BACKGROUND
The Applied Research Division (ARD) of the Institute of Child Nutrition (ICN) is located on the campus of The University of Southern Mississippi in Hattiesburg, Mississippi. Funding for the Institute is provided from the United States Department of Agriculture, Food and Nutrition Service (USDA, FNS), through the University of Mississippi. ARD’s mission is to conduct and disseminate high quality, credible, applied, operational research that is responsive to the needs of Child Nutrition (CN) professionals. ARD defines applied research as providing practical, timely solutions to real-world issues by collecting data from functional CN Programs and active CN professionals. We define operational as the issues, processes, functions, and regulations surrounding a CN Program that culminates in the delivery of food and nutrition services.

ARD researchers routinely engage a variety of CN stakeholders such as program directors, managers, and staff; State agency directors and staff; professionals from non-profit health organizations; food manufacturers, purveyors, and distributors; kitchen equipment companies, and more to identify current issues for research projects. Additionally, researchers work closely with USDA, FNS to select topics that correspond with the most current and upcoming regulations to best meet the needs of CN Program professionals.

ARD employs multiple methodologies (qualitative and quantitative) to collect data including site visits, observations, document/record reviews, structured and semi-structured interviews, expert panels, expert workgroups, focus groups, and both paper-based and electronic national surveys. Once data is collected and analyzed, researchers write technical reports to explain the results and conclusions of each project that are submitted through the ICN Executive Director to USDA, FNS. These findings are also disseminated to CN professionals in multiple forms that include education/training resources and flyers; webinars and podcasts; publication of technical reports, resources, and flyers on the ICN website; education sessions presented at local, state, regional, and national conferences, and publication of research findings in industry magazines and peer-reviewed academic journals.

PROJECTS
In 2017 ARD began increasing the scope and breadth of our research activities by engaging in research projects with larger samples and more case study site visits. The goal of these changes is to increase the rigor of the research to improve processes that will best meet the needs of CN professionals.
ARD is currently in various stages of completion of the following projects:

- Developing a competency, knowledge, and skills (CKS) resource for chefs serving in SN programs;
- Revising two CKS resources, one for school nutrition (SN) assistants/technicians, and one for district level SN professionals;
- Conducting two needs assessment project, one to support Native American/Tribal Schools and one to support State agency professionals that work with SN programs;
- Exploring how schools engage students to promote SN program participation and healthy eating;
- Investigating Child and Adult Care Food Programs (CACFP) providers’ implementation of CACFP policies and regulations; and
- Evaluating ICN’s online and face-to-face training titled Nutrition 101.

Over the past 20 plus years, ICN, ARD has been at the forefront in identifying the CKS needed by professionals working in CN Programs. These resources are designed to identify performance standards; guide efforts to support employees’ performance; measure job responsibilities and behaviors; and show how well employees perform in their individual and team-related roles to meet organizational goals. At the completion of the current grant cycle, ICN will maintain CKS resources for six CN positions including district-level SN professionals, SN managers, SN assistants/technicians, SN chefs, State agency CN professionals, and professionals working with CACFP. The CKS resource for SN assistants/technicians is scheduled for completion in the spring of 2021 with the CKS resources for SN chefs and district-level SN professionals’ completion scheduled for the spring of 2022.

The two needs assessment projects will utilize national surveys to target two specific CN professional groups. The first project, which is scheduled for completion in the spring of 2020, will identify priorities for developing resources and training to support State agency professionals that work with SN programs. The second project, which is scheduled for completion in the summer of 2022, will explore the issues related to SN program professionals that work with Native American/Tribal schools that include the uniqueness of their SN practices; their perceived training and resource needs; and their preferred methods to receive technical assistance and training.

The project titled “Environmental Scan and Formative Research of Student Engagement Practices in Support of School Meals Programs” is scheduled for completion in the summer of 2020. The purpose of this project is to explore how schools, districts, and stakeholders have effectively engaged students to promote school nutrition program participation and healthy eating. To achieve these objectives, researchers will conduct more than 54 interviews and focus groups during site visits to 10 school districts representing all 7 USDA regions. The intended groups for the interviews and focus groups include school staff, teachers, school administrators, and district/school wellness committee leaders; SN managers and supervisors; parents/community members; and elementary, middle/junior high, and high school students.

The project titled “Exploring the Implementation of Child and Adult Care Food Programs (CACFP) Policies and Regulations” is scheduled to be completed in the fall of 2021. The objectives of this study are to investigate CACFP providers’ implementation of CACFP policies and regulations; evaluate the impact of these policies and regulations on children’s food acceptability; identify best practices for successfully implementing these policies and
regulations; and develop a simple, easy-to-use resource to support CACFP providers in successfully implementing CACFP policies and regulations. This study will include the development and implementation of a national survey, and approximately 50 case study site visits representing 12 states, with approximately 24 CACFP sponsors and 36 child care/Head Start centers.

The final project is titled “Evaluation of ICN Training Program: Nutrition 101 (online and face-to-face modes).” Researchers working on this project will evaluate the Nutrition 101 training program as part of the routine continuous quality improvement system that ICN engages to ensure all education courses and materials are current, appropriate, and meet the highest quality standards. This project is scheduled for completion in the fall of 2021.

**BIOGRAPHY**

Dr. Keith Rushing earned a Doctorate Degree in Family and Consumer Sciences Education from Texas Tech University in 2005. In 1993, he became a registered dietitian. Prior to being promoted to Director of the Applied Research Division of the Institute of Child Nutrition in 2017, he worked as a research scientist for the Institute.