

EARLY BRAIN &
BIOLOGICAL
DEVELOPMENT:
A SCIENCE IN
SOCIETY SYMPOSIUM

Leveraging Science to Shape the Future of Early Childhood Policy

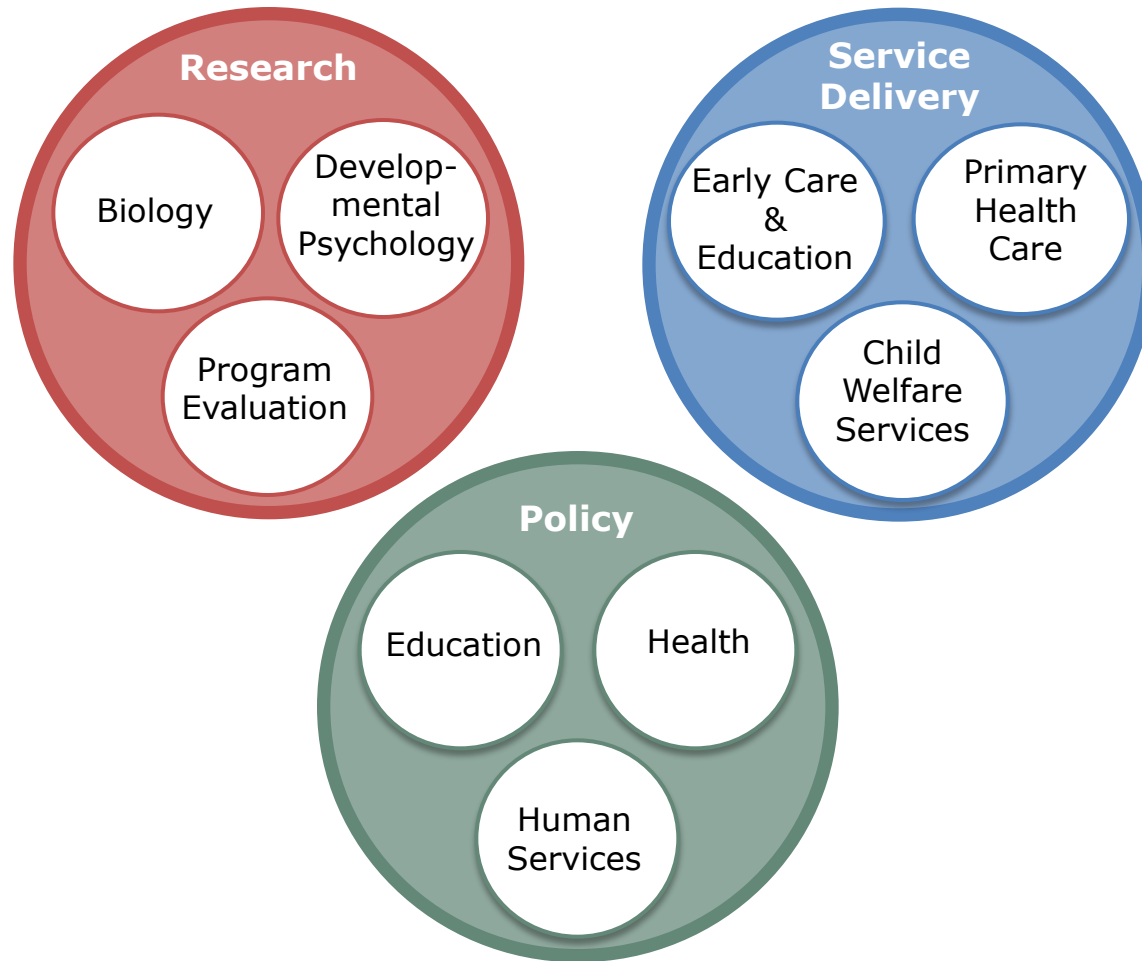
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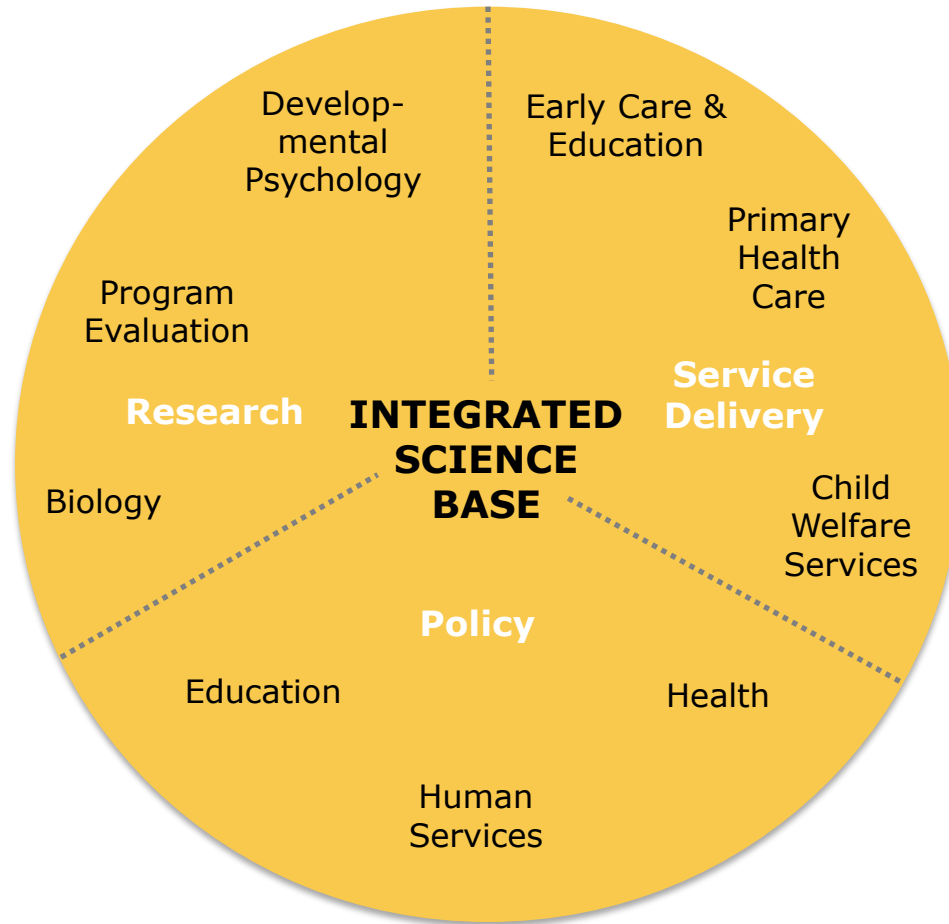
June 2, 2011



