#### Project/Activity Number: NC1171

**Project/Activity Title:** Interactions of individual, family, community, and policy contexts on the mental and physical health of diverse rural low-income families

#### Period Covered: Oct 2008 ~ 2014

Date of This Report: December 2, 2013

#### Annual Meeting Date(s): October 16-October 18, 2013

Participants: Loriena Yancura, University of Hawaii (loriena@hawaii.edu); Ramona Faith Oswald, University of Illinois (roswald@illinois.edu); Kimberly Greder, Iowa State University (kgreder@iastate.edu); Patricia Hyjer Dyk, University of Kentucky (pdyk@uky.edu); Katie Founds, University of Kentucky (Katie.founds@uky.edu); Fran Lawrence, Louisiana State University (flawrence@lsu.edu); Sheila Mammen, University of Massachusetts Amherst (smammen@resecon.umass.edu); Elizabeth Dolan (Retired), University of New Hampshire (e.dolan@unh.edu); Suzann Enzian Knight (Retired), University of New Hampshire (suzann.knight@unh.edu); Rebecca A. Seguin, Cornell University (rebeccaseguin@cornell.edu); Carolyn L. Bird, North Carolina State University (Carolyn\_Bird@ncsu.edu); Ann A. Berry, University of Tennessee (aberry@utk.edu); Janie Burney, University of Tennessee (jburney@utk.edu); Betty Greer, University of Tennessee (bgreer@utk.edu); Tiffany Bice-Wigington, Stephen F. Austin State University (bicewigit@sfasu.edu); Yoshie Sano, Washington State University Vancouver (yoshie\_sano@vancouver.wsu.edu); Kari Morgan, University of Wyoming (kmorgan@uwyo.edu)

**Brief summary of minutes of annual meeting**: 1) presentation of RFS-H Base Book (the base book provides an overview of data collected with preliminary description data including demographic data) 2) Organization of workgroups with specific tasks to be completed by September 2014 3) Officer Election & Approval of Governance documents 4) Sharing of results of NIFA funded Core Health Project 5) Discussion of project website: <u>http://ruralfamiliesspeak.org/</u> 6) Discussion of renewal proposal and plans to transition NC1171 if renewal is approved.

#### Accomplishments:

NC1171 successfully collected both quantitative [*Obj. 2,3,4; output 1*] and qualitative [*Obj. 2,3,4;output 2*] data from diverse rural low-income families related the individual, family, and community level factors and policies that influence rural family health [*Obj. 1,2,3,4,5;outcome 1,2, 7*]. The quantitative data (e.g., BMI, maternal depression, household food security, child internal and external behaviors, financial stress) collected during wave 1 (*N*=444) is complimented by the qualitative data (e.g., changes in health, barriers and enablers to health) collected during wave 2 (*N*=80). The qualitative data captures families' perspectives and contexts providing the opportunity to develop a more complete systemic picture of the interactions and influences on health outcomes over time [*Obj. 1,2,3,4,5*]. Additionally, the Core Health Messages Project (Mammen, Braun, & Sano, 2010-2012; 2011-2013), a NC1171 related project funded through the NIFA Rural Health and Safety Education Competitive Grants Program (Grants 2010-46100-21791, 2011-46100-31135), interviewed community stakeholders from NC1171 counties in order to capture community context and understand their perspectives on rural low-income families experiences reflected in the NC1171 data [*Obj. 2,3,4; outcome 1, 2, 7; output 4*]. Furthermore, the 2010 U.S. Census and American Community Survey data in combination provide the opportunity to examine the relationships, patterns, and trends between factors such the residential location and the local food environment [*Obj. 2,3,4; outcome 1, 2, 7;* 

