

# Child Care Research Scholars: 2013 Grantees

## Melissa Kull

**Project Title:** Early Physical Health Problems as Developmental Liabilities for School Readiness: Associations with Early Childhood Education and Family Resources

**Mentor:** Dr. Rebekah Levine Coley

**Project Funding Years:** 2013 - 2015

**University Affiliation:** Boston College

### **Project Abstract:**

The proposed research aims to elucidate relations between children's physical health, early childhood education, family resources, and school readiness. Data will be drawn from the Early Childhood Longitudinal Study (Birth Cohort), which followed a representative sample of approximately 10,700 children born in the United States in 2001 from infancy through kindergarten. Research questions ask: 1) Do physical health problems directly predict school readiness competencies? 2) Does restricting development-promoting opportunities in ECE among children in poor health indirectly explain the associations between health problems and school readiness? 3) Does participation in ECE temper or exacerbate the negative associations between children's physical health problems and school readiness, such that ECE serves to protect or further disadvantage children in poor health? 4) Does family income have protective or aggravating effects for associations explored in Questions 1 through 3? Research questions will be addressed using OLS and logistic regressions as well as propensity score analysis methods to explore direct, mediated, and moderated relations between children's physical health and their school readiness.

**Sample:** 10,700 children born in the United States in 2001 (ECLS-B data)

### **Measures:**

School Readiness Outcomes.

- Test of Early Mathematics Ability, 3 (TEMA-3)
- PreLAS 2000
- Peabody Picture Vocabulary Test-Third Edition (PPVT-III)
- Preschool Comprehensive Test of Phonological and Print Processing (Pre-CTOPPP)
- Items created specifically for the ECLS-
- Teacher reports on items drawn from the Preschool and Kindergarten Behavior Scales (PKBS-2), the Social Skills Rating System (SSRS), and the ECLS-K

Physical Health Indicators.

- Mothers report on children's general health
- Mothers report of whether children were diagnosed with acute/chronic health problems
- Measures of general health and experiences of acute/chronic illnesses
- Mothers report on children's birth weight and gestational age at birth

ECE Characteristics.

- Mothers report on formal center-based early childhood education

- Mothers report on whether children attended non-parental care during infancy or toddlerhood, and location and group size of the care setting

Family Income.

- Mothers report on total household income in the prior year

Covariates.

- Child gender
- Age at kindergarten assessments (wave 4|5)
- Length of exposure to kindergarten prior to assessment
- Children's race/ethnicity
- Mothers report on whether the child experienced neonatal risks
- Early cognitive ability as assessed using Bayley Short Form-Research Edition (BSF-R)
- Children's temperament as assessed using mother and interviewer report items from the Infant/Toddler Checklist (ITSC) and the Behavior Rating Scale (BRS), which is a component of the Bayley Scales of Infant Development (BSID-II).
- Maternal age
- Family immigrant status
- Parental Education
- Maternal employment
- Receipt of public assistance
- Marital status
- Number of children in the household.

## Alejandra Ros Pilarz

**Project Title:** Multiple Child Care Arrangements and Young Children's Development

**Mentor:** Dr. Julia Henly

**Project Funding Years:** 2013 - 2015

**University Affiliation:** University of Chicago

### **Project Abstract:**

Little is known about the reasons families use multiple arrangements or the relationship between multiple arrangements and young children's development. The purpose of the proposed study is to address these gaps in the literature using data from a nationally-representative study of children born in the U.S. in 2001, the Early Childhood Longitudinal Study, Birth Cohort. The first part of this study will examine families' selection into multiple, concurrent arrangements in an effort to better understand the factors that shape families' decisions to use multiple arrangements, including the role of publically-subsidized child care programs. The second part will examine the associations between multiple arrangements and young children's cognitive and socio-emotional development. It will identify the conditions under which multiple arrangements matter by examining whether the effects of multiple arrangements on children's outcomes are moderated by child care and family characteristics and whether the timing of multiple arrangements matters for children's school readiness.

**Sample:** The proposed study will use data from all four waves of the ECLS-B, a nationally-representative study of children born in the U.S. in 2001.

**Measures:**

Children’s developmental outcomes

- Bayley Scales of Infant Development—Second Edition (BSID-II)
- Preschool Language Assessment Scales—2000
- Peabody Picture Vocabulary Test—Third Edition
- Preschool Comprehensive Test of Phonological and Print Processing.
- Items from the Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 (ECLS-K) and items developed specifically for the ECLS-B
- Test of Early Mathematics Ability
- Parent-report of socio-emotional development from all four waves
- Teacher-report of socio-emotional development from the kindergarten wave
- Infant/Toddler Symptom Checklist
- Preschool and Kindergarten Behavior Scales—Second Edition
- Social Skills Rating System, from the ECLS-K, and items created specifically for the ECLS-B - reports from parents and KG teachers

Multiple child care arrangements

- Parents report of the total number of regular, non-parental child care arrangements by each of the following types of care: home-based care provided by a relative, home-based care provided by a non-relative (including family child care homes), and center-based care.