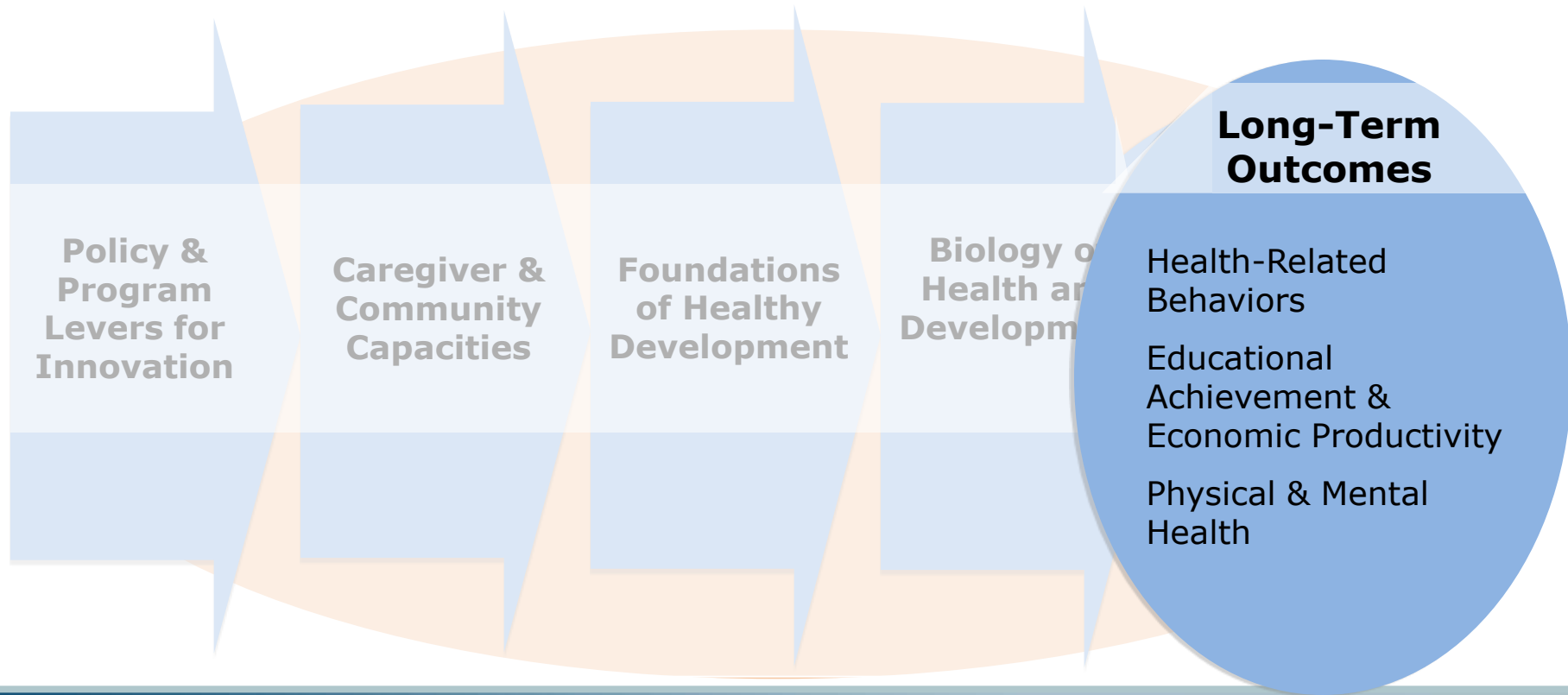
Transcending Professional Barriers