#### output 3].

During the NC1171 project time period team members have had a broad impact [*outcomes 1,2, 5; output 6*], as a total of 43 peer reviewed conference proceedings and presentations have been taken place at both the national and international levels. Additionally, 23 peer reviewed publications have been produced, in which 12 are peer reviewed journal articles, and 11 peer reviewed book chapters. In addition, this group has produced an edited peer reviewed book entitled, *Rural Families and Work*. Furthermore, 10 dissertations and thesis were produced [*outcome 4, output 7*]. Five awards have recognized team members (three members were students) for their work. We secured \$600,000 for multi-state and\$41,500 for individual states to support research and outreach pertaining to NC1171. During the last year of NC1171 (2013-2014) established working groups are developing materials, articles, policy briefs, etc., that will address how the interaction of multiple systems influence the physical and mental health of diverse rural low-income families over time [*Obj. 1,2,3,4,5*; *outcome 5,6*; *output 8,9*].

#### **Project Objectives**

**Objective 1**: To determine the interactions of individual, family, community, and policy contexts on physical and mental health in diverse rural low-income families.

**Objective 2:** To examine individual and family level characteristics which impact physical and mental health in diverse rural low-income families.

**Objective 3**: To examine community contexts that impact family mental and physical health in diverse rural low-income families.

**Objective 4**: To examine policies that impact family mental and physical health in diverse rural low-income families.

**Objective 5**: To examine the interactions of individual, family, community, and policy on mental and physical health in diverse rural low-income families.

#### **Project Outcomes**

**Outcome 1**: Improved understanding of the experiences of diverse rural low income families in relation to all aspects of the research project

**Outcome 2**: Improved policy for strengthening the mental and physical health and economic well-being of diverse rural low-income families based upon their unique community needs

**Outcome 3**: New and strengthened relationships with state and county organizations to improve physical and mental health and economic well-being of diverse rural low-income families

**Outcome 4**: Development of master's and doctoral trained researchers in multi-method data collection and analysis focused on rural low-income families

**Outcome 5**: Better informed county-based extension educators and their community partners regarding rural low-income families' physical and mental health and economic well-being

**Outcome 6**: Locally developed curricula by county-based extension educators and their community partners to inform other professionals about rural low-income families' physical and mental health needs and strengths of diverse rural low-income families, and strategies to help them meet their needs

**Outcome 7**: Improved understanding of the interrelationships among community structure, family mental and physical health outcomes and economic well-being

# **Project Outputs**

**Output 1**: Quantitative multistate data set containing predictor and outcome variables for approximately 600 families

**Output 2**: Qualitative multistate data set containing approximately 80 transcribed interviews from primary caregivers and

**Output 3**: Quantitative multistate data set containing community variables for each community participating in the study

Output 4: Qualitative and quantitative dataset linking NC223/1011 data with new project data

**Output 5**: Refereed journal articles and conference presentations (approximately 6 from each working group for a total of 30 publications and presentations)

Output 6: Training of masters' and doctoral students, approximately 15 students

**Output 7**: Development of training materials for community leaders to use to enhance the lives of diverse rural low-income families

**Output 8**: Presentation of webcasts to inform county-based extension educators and other local community professionals of the research findings and implications for practice

Output 9: Policy and information briefs focused on the findings of the project

# **Milestones & Activities**

# *Milestone 1: Organization and interaction of team members to facilitate research outputs and outcomes*

**Activities:** NC1171 membership actively facilitated effective progress toward outputs and outcomes through the following activities:

- Annual NC1171 project meetings
- Executive committee & working groups conference calls
- State reporting
- Election of executive committee
- Multi-state data collection

# Milestone 2: Quantitative multi-state data set containing predictor and outcome variables

**Activities:** NC1171 membership developed a comprehensive survey (e.g., BMI, maternal depression, household food security, child internal and external behaviors, financial stress) and sampling method in order to gather predictor and outcome variables related to the physical and mental health of diverse rural low-income families, resulting in a unique quantitative multi-state data set (*N*=444).

