



NC STATE UNIVERSITY

EXTENSION RESEARCH



TEACHING

Integration of research, teaching, and extension advances effective and impactful learning, discovery, translation, application, and engagement.

Department of Youth, Family, and Community Sciences

The Department of Youth, Family, and Community Sciences at NC State University aims to improve the health and well-being of youth, families, and their communities through:

Extension and Engagement

Develop, implement, and evaluate evidence-based programs and interventions that improve education, health, and economic well-being.

Research

Conduct applied research directed at the needs of youth, families, and communities.

Teaching

Train experienced and emerging professionals to work with youth and families in community-based organizations through an online master's program in Family Life and Youth Development.

Areas of focus include:

- Community Youth Development
- Volunteer Resource Management
- Family Life
- Family Resource Management
- Community Leadership
- Nutrition and Food Safety

The Department of Youth, Family, and Community Sciences works across the functions of extension, research, and teaching to serve students and stakeholders.

2014 IN REVIE\





Publications

Faculty published 26 peer-reviewed articles in professional journals. Faculty published 5 book chapters.



Presentations

Faculty gave 47 presentations at national meetings and 1 at an international meeting. Faculty gave 52 invited presentations across the country.

Department of Youth, Family, and Community Sciences

Tenure-Track Faculty

Grant-Funded Professionals

Research Assistant Professor

EFNEP-Funded Professionals

Instructional Designer

Administrative International Professionals Visiting Scholar

Total Full-time Department Members

PLUS

Grant-Funded Part-time Professionals



Awards & Honors

Dr. Kimberly Allen

Professional Development Award National Board for Certified Counselors Foundation

Dr. Carolyn Bird

Host for International Visiting Scholar Dr. Selda Coskuner, Turkey



Dr. Ben Chapman University Faculty Scholar NC State University

Dr. Sarah Kirby, Keishon Thomas, and Billy Brown

Educational Technology Award Georgia Extension Association of Family and Consumer Sciences

Dr. Sarah Kirby

Housing Impact Team Award Housing Education and Research Association

GRANTS AND CONTRACTS

Faculty in the Department of Youth, Family, and Community Sciences have a long history of successful resource development. They receive grants and contracts from a variety of sources including state government, federal government, and private foundations. Funding from grants and contracts supports research and extension efforts in the department as well as 29 full-time and 20+ part-time professionals.

OUR FUNDERS: Association of Public and Land Grant Universities I John Rex Endowment | Lumina Foundation | National 4-H Council | NC Agricultural Foundation I NC Department of Commerce I NC Department of Environmental and Natural Resources I NC State Health Plan for Teachers and State Employees I NOYCE Foundation I US Army I US Department of Agriculture I US Department of Education I US Department of Energy I US Department of Housing and Urban Development

TOTAL FOR 2014:

TOTAL MULTI-YEAR COMMITMENTS:

OVER \$5M OVER \$18M

Title	Direct Sponsor	Prime Sponsor	Amount Awarded	Project Duration
North Carolina 4-H Very Important Parents Sustainable Community Project Investigators: Allen, Kimberly, Jakes, Susan	US Dept. of Agriculture (USDA)	US Dept. of Agriculture (USDA)	\$493,000.00	8/1/11–7/31/16
Child Care and Youth Training and Technical Assistance Project Investigator: Behnke, Andrew	University of Nebraska–Lincoln	US Dept. of Agriculture (USDA)	\$45,000.00	5/1/11–6/30/14
Extension–Supporting Military Families and Youth Partnerships– Family Advocacy Subcontract eXtension Military Family Learning Network Investigator: Behnke, Andrew	University of Florida	University of Nebraska–Lincoln \$19,500.00		9/1/12-8/31/14
Juntos 21st Century Community Learning Center Investigators: Behnke, Andrew, Aguilar, Cintia; Urieta, Diana	NC Dept. of Public Instruction	US Dept. of Education (DED)	\$1,360,000.00	7/1/13–9/30/18
North Carolina State University and Oklahoma State Joint Sustainable Community Project Investigators: Behnke, Andrew, Aguilar, Cintia; Urieta, Diana	US Dept. of Agriculture (USDA)— National Institute of Food & Agriculture	US Dept. of Agriculture (USDA)— National Institute of Food & Agriculture	\$1,148,000.00	9/1/13–8/31/18
North Carolina Youth and Families with Promise (NCYFP) Investigator: Behnke, Andrew, Aguilar, Cintia; Urieta, Diana (Allen, Kimberly)	National 4-H Council	US Dept. of Justice (DOJ)	\$657,829.51	12/1/11–1/31/16
Triangle For Latino Student Success Investigators: Behnke, Andrew, Aguilar, Cintia; Urieta, Diana	Hispanics in Philanthropy	Lumina Foundation	\$121,875.00	7/1/12–9/30/15
Multistate Extension Education and Outreach on the Marketplace Exchanges of the Affordable Care Act Investigator: Bird, Carolyn	University of Georgia	US Dept. of Agriculture (USDA)— National Institute of Food & Agriculture	\$90,000.00	9/1/13–8/17/14
NCSU's More in My Basket FY 2014 Investigator: Bird, Carolyn	NC Dept. of Health & Human Services (DHHS)	US Dept. of Agriculture (USDA)	\$535,130.00	10/1/13–9/30/14
NCSU's More in My Basket FY 2015 Investigator: Bird, Carolyn	NC Dept. of Health & Human Services (DHHS)	US Dept. of Agriculture (USDA)	\$622,484	10/1/14-9/30/15
Senior Health Insurance Information Program Investigator: Bird, Carolyn	NC Dept. of Insurance	Centers for Medicare and Medicaid S	Services \$117,642	10/1/14–9/30/15
Farm-to-Childcare Implementation Investigator: Bloom, Dara	Wake County Smart Start, Inc.	John Rex Endowment	\$88,083	8/1/14-9/30/17
Community-Based Approach to Reducing Childhood Obesity in Low-Income Populations: Research to Action Investigators: Bowen, Sarah; Elliott, Sinikka; Jones, Lorelei; Hardison-Moody, Annie; Jakes, Susan	US Dept. of Agriculture (USDA)	US Dept. of Agriculture (USDA)	\$3,026,939.00	8/1/11–7/31/16