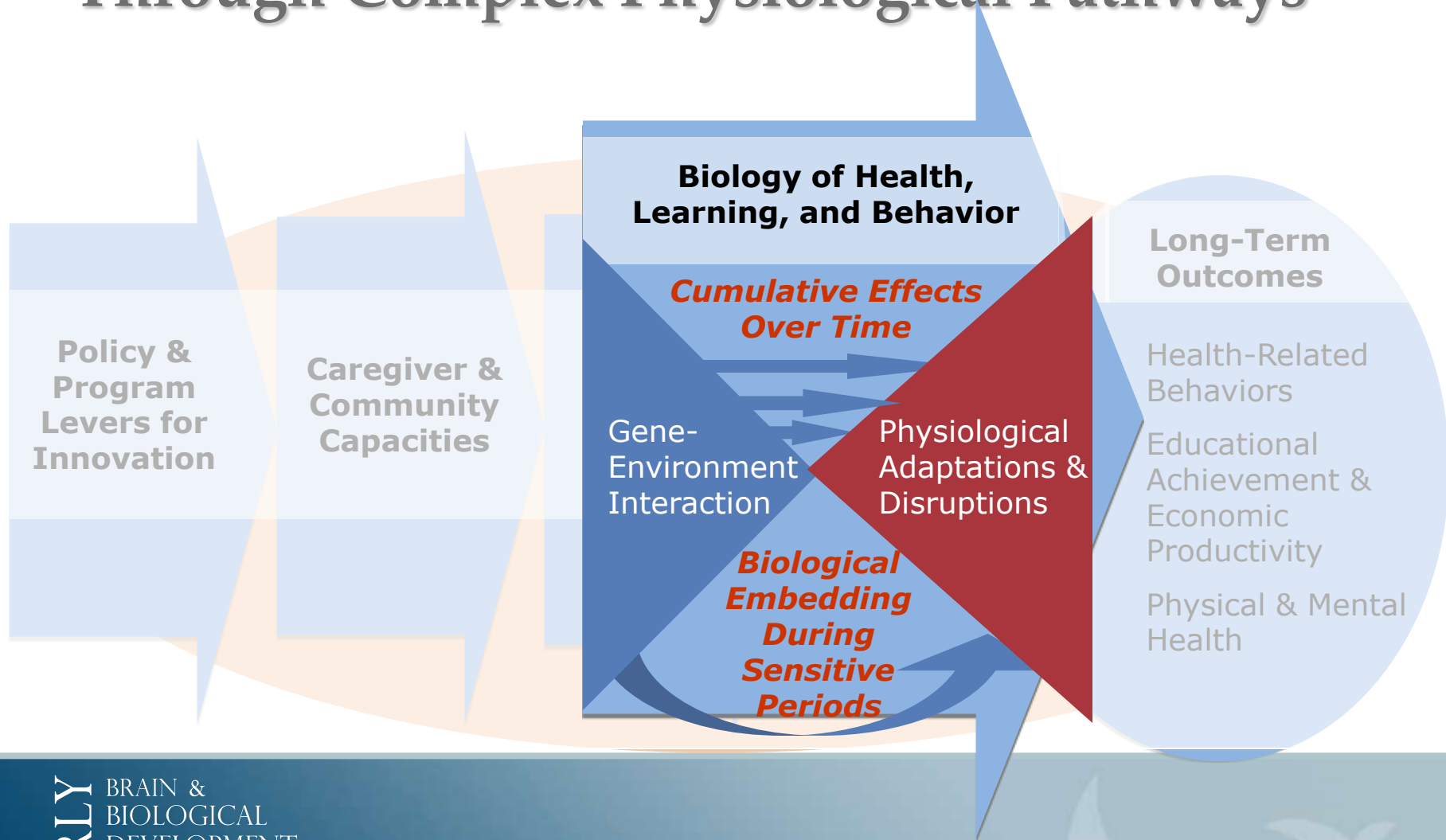
Transcending Professional Barriers



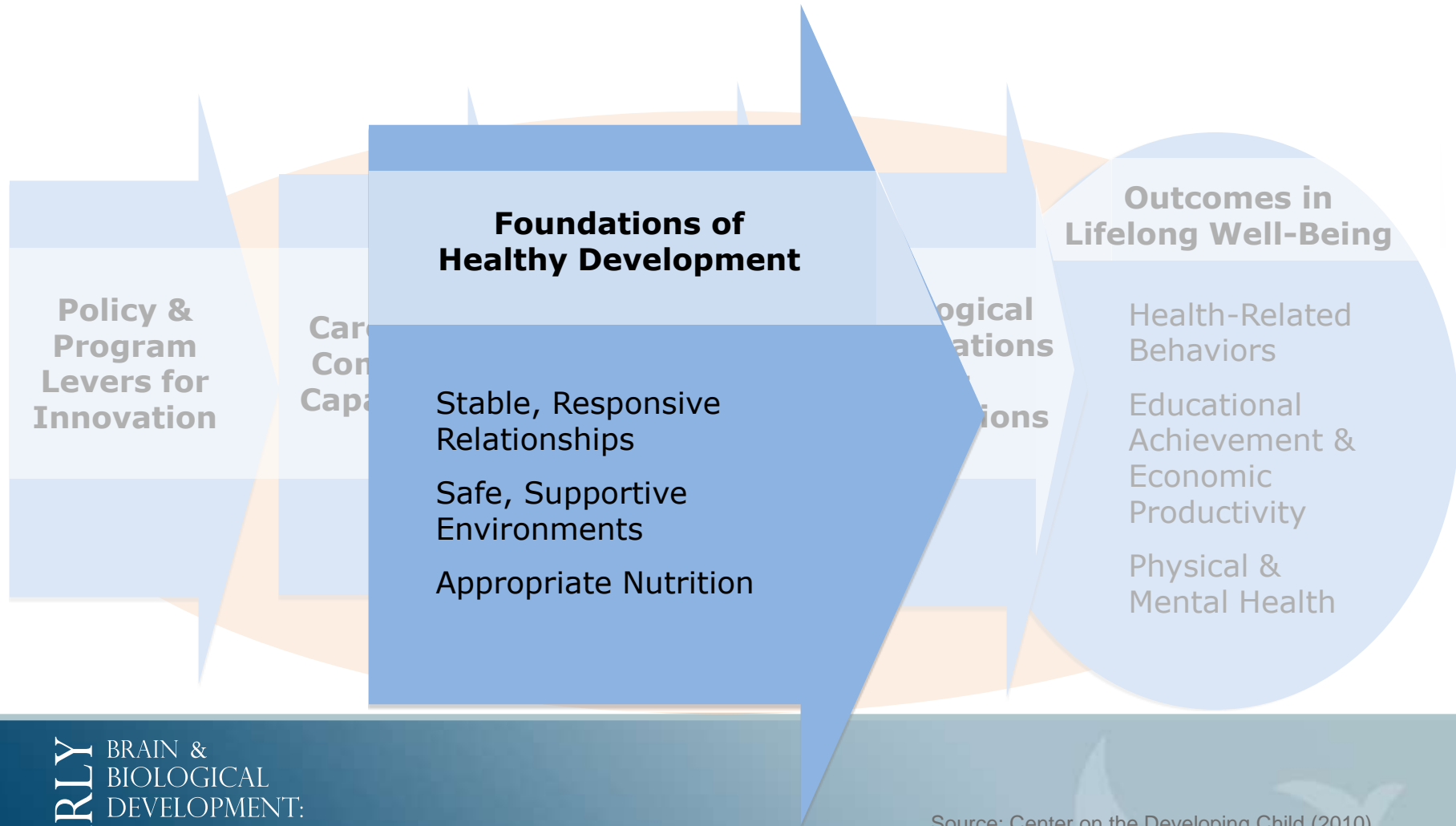
Advances in Science Can Help Construct a Logic Model to Guide Early Childhood Policy