# Milestone 3: Qualitative multi-state data set containing transcribed interviews

*Activities:* NC1171 membership developed a qualitative interview protocol (e.g., changes in health, barriers and enablers to health) complimenting the quantitative data set. The resulting qualitative data set (*N*=*80*) captures families' perspectives and contexts providing the opportunity to develop a more complete systemic picture of the interactions and influences on health outcomes over time. Additionally, the Core Health Messages Project (Mammen, Braun, & Sano, 2010-2012; 2011-2013), a NC1171 related project funded through the NIFA Rural Health and Safety Education Competitive Grants Program (Grants 2010-46100-21791, 2011-46100-31135), interviewed community stakeholders from NC1171 counties in order to capture community context and understand their perspectives on rural low-income families experiences reflected in the NC1171 data.

# *Milestone 4: Quantitative multi-state data set containing community variables for each community participating in the study*

**Activities:** NC1171 membership utilized the 2010 U.S. Census and American Community Survey data in combination to examine the relationships, patterns, and trends of community factors for each participating community.

#### Milestone 5: Improved policy for increasing the mental and physical health of diverse rural low-income families

Activities: During the NC1171 project time period, team members have had a broad impact as a total of 43 peer reviewed conference proceedings and presentations have been taken place at both the national and international levels. Additionally, 23 peer reviewed publications have been produced, in which 12 are peer reviewed journal articles, and 11 peer reviewed book chapters. In addition, this group has produced an edited peer reviewed book entitled, *Rural Families and Work*. Furthermore, 10 dissertations and thesis were produced. Five awards have recognized team members (three members were students) for their work. We secured \$600,000 for multi-state and \$41,500 for individual states to support research and outreach pertaining to NC1171. During the last year of NC1171 (2013-2014) established working groups are developing materials, articles, policy briefs, etc., that will address how the interaction of multiple systems influence the physical and mental health of diverse rural low-income families over time.

#### **Future Endeavors**

The current members of NC1171 have submitted a reauthorization proposal focused on dissemination and outreach. This multi-state research team has been in existence since 1998 (NC223, NC1011, NC1171) and has a history of using complementary strengths to develop research questions, design, and conduct quantitative and qualitative analyses to produce holistic studies. In addition to members who serve as senior faculty and Extension specialists at their institutions, several team members began their work with the project as graduate students, and now are junior faculty members at different institutions. The team has spanned distance and time by using technologies to communicate and share data files via a SharePoint site, a Web site, conference calls, annual on-site meetings, and Adobe Connect. The project's governance document is annually updated, and a tracking tool is put in place via SharePoint to facilitate collaboration among team members in regard to developing presentations, policy briefs,

manuscripts and other products. Team members are positioned to build upon the existing infrastructure and continue the successful trajectory of the past projects (NC223, NC1011, NC1171) as we intend to further analyze NC1171 data in-depth to understand the interrelationships among of family, community and policy level factors that influence the health and well-being of rural low-income families. Additionally, we plan to explore the implications of community context (e.g., accessibility of health resources in the community) and the Affordability Care Act on the health of families.

#### Proposed Reauthorization Objectives

1. To conduct extensive higher order analyses in all waves of quantitative and qualitative data to further explore factors that create barriers or enhance the physical and mental health of diverse rural low-income families.

2. To understand the impact of the Affordable Care Act (ACA) on rural low-income families.

3. To disseminate findings, based on the proposed analyses, in order to further the empirical knowledge base and increase understanding among family serving professionals and policy makers regarding factors that contribute to or create barriers to the physical and mental health of diverse rural low-income families.