Title	Direct Sponsor	Prime Sponsor	Amount Awarded	Project Duration
Exploration and Communication of Gaps Barriers for Small Farms in NC Investigators: <i>Chapman, Ben</i> ; Ducharme, Diane	Carolina Farm Stewardship US Dept. of Agriculture (USDA) Association		\$10,100.00	7/1/13–6/30/14
GAP Training for Durham Producers Investigator: Chapman, Ben	Durham County	Durham County	\$1,150	2/5/14-2/28/14
Hazard Analysis Critical Control Plan (HACCP) Investigator: Chapman, Ben	NC Dept. of Public Instruction	US Dept. of Agriculture (USDA)	\$257,179.00	10/11/11–9/15/13
Investigating and Enhancing Positive Food Safety Culture in Farmers Markets Investigator: Chapman, Ben	Virginia Polytechnic Institute and State University	US Dept. of Agriculture (USDA)— National Institute of Food & Agriculture	\$102,913.00	9/1/13–8/31/18
Shiga-toxigenic Escherichia coli (STEC) in the Beef Chain: Assessing and Mitigating the Risk by Translational Science, Education and Outreach Investigator: Chapman, Ben	University of Nebraska—Lincoln	US Dept. of Agriculture (USDA)	\$337,700.00	1/1/12–11/30/15
Health Rocks Investigators: Chilcote, Amy, Allen, Kimberly	National 4-H Council	National 4-H Council	\$44,000.00	1/1/13–8/31/14
Healthy Lifestyles Initiative: Eat Smart, Move More, Weigh Less Investigator: Dunn, Carolyn	NC Agricultural Foundation, Inc.	NC State Health Plan for Teachers & State Employees	\$2,652,482.00	7/1/09–12/31/15
2014 NC 4-H Military Partnerships Grant Investigator: Edwards, Harriet	Kansas State University	US Dept. of Agriculture (USDA) National Institute of Food & Agriculture	\$25,000.00	10/1/13-9/30/14
Air Force/4-H Military Partnership and Outreach and Support Investigator: Edwards, Harriet	Kansas State University	US Dept. of Agriculture (USDA) National Institute of Food & Agriculture	\$265,112.00	9/1/13–8/31/15
NC Operation Military Kids 2013 Investigator: Edwards, Harriet	US Army	US Army	\$49,284.00	4/1/13-9/30/14
NC Operation Military Kids 2014 Investigator: Edwards, Harriett	US Army	US Army	\$147,852	10/1/13-3/31/15
Family and Child Well Being Optimized COP (Families and Child Well-Being Learning Network) Investigators: <i>Huff, Nichole Langley</i> , Behnke, Andrew	University of Nebraska–Lincoln	Association of Public & Land-Grant Universities former National Association of State Universities	\$50,000.00	9/1/13–11/30/14
Building Capacity to Control Viral Foodborne Disease: A Translational, Multidisciplinary Approach Investigators: Jaykus, LeeAnn; Simmons, Otto; Chapman, Ben	US Dept. of Agriculture (USDA)	US Dept. of Agriculture (USDA	\$9,982,503	1/1/12-12/31/17
Consumer Energy Education, E-Conservation Program Investigator: Kirby, Sarah	NC Dept. of Commerce	US Dept. of Energy (DOE)	\$199,863.00	11/1/12–12/31/14
Consumer Energy Education, E-Conservation Program Investigator: Kirby, Sarah	NC Dept. of Environmental and Natural Resources	US Dept. of Energy (DOE)	\$198,820	11/1/12-6/30/15
Development of a Comprehensive Fair Housing Outreach Program Investigator: Kirby, Sarah	NC Dept. of Administration	US Dept. of Housing and Urban Development	\$37,500	3/1/14-2/28/15
Energy Transformation School Enrichment Curriculum Investigator: Kirby, Sarah; Chilcote, Amy	Piedmont Natural Gas Foundation	Piedmont Natural Gas Foundation	\$24,999.00	8/1/13–7/31/14
Home Energy Community of Practice Leadership Funds Investigator: Kirby, Sarah	University of Nebraska–Lincoln	US Dept. of Agriculture (USDA)	\$22,368.00	1/1/12–12/31/14
Home Energy CoP Investigator: Kirby, Sarah	University of Nebraska Lincoln	Association of Public and Land Grant Universities	\$9,998	1/1/14-6/30/15
Steps to Health (NCSU SNAP-Ed FY 2014) Investigators: McClelland, Jacquelyn; Bird, Carolyn; Dunn, Carolyn	NC Dept. of Health & Human Services (DHHS)	US Dept. of Agriculture (USDA)	\$1,019,221.00	10/1/13–9/30/14
Steps to Health (NCSU SNAP-Ed FY 2015) Investigators: McClelland, Jacquelyn; Bird, Carolyn; Dunn, Carolyn	NC Dept. of Health & Human Services (DHHS)	US Dept. of Agriculture (USDA)	\$1,684,735	10/1/14-9/30/15
Evaluation CoP Investigator: Silliman, Ben	University of Nebraska–Lincoln	US Dept. of Agriculture (USDA)	\$30,000.00	10/1/10-6/30/14
4-H Science E-Basics Online Training Investigator: Silliman, Ben	National 4-H Council	NOYCE Foundation	\$60,000.00	1/1/12–5/31/14
Project Youth Extension Service (YES) Investigators: Stewart, Marshall, Johnson, James	US Dept. of Agriculture (USDA) National Institute of Food & Agriculture	US Dept. of Agriculture (USDA) National Institute of Food & Agriculture	\$2,970,909.00	9/1/12-8/31/15
The Youth Extension Service Investigator: Stewart, Marshall	US Dept. of Agriculture (USDA)	US Dept. of Agriculture (USDA)	\$3,031,182.00	5/1/10-10/31/14