Early Experiences Are Built Into the Body Through Complex Physiological Pathways



The Foundations of Healthy Development Influence Biological Responses Over Time



Caregiver and Community Capacities Affect the Strength of the Foundations



The Developmental Needs of Young Children Can Be Addressed Across Multiple Sectors

Policy & Program Levers for Innovation

- Primary Health Care
- Child Care & Early Education
- Public Health Initiatives
- Child Welfare
- Early Intervention
- Income Supports
- Community Development
- Housing
- Private Sector Actions

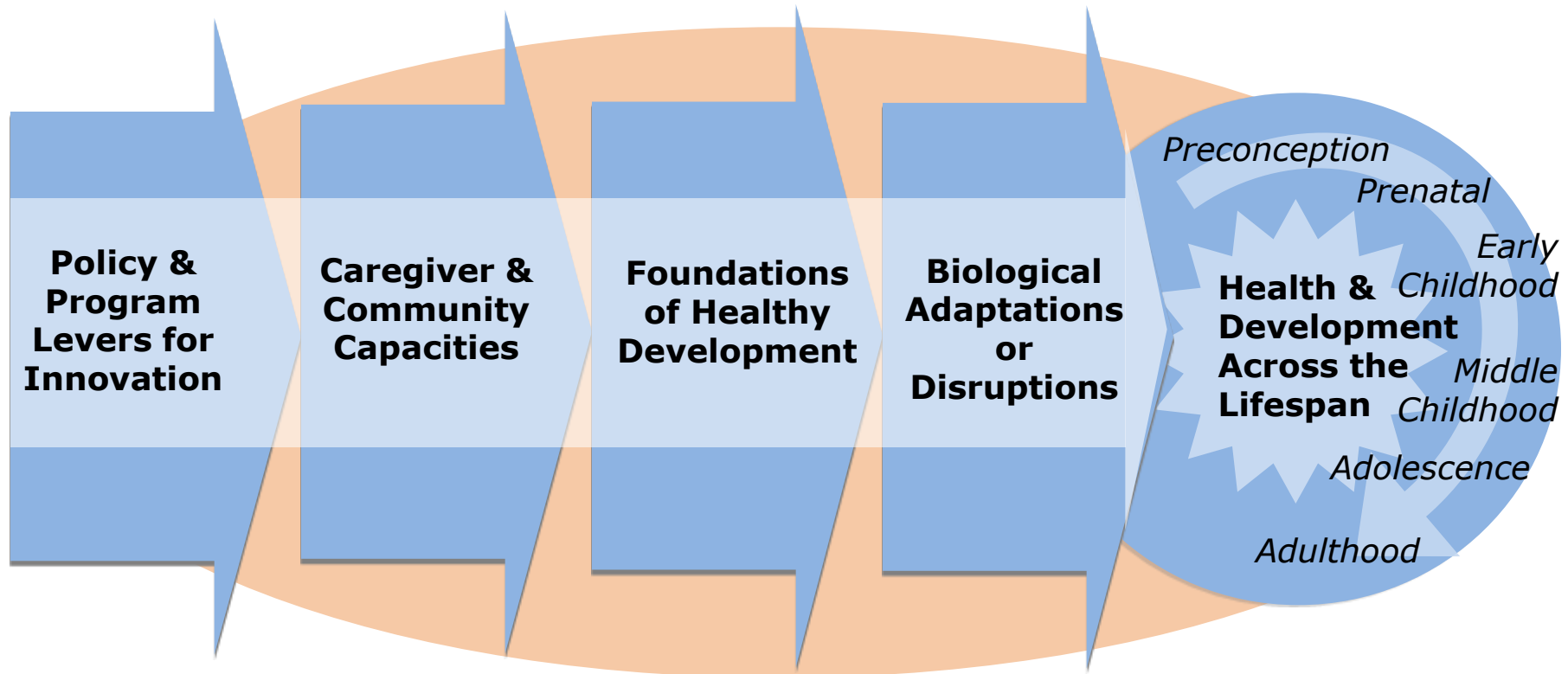
Foundations of Healthy Development

Biological Adaptations or Disruptions

Outcomes in Lifelong Well-Being

- Health-Related Behaviors
- Educational Achievement & Economic Productivity
- Physical & Mental Health