#### **Selected Achievements**

#### Publications

- Bauer, J.W., Dolan, E. M., & Braun, B. (2011). Applications for the RFS findings: Programs and future research. In J. W. Bauer & E.M. Dolan (Eds). *Rural families and work*: (pp. 207-215). Springer New York.
- Bauer, J. W., & Dolan, E. M. (2011). Rural families and work overview. In J. W. Bauer & E.M. Dolan (Eds). *Rural families and work*: (pp. 1-15). Springer New York.
- Bauer, J. W., & Dolan, E. M. (2011). Theories for studying rural families and work. In J. W. Bauer & E.M. Dolan (Eds). *Rural families and work*: (pp. 17-35). Springer New York.
- Bauer, J. W., Dyk, P. H., Son, S., & Dolan, E. M. (2011). Rural does matter: Understanding the rural context. In J. W. Bauer & E.M. Dolan (Eds). *Rural families and work*: (pp. 37-54). Springer New York.
- Berry, A., Katras, M. J., Sano, Y., Lee, J. (in press). Staying-at-home: Cases of rural low-income mothers. In. E. R. Boyd & G. Letherby (Eds.). Stay at home mothers: An international perspective. Bradford, ON, Canada: Pemeter Press.
- Bice-Wigington, T., & Huddleston-Casas, C. (2012). Influencing self-reported health among rural lowincome women through health care and social service utilization: A structural equation model. *Journal of Family Social Work*, 15(5), 417-434.
- Bird, C. L., Dolan, E. M., & Seiling, S. B. (2011). Resources as the key to rural employment. In J. W. Bauer & E.M. Dolan (Eds). *Rural families and work*: (pp. 137-156). Springer New York.
- Carlton, E. L., Simmons, L., & Simmons, E. C. L. A. (2011). Health decision-making among rural women: physician access and prescription adherence. *Rural and Remote Health*, *11*(1599).
- Dolan, E. M., Bauer, J. W., & Katras, M. J. (2011). Making rural employment work. In J. W. Bauer & E.M. Dolan (Eds). *Rural families and work*: (pp. 55-76). Springer New York.

- Dolan, E. M., Bauer, J. W., & Braun, B. (2011). Policy issues and applications: Rural concerns. In J. W. Bauer & E.M. Dolan (Eds). *Rural families and work*: (pp. 217-230). Springer New York.
- Greder, K. and Sano, Y. (2011). Health seeking behaviors of rural, low-income families. In M. Martha Craft-Rosenberg and S.R. Pehler (Eds.). In Encyclopedia of Family Health. S.R. SAGE Publications, Inc. ISBN: 9781412969185.
- Kropczynski, J. N. & Dyk, P. H. (2012). Insights into housing affordability for rural low-income families. *Housing and Society*, 39 (2), 125-148.
- Mammen, S., & Sano, Y. (2013). *RFSH Project Basebook*. An introduction of the overall project including baseline tables for Wave 1.
- Mammen, S., & Sano, Y. (2012). Gaining access to economically marginalized rural populations: Lessons learned from nonprobability sampling. *Rural Sociology*, 77(3), 462-482.
- Mammen, S., Lawrence, F. C., Marie, P. S., Berry, A. A., & Knight, S. E. (2011). The earned income tax credit and rural families: Differences between non-participants and participants. *Journal of Family and Economic Issues*, 32(3), 461-472.
- Mammen, S., Lawrence, F. C., & Lee, J. (2011). The earned income tax credit: An incentive to rural employment. In J. W. Bauer & E.M. Dolan (Eds). *Rural families and work*: (pp. 185-205). Springer New York.
- Sano, Y., Manoogian, M. M. & Ontai, L. L. (2012). The kids still come first: Creating family stability during partnership instability in rural, low-income families. *Journal of Family Issues, 33*(7), 942-965.
- Sano, Y., Garasky, S., Greder, K. A., Cook, C. C., & Browder, D. E. (2011). Understanding food insecurity among Latino immigrant families in rural America. *Journal of Family and Economic Issues*, 32(1), 111-123.
- Sano, Y., & Richards, L. N. (2011). Physical health, food security, and economic well-being: The rural perspective. In J. W. Bauer & E.M. Dolan (Eds). *Rural families and work*: (pp. 77-98). Springer New York.
- Sano, Y., Richards, L. N., & Lee, J. (2011). Invisible barriers to employment: Mental and behavioral health problems. In J. W. Bauer & E.M. Dolan (Eds). *Rural families and work*: (pp. 99-116). Springer New York.
- Seiling, S. B., Manoogian, M. M., & Son, S. (2011). "I don't know how we would make it"— Social support in rural low-income families. In J. W. Bauer & E.M. Dolan (Eds). Rural families and work: (pp. 157-183). Springer New York.
- Simmons, L., Huddleston-Casas, C. A., Morgan, K. A., & Feldman, D. (2012). Mixed methods study of management of health conditions in rural low-income families: Implications for health care policy in the USA. *Rural and Remote Health*, 12(1879).
- Walker, S. K., & Manoogian, M. M. (2011). The challenge of child care for rural low-income mothers. In J. W. Bauer & E.M. Dolan (Eds). *Rural families and work*: (pp. 117-136). Springer New York.