Graduate Programs in Youth, Family, and Community Sciences

The Department of Youth, Family, and Community Sciences at North Carolina State University offers graduate distance education programs designed to prepare and strengthen current and future professionals who work with youth and/or families in community-based settings. Our graduate faculty members are subject-matter experts who create applied learning environments where students are equipped to seek dynamic careers in youth, family, and community development.

Family Life and Youth Development (FYD) courses are designed to improve student understanding of the complexities of human development. Knowledge is then used to design, implement, and evaluate effective

educational interventions to improve the quality of life of youth and families.

The Department offers two distance-based graduate programs leading to a Master's degree in Family Life and Youth Development. Both the M.R. (non-thesis) and M.S. (thesis) are designed to meet the individual needs of the student through specialized concentration areas. The Department also offers three Graduate Certificate options:

- Family Life Education and Coaching
- · Leadership and Volunteer Management
- Youth Development and Leadership

Family Life and Youth Development Enrollment 2009-2014											
Program	Fall 2009	Spring 2010	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014
Master's	13	11	29	22	29	23	31	27	28	27	26
Certificate	-	1	2	1	17	15	17	13	16	13	13
TOTAL	13	12	31	23	46	38	48	40	44	40	39

IMPACTS—EXTENSION AND RESEARCH



Local Food Access for Immigrant/ Refugee Communities

Asset mapping, community gardens, and Faithful Families Eating Smart and Moving More help immigrant and refugee communities have better access to foods and improve health. A major objective of the project is to engage three immigrant and refugee communities in the Triangle region in a process that enhances community development through local foods and nutrition projects. The three communities include Latino immigrants who are members of a Catholic Church, a diverse group of West African and Middle Eastern immigrants and refugees affiliated with a mosque, and a community of Burmese refugees. The project builds upon the cultural context of immigrant and refugees' food production and preparation skills, and aims to support and facilitate the use of these skills by connecting them with Cooperative Extension resources.

Faculty: Annie Hardison-Moody, PhD; Dara Bloom, PhD; Michael Schulman, PhD

Graduate Program Approved as Certified Family Life Educator Program

ur graduate program was approved as a Certified Family Life Educator (CFLE) program through the National Council on Family Relations. Students who graduate from the Department with a MR or MS are now eligible to become a Certified Family Life Educator. The extensive peer-review process that led to this credential ensures the highest coursework and curriculum for CFLE graduates.