Other child care characteristics

- Child care subsidy program, Head Start, and public pre-K participation.
- Long-term child care stability
- Type of care

Child characteristics

- Parents report of the child’s age, normal or low-birth weight (less than 2,500 grams), and single- or multiple-birth represent the child’s birth status.
- Parent report of child’s health and special needs
- Child’s race/ethnicity

Family characteristics

- Demographics.
- Parental education
- Mothers’ current school enrollment
- Mothers’ marital status
- Family income
- Household composition
- Region
- Family routines
- Quality of the home environment
- Parenting stress

Parental employment characteristics

- Mother's employment status
- Mother works multiple jobs
- Mothers' work schedule

## Marina M. Mendoza

**Project Title:** Macro and Proximal Demographic Risks in Diverse Families: Factors Predicting Early Head Start Utilization and Child Outcomes

**Mentor:** Dr. Sarah Enos Watamura

**Project Funding Years:** 2013 - 2015

**University Affiliation:** University of Denver

**Project Abstract:**

This two-year study will assess how broader demographic risks that capture important cultural dynamics impact Early Head Start (EHS) engagement, and how EHS engagement impacts a young child's early mental health in a sample of high-risk diverse families. The three objectives of the study are: first, to assess how macro and proximal demographic risk impacts Early Head Start (EHS) engagement and the potential mediating role of alliance and culture match between EHS families and providers has on engagement; second, to assess how macro and proximal demographic risks predict socio-emotional problems in this diverse sample; and finally, to thoroughly examine the direct and indirect relationships among, macro and proximal demographic risk, alliance and culture match, EHS engagement, and child outcomes in immigrant families.

**Sample:** 360 EHS families from two EHS centers in the Denver Metro area. Children will be between 6-36 months of age and parents between the ages of 15 and 45.

**Measures:**

Macro demographics.

- Assessed with direct question such as "At what generation did your family immigrate to the U.S., for example, did you, or did your parents, grandparents, or great-grandparents immigrate?" and "How many years have you lived in the U.S.?"

Proximal demographics.

- Hispanic Stress Inventory for Parents (HSI-I).
- Vancouver Index for Acculturation (VIA).
- EHS demographic ethnicity data standards

EHS program engagement

- Program type.
- Involvement to program components.
- Dosage.

Alliance and culture match.

- Adapt a measure that will capture rapport and working alliance between parents and their primary delivery source of EHS services (teacher or home visit liaison).

Socio-emotional Problems.

- CBCL or BITSEA
- Parent Daily Report (PDR)
- Infant Behavior Record (IBR)

## Anna Colaner

**Project Title:** Sociodemographic Disparities in Market Change and Programmatic Mission under Preschool for All: A Case Study of Illinois

**Mentor:** Dr. Rachel Gordon

**Project Funding Years:** 2013 - 2015

**University Affiliation:** University of Illinois

**Project Abstract:**

The proposed research will use sociological theories of markets to investigate whether the introduction of Preschool for All, a universal preschool plan in Illinois, has had a disparate impact across sociodemographic groups. The objectives of the proposed project are to: 1) analyze quantitative data and to collect and analyze qualitative data to determine if and how Illinois' Preschool for All plan has affected the producer preschool market, with particular emphasis on disparate implications by family demographics; 2) write papers meeting the rigors of scholarly journals; and 3) translate results for non-academic audience. This proposed research aims to inform the Child Care Development Fund goals of: 1) allowing State flexibility to develop child care programs and policies that best suit the needs of children and parents within the State; 2) promoting parental choice to empower working parents to make their own decisions on the child care that best suits their families; and the long-term goal of 3) increasing the availability of provisions for low-income families.

**Sample:** Survey and interview data from 229 preschool center directors in 33 Chicagoland ZIP codes. Primary, in-depth interview data from 36 directors surveyed in the 2012 Chicago Area Study (CAS).

**Measures:**

Census Data

- Census' American Community Survey data

Administrative data

- Illinois Early Childhood Asset Map
- Illinois Action for Children for 2006 and 2012

Survey data.

- Survey data from the 2012 Chicago Area Study (CAS) – "Racial/Ethnic Difference in Child Care Supply: Is the Great Recession Widening Disparities?"

Qualitative Interview Data

- Primary, in-depth interview data with a subsample of directors surveyed in the 2012 Chicago Area Study (CAS)