#### **Proceedings & Abstracts**

Greder, K. & Doudna, K. (in press). Examining the health literacy of rural Latina immigrant mothers and their use of the Internet to seek health information. Proceedings of the Twelfth Annual Cambio de Colores (Change of Colors)-*Latinos in the Heartland*: Conference, St. Louis, Missouri.

- Greder, K., Young, S., & Sano, Y. (2011). Health insurance and health issues among rural, low Income families of Mexican origin in the U.S. Proceedings of the Ninth Biennial Conference of the Asian Consumer and Family Economics Association (ACFEA), Seoul, Korea.
- Reina, A., Greder, K., & Lee, T. (in press). Meanings and strategies for good health: Perspectives of Latina immigrant mothers in rural Iowa. *Proceedings of the Twelfth Annual Cambio de Colores Change of Colors- Latinos in the Heartland: Conference,* St. Louis, Missouri.

#### Presentations

- Braun, B., Maring, E.F., Aldoory, L., & Duggal, M. (2012). Core health messages: A user-focused health *literacy initiative*. National Council on Family Relations, Paper Presentation, Phoenix, AZ.
- Braun, B., Maring, E.F., Aldoory, L., & Duggal, M. (2012). *Core health messages: A user-focused health literacy initiative*. United States Public Health Service Home Conference, Oral Presentation, University of Maryland, College Park, MD.
- Braun, B., McCoy, T., & Duggal, M. (2012). A statewide health care reform forum: Health care, rural communities and you. College Park, MD: University of Maryland Extension.
- Braun, B., Maring, E.F., Ginter, A., & Duggal, M. (2011). *Core rural health messages*. Maryland Asthma Conference, Presentation, Maryland.
- Braun, B., Maring, E.F., Mammen, S., Sano, Y., & Aldoory, L. (2011, October). Exploring oral health literacy messages among rural, low-income mothers. American Public Health Association Annual Conference. Washington, DC.
- Browder, D., Greder, K., Wickrama, K., & Crase, S. (2011, November). *Food insecurity and maternal depression: A latent growth-curve analysis.* Paper presentation at the 2011 Conference on Family Relations Annual Conference, Orlando, Fl.
- Doudna, K., & Greder, K. (2012, November) *Individual and community factors associated with rural Latina immigrant mother BMI.* Paper presentation at the 2012 National Council on Family Relations Conference Annual Conference, Phoenix, AR.
- Doudna, K. (2012, November) *Rural families and health.* Paper presentation, NCFR Annual Conference. Phoenix, AZ.
- Downing, J. & Greder, K. (2012, November). *Depression, nutrition, physical activity routines and obesity in poor, rural America.* Paper presentation at the 2012 National Council on Family Relations Conference Annual conference, Phoenix, AR.
- Duggal, M., Braun, B., Maring, E.F., & Sana, H. (2012). Using community-based participatory research to strengthen the health of rural low-income families. American Public Health Association Annual Conference, Oral Presentation, San Francisco, CA.
- Dyk, P. H. (2012, February) *Methodological challenges in studying low-income rural families: Lessons from the rural families speak about health project.* Presentation at the Southern Rural Sociological Society, Birmingham, AL.
- Greder, K. & Doudna, K. (2013, June). *Examining the health literacy of rural Latina immigrant mothers and their use of the Internet to seek health information.* Paper presentation at the Twelfth Annual Cambio de Colores (Change of Colors)-Latinos in the Heartland: Positive Steps toward a Pluralist Society Conference, St. Louis, Missouri.