"As a person who is driven to be at the at the forefront of application and innovation in supporting families and youth development organizations, I value both the academic and practical approaches the FYD curriculum provides. I can truly say the course work allowed me to grow both personally and professionally. I was able to gain insight and experience in contemporary youth and family

development programing from my peers, community and organizational partners, as well as, professional investment from instructors."

-Jeremy Crisp, 2015 MS Graduate, currently serving as Program Manager, Kids Included Together (KIT), Inc., Washington DC

Family Life and Youth Development Graduates 2009-2015							
Program	2009- 2010	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015	
Master's	6	4	10	8	11	15	
Certificate	-	-	3	5	6	7	
TOTAL	6	4	13	13	17	22	

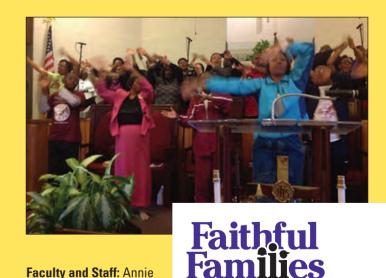
"The Family Life and Youth
Development graduate program
provided me the practical
experience I needed to be
successful to transition into a new
career. I feel more confident as
a leader to engage, collaborate,
and serve youth and families in
my community."



—Carina Surface, 2014 MA Graduate currently serving as Outward Bound Professional Coordinator and Challenge Course Coordinator, Thompson Island Outward Bound, Boston, Massachusetts

Faithful Families Eating Smart and Moving More

aithful Families Eating Smart and Moving More (Faithful Families) is a faith-based health promotion program that provides faith-based nutrition and physical activity education. The program is co-led by a lay leader from participating congregations and a Faithful Families facilitator (from Cooperative Extension or a local health department). Each participating congregation agrees to implement at least one policy change (such as serving healthy foods, or promoting physical activity) and one environmental change (such as a community garden, water pitchers, or on-site walking trail). In 2014,107 facilitators across 53 counties in North Carolina were trained to carry out the program. Successes include establishment of a farmer's market in Craven County, healthy eating policies and marked parking lots to encourage walking in Northeast counties. Macon County is working with corner stores to provide healthier foods to members of a Faithful Families congregation that is within walking distance.



Eating Smart

Moving More

Faculty and Staff: Annie Hardison-Moody, PhD; Carolyn Dunn, PhD, RD, LDN; Lorelei Jones, MS

IMPACTS—EXTENSION AND RESEARCH



Operation Military Kids

North Carolina is home for over 100,000 military children who face unique challenges when one or more parents are deployed. Operation Military Kids connects families with local resources and provides youth fun learning activities including camping and overnight educational events.

Faculty and Staff: Harriett Edwards, EdD; Scott Enroughty





STEPS TO HEALTH—Supplemental Nutrition Assistance Program Education (SNAP-Ed)

teps to Health, NC State University's SNAP-Ed program, educates and inspires limited resource North Carolinians to eat smart and move more through nutrition and food resource management education programs. The program



reaches preschoolers, kindergarteners, second grade students, third grade students, adults, older adults, families, and Latino families. Steps to Health programs help families be more food secure and adopt eating and physical activity habits that decrease the risk of chronic illness, specifically obesity, diabetes, and heart disease.

In 2014 Steps to Health reached a total of

6,193 participants

and made over

46,000 educational

contacts in

56 counties

5,376 children

817 adults

Steps to Health for Children

The Steps to Health program reaches children in child care and public school settings. Family and Consumer Sciences and 4-H agents teach children about healthy eating through hands on interactive learning that includes taste tests and food preparation. Color Me Healthy for SNAP-Ed reached a total of 1,180 students across 16 counties with 9,313 educational contacts. Over 4,000 second and third grade students were reached and made positive changes in eating and physical activity.

Better Choices

The Better Choices program addresses food insecurity and provides nutrition and food resource management education to adults age 60 and older. The program engages participants through group interaction, skill building, taste testing, and a variety of activities. The overall goal of the program is to improve health and well-being of participants and prevent malnutrition. Working with Family and Consumer Sciences Agents in 21 counties, Better Choices reached over 600 older adults in 2014.

Eat Smart, Move More, Take Control

Eat Smart, Move More Take Control works with adults to decrease risk factors for chronic disease. Participants set personal health goals and learn strategies and skills to achieve them. The majority of participants reported making progress towards their goal. Over 100 adults across seven counties participated in the program for a total of 500 educational contacts.