Science Can Inform an Integrated Approach to Early Investment in Healthy Development



Three Challenges at the Intersection of Early Childhood Science and Policy

Answering the “why” question (easy)

Answering the “what” and “how” questions (tougher)

Answering the “what’s next” question (toughest)

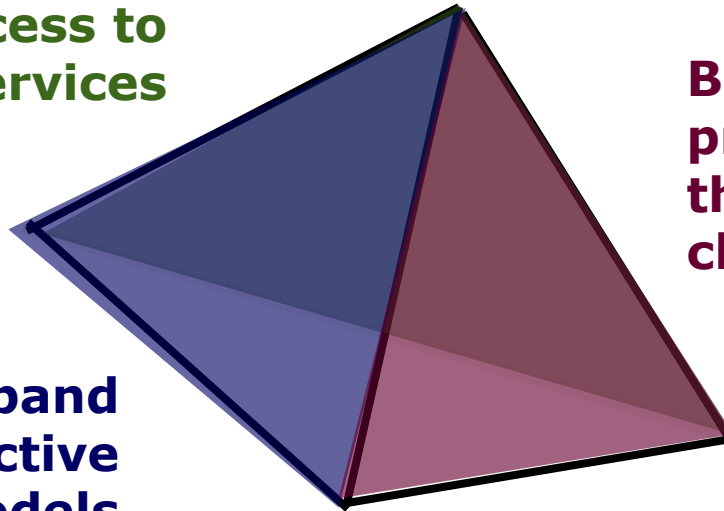


Three Answers to the “What’s Next” Question

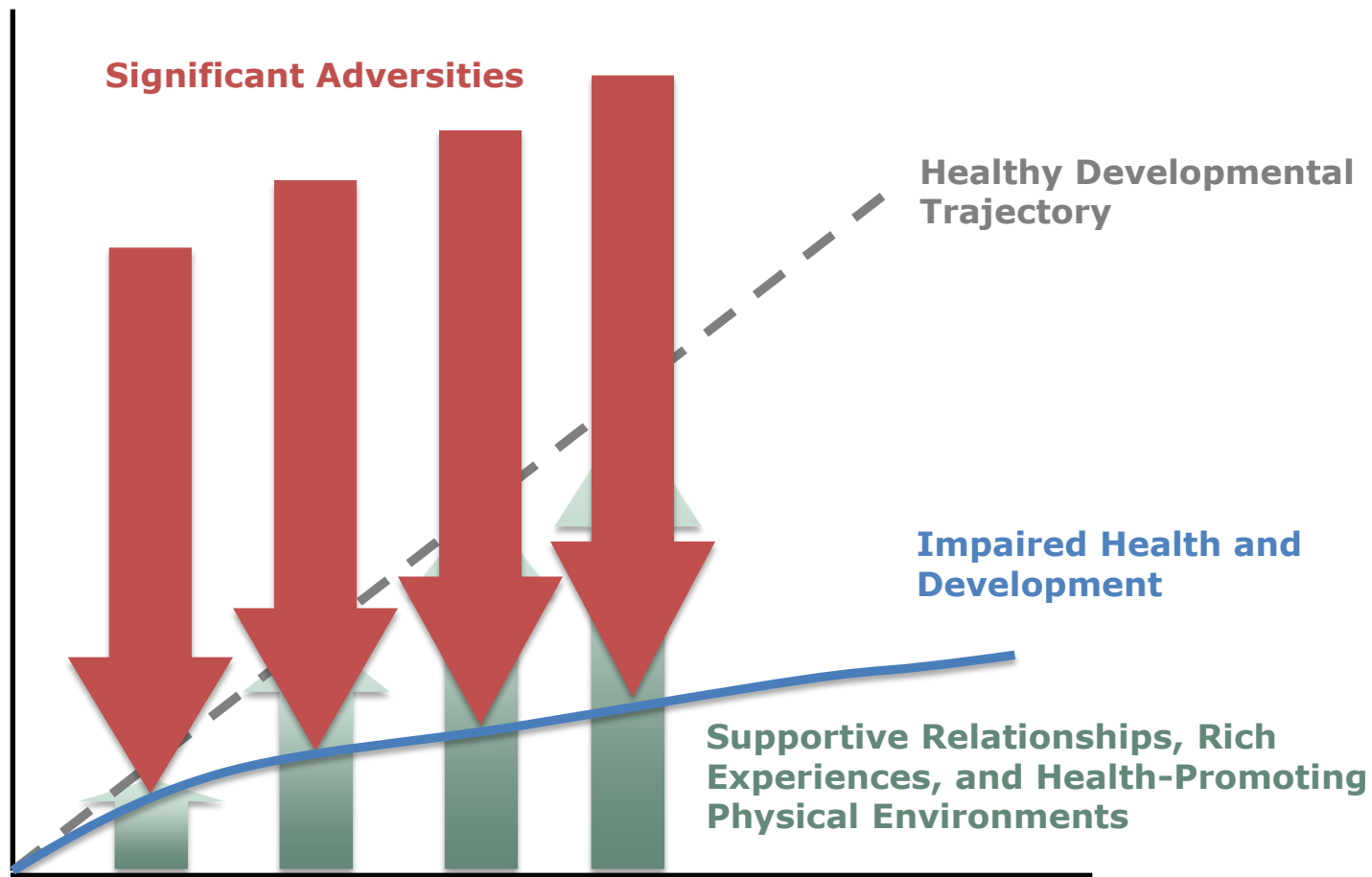
**Enhance
quality and
access to
services**