- Greder, K. (2013, April) Latina immigrant mothers: Negotiating new food environments to preserve cultural food practices and healthy child eating. Webinar presentation, April 24, Iowa State University Extension and Outreach to Families.
- Greder, K. (2013, April). Latina immigrant mothers: Negotiating new food environments to preserve cultural food practices and healthy child eating. Webinar presentation, NCERA-216, Latino and Immigrants in Midwestern Communities and North Central Region Center for Rural Development (NCRCRD), and University of Missouri-Extension.
- Greder, K. & Slowing, F. (2012, November). *Feeding children in contested spaces: Experiences of Latina Immigrants.* Paper presentation during the panel presentation, The Well Being of Immigrant Families in the U.S.: The Role of Public Policy at the 2012 Nation Council on Family Relations Conference Annual Conference, Phoenix, AR.
- Greder, K., Romero, F., Ihmels, M., & Burney, J. (2012, April) *Relationship between the home environment* and family well being among rural low income mothers. Paper presentation at the 15th Annual Priester National Extension Health Conference, Washington, D.C.
- Greder, K., Sano, Y., & Mammen, S. (2012, April). *Relationship between health status and health literacy among rural low-income mothers*. Paper presentation at the 15th Annual Priester National Extension Health Conference, Washington, D.C.
- Greder, K. & Cook, C. (2011, June). *Exploring transnationalism and health risks of rural Latino immigrant families*. Paper presentation at the tenth Annual Cambio de Colores (Change of Colors) Latinos in the Heartland: Migration and Shifting Human Landscapes Conference, Kansas City, MO.
- Greder, K., Gonzales, R., Nicho, N. & Hernandez, H. (2011, June). *Strengthening relationships between Latino immigrants and their new Mid-western communities*. Panel presentation at the tenth Annual Cambio de Colores (Change of Colors) - Latinos in the Heartland: Migration and Shifting Human Landscapes Conference, Kansas City, MO.
- Greder, K., & Romero de Slowing, F. (2011, June). *Rural Latino immigrant mothers' perceptions of local food and health.* Paper presentation at the tenth Annual Cambio de Colores (Change of Colors) Latinos in the Heartland: Migration and Shifting Human Landscapes Conference, Kansas City, MO.
- Kropczynski, J. Dyk, P.H., Greder, K. Cook, C. & Bice-Wigington, T. (2012, July). Low-income housing concerns embedded in the social structure of rural places: A comparative analysis. Paper presented at 75th Annual Meeting of the Rural Sociological Society, Chicago, IL.
- Lee, J., Richards, L. N., & Sano, Y. (2011, November). *Physical and mental health as a barrier to employment*. Paper presentation at the annual meeting of the National Council on family Relations, Orlando, FL.
- Maring, E.F., Ginter, A., Braun, B., & Aldoory, L. (2011). *Rural mothers' empowerment: Developing health messages for rural low-income families.* National Council on Family Relations, Paper presentation, Orlando, FL.
- McCoy, T., & Duggal, M. (2012). *Paying attention to evaluation & key stakeholders: Uncovering relevant core health messages for rural women*. American Evaluation Association Annual Conference, Panel Presentation, Minneapolis, MN.
- Paleg, B. & Ginter, A. (2012). Clicker Technology. *Association for communication excellence Conference*. Oral Presentation, Annapolis, MD.
- Reina, A., Greder, K., & Lee, T. (2013, June) Meanings and strategies for good health: Perspectives of

Latina immigrant mothers in rural Iowa. Paper presentation at the Twelfth Annual Cambio de Colores (Change of Colors)-Latinos in the Heartland: Positive Steps toward a Pluralist Society Conference, St. Louis, Missouri.