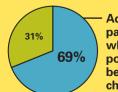
Better Food Better Health

The **Better Food Better Health** (BFBH) program addresses unhealthy eating practices and physical inactivity that contributes to health risks among North Carolina Latino/Hispanic adults and their families, especially those with limited resources and low educational attainment. The BFBH curriculum is family-based and employs parallel modules for adults and children that engage the entire family in learning about better quality of life through improved nutrition and food resource management. BFBH was successful in promoting behavior change for all participant age groups.

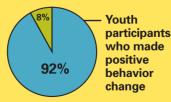
SNAP-Ed Team: Jackie McClelland, PhD; Carolyn Bird, PhD; Carolyn Dunn, PhD, RD, LDN; Gretchen Hofing, MPH, RD; Cintia Aguilar, MA; Jenelle Wass, MS, RD, LDN; Lindsay Goolsby, MS, RD, LDN; Nekeidra Morrison, MEd; Tara Carr, MPH, RD, LDN

STEPS TO HEALTH WORKS

Programs are multi-session to provide repetition and aid in the retention of information presented. Sessions are interactive and multi-sensory to better facilitate learning. Session components include: taste tests, cooking demonstrations, games, discussion, physical activity, songs, and goal setting. Participants receive take-home materials to promote behavior change outside of the classroom.



Adult participants who made positive behavior change



"This program had a positive impact on my students, on my own food choices, and on my own children."

-2nd grade teacher, Buncombe County

"My child has been more aware of what he is eating, more interested in eating fruits and vegetables, and has been reading labels."

-Parent of 3rd grader, Craven County

"I learned how to buy and prepare better meals with less salt, sugar, and fat."

-Adult participant, Randolph County

Highlighted FY14 Impacts: 94% of preschool children are more willing to try fruits and vegetables. 76% of students are more physically active. 50% of adults and older adults are eating more vegetables. 100% of Head Start centers made a change in their environment and/or policies.

IMPACTS—EXTENSION AND RESEARCH

More In My Basket

ore in My Basket (MIMB) is a Supplemental Nutrition Assistance Program (SNAP) outreach program with the purpose of reducing food insecurity by providing education, outreach, and application assistance to adults eligible for SNAP. MIMB reached over 15,000 people in 2014 with needed education and assistance to help them be more food secure.



Faculty and Staff:

Carolyn Bird, PhD; Jacquelyn W. McClelland, PhD; Jeanette Maatouk, MA; April Morgan, MA; Ellen Colon, BA



More In My Basket Program Components

EDUCATION

Extension Agents provide education about SNAP through group presentations, booth-based outreach, and individual consultation sessions.

OUTREACH

MIMB staff cultivate partnerships with local community groups to extend outreach efforts to even more people across North Carolina.

APPLICATION ASSISTANCE

MIMB staff provide assistance on-site at events or through a toll-free number. Assistance is provided at convenient times and locations.





E-Conservation

The E-conservation program provides families with accurate, credible information to help them make informed decisions about energy use and the adoption of energy saving products. As a result of workshops and home audits, over 500 thousand KWh in energy use was saved and carbon dioxide emissions reduced by the installation of CFL light bulbs and low-flow shower heads.

Faculty and Staff: Sarah Kirby, PhD; Laura Langham, MS



Energy Transformation

nergy Transformation is an engaging, hands-on science curriculum that demonstrates the effects of energy use in our world and teaches youth to be good stewards of our environment. In this sixth-grade school enrichment curriculum, youth learn about the sources and history of the energy and observe how their energy consumption will affect the future. Those participating have significantly increased their energy literacy knowledge related to renewable and nonrenewable energy sources, energy saving behaviors, and understanding of energy retrofits.

Faculty and Staff: Sarah Kirby, PhD; Autumn Guin, MS; Amy Chilcote, MS





Eat Smart, Move More, Weigh Less

at Smart, Move More, Weigh Less is a 15-week adult weight management program that is delivered in both in-person and online format. Using synchronous distance technology the Eat Smart, Move More, Weigh Less team is able to reach participants across the nation with weight management education. Results from novel delivery method were published in the Journal of Nutrition Education and Behavior. Program research indicates that participants lose weight and adopt healthy eating and physical activity behaviors. Over 2,000 people participated in Eat Smart, Move More, Weigh Less in 2014.

Eat Smart, Move More, Weigh Less Team: Carolyn Dunn, PhD, RD, LDN; Surabhi Aggarwal, MHSc, MPH, RD, LDN; Kelly Nordby, MPH, RD, LDN; Greg Moore; Madison Johnson

Project Youth Extension Service

Project Youth Extension Service (YES) is a national college internship program. Students from across the country work with military families affected by deployment. Through a year of committed service, Project YES interns facilitate hands-on activities and experiences focusing on leadership development, resilience, life skills, and STEM. In 2014, 25 interns representing 18 states and 21 universities provided support for over 100 events in 34 states, two US territories, and Germany. Project YES delivered over 4,000 direct contact hours serving over 3,400 youth.