**Build, test, and
promote new
theories of
change**

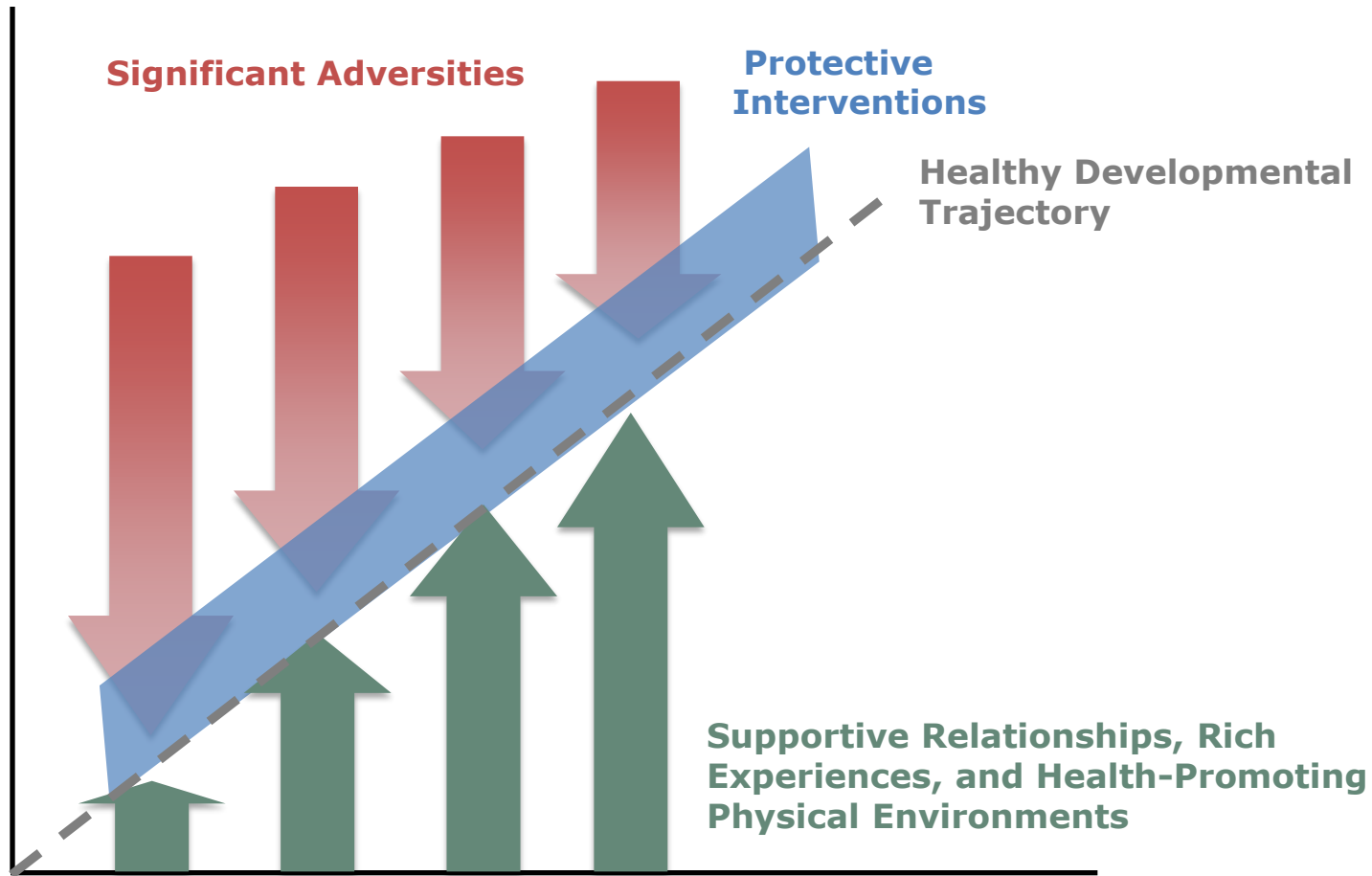
**Expand
effective
models**



Existing Conceptual Framework



Enhanced Theory of Change



Creating an Ecology of Innovation

CLIMATE: the policy, professional, and funding environment that creates incentives and influences the allocation of resources.

SOIL: a rich combination of people and contexts that cultivates promising seeds, promotes favorable climate, learns from failure, and catalyzes broader impact.

SEEDS: breakthrough ideas that offer the potential for substantially more effective policies and practices that are affordable, replicable, scalable, and sustainable.



Three Promising Domains for Fresh Thinking

Reduce developmental barriers to learning.

Enhance the resources and capacities of the family environment.

Strengthen the early childhood foundations of lifelong health.



An Innovation Agenda for Reducing Barriers to Learning

CLIMATE

Transform the Policy Environment

Increase public understanding of the impact of behavior, emotion, self regulation, and executive functioning on early learning.

SOIL

Cultivate Creativity and Impact

Convene communities of creative thinkers and doers to design, test, and replicate new intervention strategies.

SEEDS

Incubate Breakthrough Ideas

Catalyze the development of promising, new strategies to improve learning outcomes through enhanced executive functioning, emotional regulation, and social behavior.



An Innovation Agenda for Enhancing Family Resources and Capacities

CLIMATE

Transform the Policy Environment

Increase public understanding of both benefits and limitations of parenting education and the need for new ideas beyond social support.

SOIL

Cultivate Creativity and Impact

Engage with states, communities, or programs that provide fertile conditions for rethinking the concepts of parent engagement and community support.

