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. She has extensive expertise in epidemiological study design and conducting field studies, with additional experience in questionnaire development, validation, and testing. In addition, she comes with strong biostatistical experience in statistical consulting and advanced methods, including quantile regression, structural equation modeling, and generalized linear models.



Diane Davis Phone: 217-333-7772 | Email: ddavis5@illinois.edu

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 and Women of Color.



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