Faculty and Staff: Marshall Stewart, EdD; James C. Johnson, MBA; Myra Moses, PhD

IMPACTS—EXTENSION AND RESEARCH



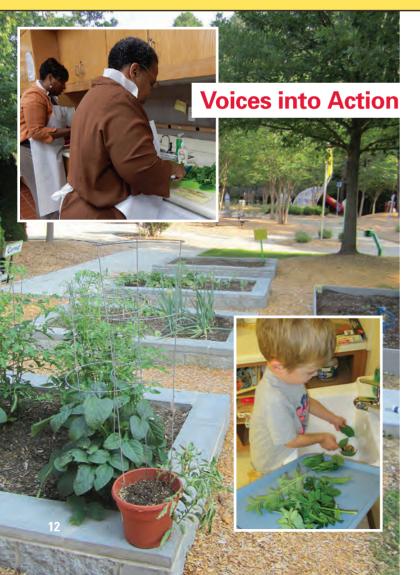


Juntos

Juntos para una major educación (Together for a better education) program promotes student success and access to higher education. Juntos works to join partners from 4-H, high schools, local community colleges, and businesses, to provide Latino 8th- through 12th-grade students and their parents with knowledge, skills, and resources to prevent youth from dropping out and to encourage families to work

together to gain access to college. To date, Juntos is in 53 rural areas and seven states. Most recently, it was selected by National 4-H Council for funding to expand this important program as a national model.

Faculty and Staff: Andrew Behnke, PhD; Cintia Aguilar, MS; Diana Urieta, MSW



oices into Action is USDA-funded research study that is a partnership between the Department of Sociology and Anthropology in collaboration with faculty and staff in the Department of Youth, Family, and Community Sciences. The research focuses on access to healthy foods and places to be active in three counties in North Carolina. The team has learned about the types of changes families wanted to see in their communities after talking and spending time with mothers and grandmothers. The Voices into Action team partnered with residents and community leaders to conduct community health asset mapping workshops in each of the three counties. In 2014, Voices into Action funded 22 sustainable mini-grant projects in each of the three counties, that included community gardens, fitness and nutrition classes, mobile markets, and healthy eating programs for preschoolers, all spearheaded by local faith communities, farmers' markets, and non-profit agencies. Additionally, in 2014, Voices into Action concluded a community food assessment in all three counties (Harnett, Lee, and Southeast Raleigh in Wake County) to learn about assets and barriers to accessing healthy foods and places to be active, particularly for low-income families. The Families, Food, and Health Project (Voices into Action) was selected to receive the Opal Mann Green Engagement & Scholarship Award for excellence in collaborative and participatory research at NC State University.

Voices into Action Team: Annie Hardison-Moody, PhD; Sarah Bowen, PhD; Lorelei Jones, MS; Helen Herrera; Zandra Alford, MPH

New Case-Based Curriculum for Retail Food Safety Managers: NC Safe Plates

ood safety at retail food service establishments is a major concern for public health. Retail food managers certified in food protection have been shown to minimize the risk of foodborne illness. However, many food safety curricula focus on knowledge change and fail to address behavioral change and food safety culture. Using information from a job task analysis of retail food safety managers, NC Cooperative Extension developed a curriculum framework centered on casebased instruction and adult learning principles in 2014. From our research, the case study approach is a unique delivery mechanism and we believe will provide more tangible behavior impacts as opposed to just knowledge outcomes. The program was piloted in 2014 with 200 cafeteria managers, 20 food volunteers and to our first cohort of FCS agents trained. It is anticipated that over 500 managers will be certified in 2015.

Faculty and Staff: Ben Chapman, PhD; Matt Agle, MS



Food Safety and Social Media

oodborne illness remains a significant health issue in the U.S. with an estimated many as 48 million cases of foodborne illness annually. To address this important public health burden, a robust social media strategy including Facebook, Twitter, and blogging addressing food safety was implemented in 2014. Over 1500 blog posts, Infosheets, infographics, videos and podcasts were created by the NC Safe Plates and were distributed to at least 40,000 subscribers and readers in 2014. It is believed that if just one of the many decision makers who follow barfblog.com shared the information with food handlers or changed their system, leading to avoiding a single major outbreak (30 illnesses) of foodborne illness cost savings could reach an estimated \$500,000 to \$5 million in medical expenses, brand damage and loss of market.