SEEDS

Incubate Breakthrough Ideas

Formulate and test new strategies to enhance economic security, adult executive functioning, and social stability of the family environment.



An Innovation Agenda for Strengthening the Early Foundations of Lifelong Health

CLIMATE

Transform the Policy Environment

Increase public understanding of the early life origins of adult disease and disability.

SOIL

Cultivate Creativity and Impact

Engage with states, communities, or programs that provide fertile conditions for developing and testing new strategies to reduce sources or mitigate impacts of toxic stress.

SEEDS

Incubate Breakthrough Ideas

Investigate biomarkers for new ways to identify increased biological vulnerability, individualize services, and measure intervention effects.



Embracing an Accelerated Approach to Innovation

Current Model

- Premium on low-risk “success”
- Relatively long cycle for impact
- Fixed evaluation points – harder to change course
- Traditional funding model
- Failure is costly in time and money

Proposed Shift in Culture

- Premium on high-risk “breakthroughs”
- Multiple shorter cycles for impact
- Dynamic evaluation – frequent adjustments
- Flexible “venture” investing
- The only failure is the failure to learn



Successful Innovation Requires Visionary Leadership

Responsible management of finite resources is about creative problem-solving and ingenuity, not simply achieving efficiencies and cutting costs.

Science can guide the development of innovative strategies for action but their implementation requires a willingness to take risks.

Real change requires a deep commitment to a lasting legacy, not just re-election, renewed funding, or the search for a quick fix.





Center on the Developing Child HARVARD UNIVERSITY



www.developingchild.harvard.edu

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