Summary Project I:
We employ the child-environment fit perspective to derive and test hypotheses about which combinations of child, family, and child care program characteristics lead to larger child care treatment effects on cognitive and socio-emotional school readiness outcomes for children. We first test a compensatory hypothesis in which high-quality child care benefits at-risk children. This is an experimental test using data from five evaluations that employ an experimental manipulation of high-quality child care – the Infant Health and Development Program (IHDP), Early Head Start (EHS), the National Head Start Impact Study (NHSIS), and the randomized Preschool Curriculum Evaluation Research Study (PCER). Tests are also performed using the regression-discontinuity design of the Oklahoma Universal Pre-K program. A second set of experimental tests are of competing predictions from compensatory (least skilled children profit the most) and skill begets skill (the most skilled children profit the most) hypotheses using data from the IHDP, NHSIS, Oklahoma Pre-K, and PCER studies. Third, we use data from EHS, NHSIS, and PCER to test the protective hypothesis that certain personal and family factors protect at-risk children from the negative effects of low-quality care. We use these same data to test the cumulative disadvantage hypothesis that poor-quality programs are most detrimental for children with a high number of risk factors. Finally, we test the differential susceptibility hypothesis that children with difficult temperaments are at once hurt the most by low-quality care but helped the most by high-quality care. In addition, we will undertake analyses of two randomized databases – the NHSIS and PCER – that provide very detailed information on variation in program characteristics, in order to determine which characteristics account for differential effects experienced by population subgroups. We will use an instrumental variables strategy that employs the variation in program characteristics due to the experimental treatment to provide unbiased estimates of the effects of these characteristics on child outcomes. We expect to produce recommendations for a new generation of preschool child care programs aimed at identifying effects of global and content-specific quality as well as other detailed aspects of quality, enabling program features to be better aligned to particular children’s needs and background. In all cases in which data from the NHSIS are used to test these hypotheses, we will reconcile our results with those from Project III’s use of distributional methods on the NHSIS.

Relevance:
This project analyzes data from educational interventions involving the provision of high-quality child care to infants, toddlers and preschool children so as to better understand the heterogeneous effects of such care. Results will enable program planners to better target existing programs to subgroups of children for whom they are effective, and guide the redesign of program elements to achieve stronger effects for those subgroups who are not currently receiving adequate education and care to prepare them for kindergarten.