- Tabatabaei-Moghaddam, H. & Sano, Y. (2013, April). Oral health communication: Creating culturally appropriate messages for rural communities. Oral presentation at the annual meeting on the Northwest Council on Family Relations. Portland, OR.
- Yancura, L. A., Ontai, L., & Sano, Y. (2013, March). *Effects of family structure on food, nutrition, and physical activity in the rural families speak about health project.* Paper presentation at the International Conference on Health, Wellness and Society, Sao Paulo, Brazil.

#### Posters

- Bice-Wigington, T., & Huddleston-Casas, C. (2013, April). *Influencing self-reported health among rural lowincome women through health care and social service utilization*. Poster presentation, Bridging the Research and Practice Gap: A symposium. Houston, TX.
- Braun, B., Maring, E.F., Aldoory, L., Duggal, M., & Ginter, A. (2011). Core health messages: Strategy to improve the health outcomes of rural low-income families. Research Interaction Day, Poster Presentation, University of Maryland School of Public Health, College Park, MD.
- Duggal, M., Braun, B., & Maring, E.F. (2012). Core health messages: Strategy to improve the health outcomes of rural low-income families. Association of Maternal and Child Health Programs Annual Conference, Poster Presentation, Washington DC.
- Greder, K., Young, S., & Sano, Y. (2011, July). *Factors related to the prevalence of health insurance and health issues among rural, low-income Mexican families in the United States.* Poster presentation at the biennial meeting of Asian Consumer & Family Economics Association, Seoul, Korea.
- Holman, E.G., Oswald, R.F., Greder, K., Sano, Y., & Mammen, S. (2011, November). Social support and financial stress: Moderators between poverty and well-being? National Council on Family Relations Annual Conference. Poster presentation. Orlando, FL.
- Kropczynski, J., Dyk, P. H., Greder, K. & Cook, C. (2012, April). *Linking family health to housing.* Poster presentation at Priester Health Conference, Washington D.C.
- Lee, T., Reina, A., Greder, K., & Cook, C. (2013). *Challenges in maintaining children's overall health: A perspective from rural Latina mothers*. Poster presented at the 2013 Human and Family Studies Research and Poster Symposium, Iowa State University, Ames, IA.
- Reina, A., Hardy, A., & Greder, K., Cook, C. (2012). Strategies to maintaining physical health among Latino immigrant mothers in rural lowa. Poster presented at the 2012 Human and Family Studies Research and Poster Symposium, Iowa State University, Ames, IA.
- Reina, A., Greder, K., Slowing, F. & Sano, Y. (2012, November). *Mothers informing messages to improve rural Latino family health.* Poster presentation at the 2012 National Council on Family Relations Conference Annual Conference, Phoenix, AR.
- Sano, Y., Gibbs, L., & Vaughn, L. (2013, April). Family environment during meal time in rural low-income families. Poster presentation at the annual meeting on the American Council for Consumer Interests, Portland, OR.
- Sano, Y. & Manoogian, M. (2011, November). Rural low-income women's experiences of multiple

*partnership transitions*. Poster presentation at the annual meeting of the National Council on Family Relations, Orlando, FL.

Valdez, A., Cardenas, R., Cook, C. & Greder, K. (2011, November). "Living in the community: Perceptions of Latina women in Iowa". Poster presentation at the 2011 Human Development and Family Studies Student Research Symposium, Iowa State University, Ames, IA. <u>http://ruralfamiliesspeak.org/uploads/Valdez\_Cardenas.pdf</u>

#### **Dissertations & Theses**

#### Doctoral

- Bice-Wigington, T. (2011) Understanding mesosystemic influences on reported health among rural lowincome women: A structural equation analysis. Doctoral dissertation. University of Nebraska-Lincoln (C. Huddleston-Casas, advisor).
- Browder, D.E (2011). Latino mothers in rural America: A mixed methods assessment of maternal depression. Doctoral Dissertation, Iowa State University.

