Developmental Origins of Healthy Brain Development: From Evidence to Policy

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3rd Annual Harvard Catalyst Child Health Symposium
Boston, MA | October 7, 2015
The Challenge: Racial Disparities in Reading Scores Have Decreased, Income Differences Have Grown, and the Gaps are Present on the First Day of School

Source: Reardon (2011)
The Evidence Base: 50 Years of Research on Early Childhood Programs Show We Need New Strategies

Source: Duncan & Magnuson (2013)
The Opportunity: A Scientific Revolution in Neuroscience and the Biology of Adversity

Toxic stress disrupts the foundations of learning, behavior, and health.
Healthy development requires protection as well as enrichment.
The Strategy: Leverage 21st-Century Science to Develop and Test New Theories of Change.

Strengthening the foundations of resilience in young children experiencing significant adversity requires that we transform the lives of the adults who care for them.
The Key to Impacts at Scale: Greater Specificity About What Works for Whom and Why

What We Should Ask
Why did this work so well for these children and families?

Current Approach
Mean effect qualifies as an evidence-based program

Why did this work so poorly for these children and families?
The Key to Impacts at Scale: Greater Specificity About What Works for Whom and Why

- Scale effective programs for similar subgroups
- Build a diversified portfolio that matches explicit intervention strategies to identified needs
- Design and test new approaches for these subgroups

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Identification of biological and bio-behavioral measures of toxic stress at all ages that are sensitive to intervention effects and can be collected in community-based, health care settings.

Basic research on critical periods in development to inform the timing of new, science-based intervention strategies early in the life cycle.

Basic research on variation in stress susceptibility to guide the development of a suite of more effective interventions for children facing adversity as well as the evaluation of differential program impacts.