Faculty and Staff: Ben Chapman, PhD; Katrina Levine, MPH, RD, LDN





Grandparents Raising Grandchildren

ncreasing numbers of grandparents and other relatives are stepping in to raise grandchildren when the parents are unable to parent because of substance abuse, significant health problems, incarceration, child abuse or military deployment. County FCS agents use their knowledge of parenting, child development, aging, family relations, nutrition, and family resource management along with specialized information about the needs and and challenges of midlife and older adults to help grandparents who take care of the children. Agents refresh grandparents' parenting skills, introduce them to local services and resources, teach self-care, create an environment in which the potential stigma is neutralized for the grandparents and the grandchildren, and provide an environment for social support, camaraderie and fun. In 2014, five Family & Consumer Sciences educators provided county leadership in serving an estimated 60-70 North Carolina grandparents, in groups of 5-15 which generally met quarterly or monthly. Agents reported that the impact for individuals included increased confidence, reduced stress and increased learning about, and success at, accessing community resources. Also, in October 2014, NC Cooperative Extension and state partner the NC Division of Aging and Adult Services were awarded the Janet Sainer RAPP Award from the Brookdale Foundation Group for our state-level leadership as North Carolina's co-liaisons to Brookdale, "in recognition of the commitment to excellence in providing supportive services to relative caregivers and their families."

Faculty: Luci Bearon, PhD

EFNEP—Expanded Food and Nutrition Education Program

FNEP serves limited-resource families with young children, school-age youth, and pregnant teens through a series of lessons offered by paraprofessionals and volunteers, many of whom are indigenous to the population.

Using "hands-on" experiences, participants are taught to: make wise choices with their food dollars, improve eating habits, and practice food safety principles.

EFNEP is offered through North Carolina Cooperative Extension as a part of university outreach at NC State University and NC A&T State University. In 2014, North Carolina EFNEP served 51 counties.

Food Insecurity, Chronic Disease and Economic Implications for North Carolina

Food insecurity and chronic disease affect both the health of our population and our economy. Children living in food insecure households are at greater risk of developmental and academic problems as well as nutritional deficiencies and nutrition-related illnesses. Addressing this issue in North Carolina is essential to the preparation of our future workforce and economic growth in our state. The challenges are great.

Between 2008 and 2012, North Carolina saw a rise from 22% to 24% in the number of working low-income families with children. This 2% increase accounts for 27,000 additional families with children earning incomes at or below the poverty level. During the same time frame, the number of children living in poverty in North Carolina increased from 20% to 26%.¹

When compared to other states, North Carolina ranks poorly in health. 29.6% of adults in North Carolina are obese. What is even more alarming is that 15.4% of two to four year olds living in North Carolina are obese, making our children the 7th most obese in the nation. Additionally, North Carolina has the 18th highest rate of diabetes and the 17th highest rate of hypertension.²



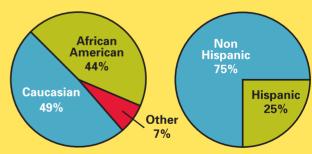




North Carolina EFNEP Reaches Diverse Audiences

In 2014, • 4,742 families enrolled in EFNEP

- —150 of these are pregnant or parenting teens27,230 participated in 4-H EFNEP
- 45% of EFNEP participants were also WIC participants
- 87% of EFNEP participants enrolled in one or more food assistance programs.



North Carolina EFNEP programs obtained over \$251,709 in funding and support from local efforts.



References

- Population Reference Bureau, analysis of data from the U.S. Census Bureau, 2008–2012 American Community Survey. Population Reference Bureau, analysis of data from the U.S. Census Bureau, Census 2000 Supplementary Survey, 2001 Supplementary Survey, 2002 through 2012 American Community Survey.
- 2. Trust for America's Health and Robert Wood Johnson Foundation. F as in Fat: How Obesity Threatens America's Future [PDF]. Washington, D.C.: 2013.

FACULTY

Kimberly Allen, PhD, BCC, Assistant Professor, Extension Specialist, Human Development, Family Life Coaching

Luci Bearon, PhD, CFLE, Associate Professor, Extension Specialist, Adult Development/Aging

Andrew Behnke, PhD., CFLE, Associate Professor, Extension Specialist, Human Development, Latino Audiences

Carolyn Bird, PhD, AFC, RFG, Associate Professor, Extension Specialist, Family Resource Management

Dara Bloom, PhD, Assistant Professor, Extension Specialist, Local Foods

Ben Chapman, PhD, Assistant Professor, Extension Specialist, Food Safety

Carolyn Dunn, PhD, RD, Department Head, Professor, Extension Specialist, Nutrition

Harriett Edwards, EdD, Associate Professor, Extension Specialist, Volunteer Management

Anne Hardison-Moody, PhD, MTS, Research Assistant Professor, Faith and Health

Nichole Huff, PhD, CFLE, Assistant Professor, Extension Specialist, Human Development, Director of Graduate Certificate Programs **Sarah Kirby**, PhD, Associate Professor, Extension Specialist and DEL, Housing, Energy

Jackie McClelland, PhD, Professor, Extension Specialist, Nutrition

Michael Schulman, PhD, William Neal Reynolds Distinguished Professor, Bural Sociology