#### Masters

- Gifford, E. C. (2011). Low-income mothers and their pursuit of food security: a qualitative study through a feminist framework. Unpublished master's thesis. University of Amherst, Massachusetts (S. Mammen & E. J. Pader, co-advisors).
- Romero de Slowing, F. (2012) "Le tengo fe" How do women's networks influence the health competence of Latina immigrant mothers living in a rural Midwestern state? Unpublished master's thesis. Iowa State University. (K. Greder, and C. Flora, co-advisors)
- Valluri, S. (2011). Determinants of health care use among rural, low-income mothers and children: A simultaneous systems approach to negative binomial regression modeling. Unpublished Master's thesis, University of Massachusetts Amherst. (S. Mammen, advisor). http://scholarworks.umass.edu/theses/731/

#### **Other Dissertations & Thesis**

- Doudna, K. (2012). The longitudinal relations between depression and parenting self-efficacy in rural mothers with low income. Unpublished thesis. Iowa State University (K. Greder, advisor).
- Downer, J. (2012) Factors influencing depression in white and Latina low-income, rural mothers. Unpublished Mini-thesis.lowa State University(K. Greder and C. Cook, co-advisors).
- Young, E. R. (2012) *The Earned Income Tax Credit: Effects on Households and Rural Communities.* Undergraduate honors thesis. (S. Mammen, advisor).

#### Grants

Mammen, S. (PI), Braun, B. and Sano, Y. (co-PIs) "Core Health Messages: A Strategy to Improve the Health and Well-Being of Rural, Low-Income Families." Rural Health and Safety Education Competitive Program of the USDA Cooperative State Research, Education and Extension Service, grant number 2010-46100-21791. \$349,958. 8/1/10-8/31/11.

Mammen, S. (PI), Braun, B. and Sano, Y. (co-PIs) "Dissemination of Core Health Messages: Using Community Based Participatory Research to Strengthen the Health of Rural, Low-Income Families." Rural Health and Safety Education Competitive Program of the USDA Cooperative State Research, Education and Extension Service, grant number 2011-46100-31135. \$250,062. 9/01/11-8/31/12.

# Grants for individual states

- Dyk, P.H. "Interactions of individual, family, community, and policy contexts on the mental and physical health of diverse rural low-income families." University of Kentucky Center for Poverty Research through the US Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation; \$11,687. 2011-12
- Greder, K. & Cook, C. "Interactions of individual, family, community, and policy contexts on the mental and physical health of rural Latino immigrants." American Association of Family and Consumer Sciences, Ruth O'Brien Project Grant. \$5000. 8/31/10-8/31/11.
- Greder, K., Ihmels, M., & Welk, G. "Evaluating home obesogenic environments in rural low-income families." College of Human Science Intramural Seed Grant Proposal, Iowa State University. \$25,000. 6/1/11-6/30/13.

### Awards & Honors

#### Student

- Bawal, R. (2011, April). Core Health Messages: Examining the Effectiveness of the Messages on Low-Income Mothers in Rural Washington. First prize for her research in the Undergraduate Students Category at the Washington State University Vancouver Research Showcase.
- Glessing, J. (2011, April). Core Health Messages: Examining the Effectiveness of the Messages on Low-Income Mothers in Rural Washington. Second prize for her research in Human Sciences Category at the College of Agricultural, Human, and Natural Resource Sciences Undergraduate Research and Creative Project Poster Fair at the Washington State University Vancouver.
- Valluri, S., (2012, June). Determinants of Health Care Use Among Rural, Low-Income Mothers and Children: A Simultaneous Systems Approach to Negative Binomial Regression Modeling. University of Massachusetts Amherst. Master's Thesis Award of Merit. Northeastern Agricultural and Resource Economics Association.

# Faculty

- Greder, K. A. (2013) Latina Immigrant Mothers: Negotiating New Food Environments to Preserve Cultural Food Practices and Healthy Child Eating. Iowa State University. Selected 2013 "Best Article" in the Family and Consumer Sciences Research Journal.
- Romero de Slowing, F. (2011, October). *Perceptions of Food and Health by Rural Immigrant Latina Mothers*. Norman Borlaug Graduate Student Poster Symposium 1st Place Award, Iowa State University, Ames, IA.