Ben Silliman, PhD, Professor, Extension Specialist, Evaluation

Marshall Stewart, EdD, Associate Professor, Special Assistant to the Dean, Director, APLU Food Systems Leadership Institute

STAFF

Surabhi Aggarwal, MHSc, MPH, RD, LDN, Extension Associate, Eat Smart, Move More, Weigh Less

Matt Agle, MS, Extension Associate, Food manager certification course

Zandra Alford, MPH, Harnett and Lee Outreach Coordinator, Voices into Action: The Families, Food, and Health Project

Jenna Barnes, MEd, Extension Assistant, 4-H Very Important Parents

Lisa Benavente, MEd, Extension Associate, Expanded Food and Nutrition Education Program

Tony Benavente, MEd, Extension Associate, Expanded Food and Nutrition Education Program

David Brittain, Extension Assistant, Military Programs (Air Force)

Julie Bunting, Administrative Support Specialist, Project YES

Geri Bushel, Executive Assistant, Assistant to Department Head, ECA Advisor, Graduate Program Coordinator

Tara Carr, MPH, RD, LDN, Extension Associate, Supplemental Nutrition Assistance Program (SNAP)-Ed

Beverley Cash, Administrative Support Associate, Project YES

Susan Chase, MEd, Extension Associate, Expanded Food and Nutrition Education Program

Sue "Ellen" Colón, BA, Extension Assistant, More In My Basket

Judith D'Eredita, Extension Associate, Expanded Food and Nutrition Program

James Draper, MPA, Administrative Support Specialist, HR, Budgets, Contracts and Grants

Ariel Fisher, Administrative Support Specialist, Supplemental Nutrition Assistance Program (SNAP)-Ed

Emily Foley, MS, Extension Associate, Expanded Food and Nutrition Education Program

Lindsay Goolsby, MS, RD, LDN, Extension Associate, Supplemental Nutrition Assistance Program (SNAP)-Ed

Autumn Guin, MS, Extension Associate, Program Development and Evaluation

Suchi Gupta, MS, Extension Associate, eXtension Home Energy

Helen Herrera, Nutrition and Outreach Associate, Voices into Action

Gretchen Hofing, MPH, RD, Program Coordinator, Supplemental Nutrition Assistance Program (SNAP)-Ed

Shannon Hoffman, Administrative Support Specialist, Supplemental Nutrition Assistance Program (SNAP)-Ed

James Johnson, MBA, National Director, Project YES

Madi Johnson, Administrative Support Associate, Eat Smart, Move More, Weigh Less

Christina Jolly, MEd, Extension Assistant, 4-H Very Important Parents

Lorelei Jones, MEd, Coordinator, Expanded Food and Nutrition Education Program

Renee Jordan, Administrative Support Associate, Expanded Food and Nutrition Education Program

LaTonja Joyner-Hyman, MS, Extension Associate, Bertie County— Early College

Laura Langham, MS, Extension Associate, Energy

Katrina Levine, MPH, RD, LDN, Extension Associate, Nutrition and consumer, retail, and school food safety

Erica Lindenberg, Extension Assistant, Fair Housing

Jeanette Maatouk, MA, Extension Associate, Program Coordinator, More in My Basket

Jamie McCullers, Administrative Support Associate, Expanded Food and Nutrition Education Program **Stephanie McDonald-Murray**, MPH, Extension Associate, Expanded Food and Nutrition Education Program

Gregory Moore, Extension Assistant, Eat Smart, Move More, Weigh Less

April Morgan, MA, Extension Associate, More In My Basket

Nekeidra Morrison, MEd, Extension Associate, Supplemental Nutrition Assistance Program (SNAP)-Ed

Dede Nelson, MEd, Instructional Designer, Graduate Degree Program

Virginia New, MS, Extension Associate, Expanded Food and Nutrition Education Program

Kelly Nordby, MPH, RD, LDN, Extension Associate, Eat Smart, Move More, Weigh Less

Salim Oden, Extension Assistant, Expanded Food and Nutrition Education Program

Daniel Pate, Extension Assistant, Energy

Kavitha Ram, Administrative Support Associate, Food safety

Ben Raymond, Graduate research assistant, Food safety

Steve Roman, Extension Associate, Parenting and relationship education

Marissa Sheldon, MPH, Community Outreach Coordinator, Voices into Action: The Families, Food and Health Project

Ellen Thomas, MS, Graduate Research Assistant, Retail and food service beef food safety

Diana Urieta, MSW, Extension Associate Juntos

Suzanne van Rijn, MAEEd, Extension Associate, Expanded Food and Nutrition Education Program

Paul Stanley, Extension Assistant, Energy

Jenelle Wass, MS, RD, LDN, Extension Associate, Supplemental Nutrition Assistance Program (SNAP)-Ed



NC STATE UNIVERSITY