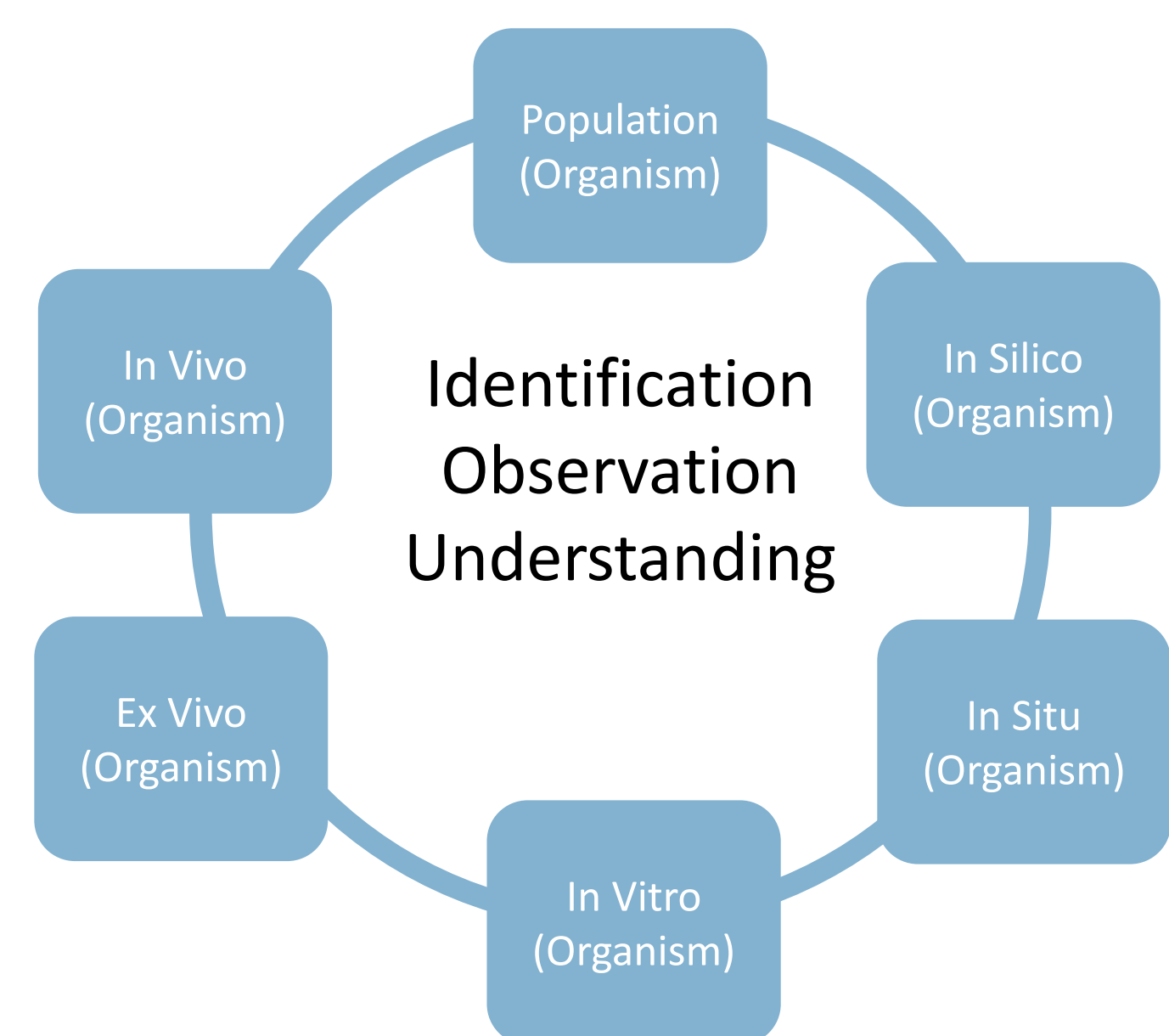
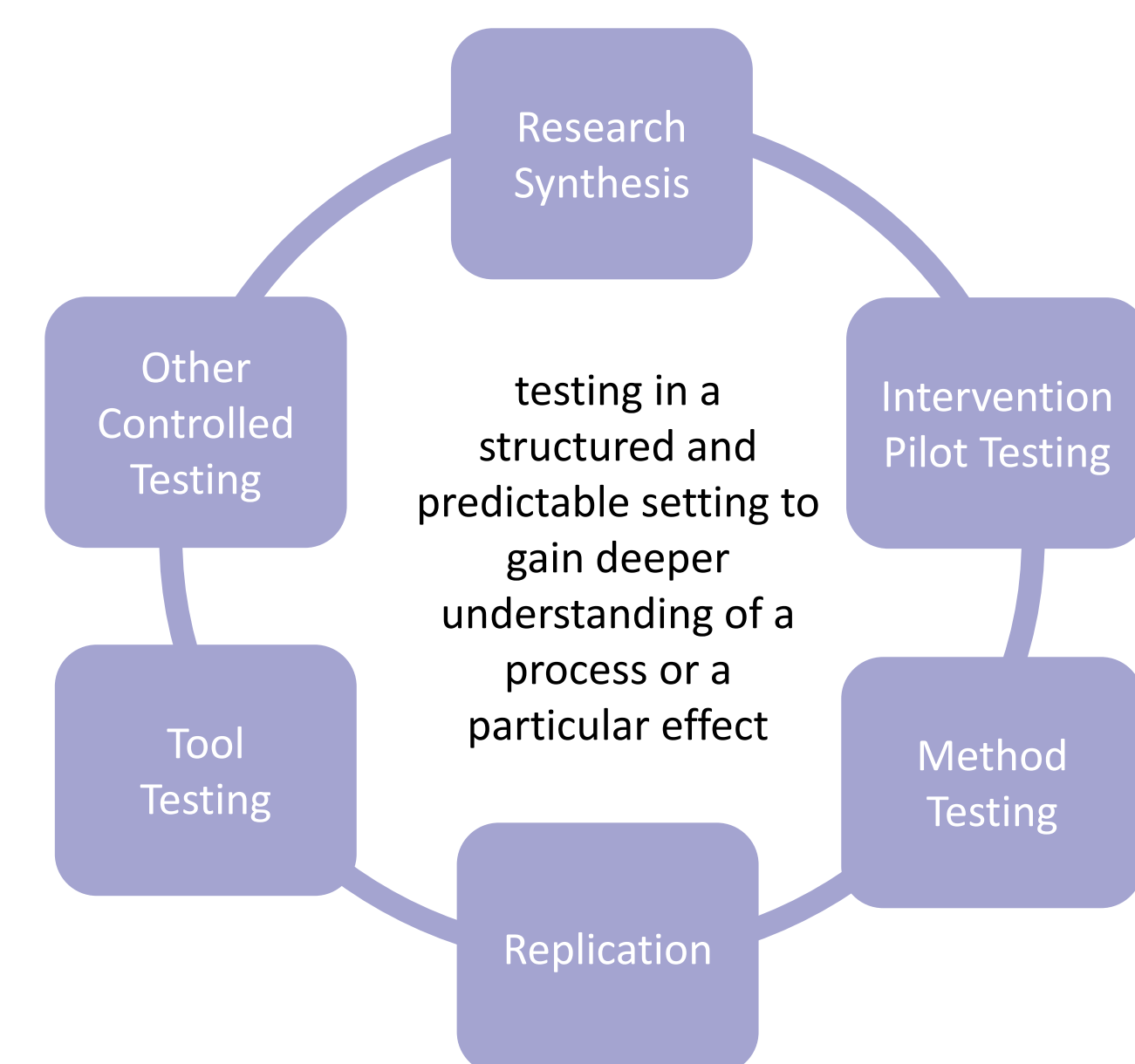


Translational Research Spectrum: Rings and Nodes

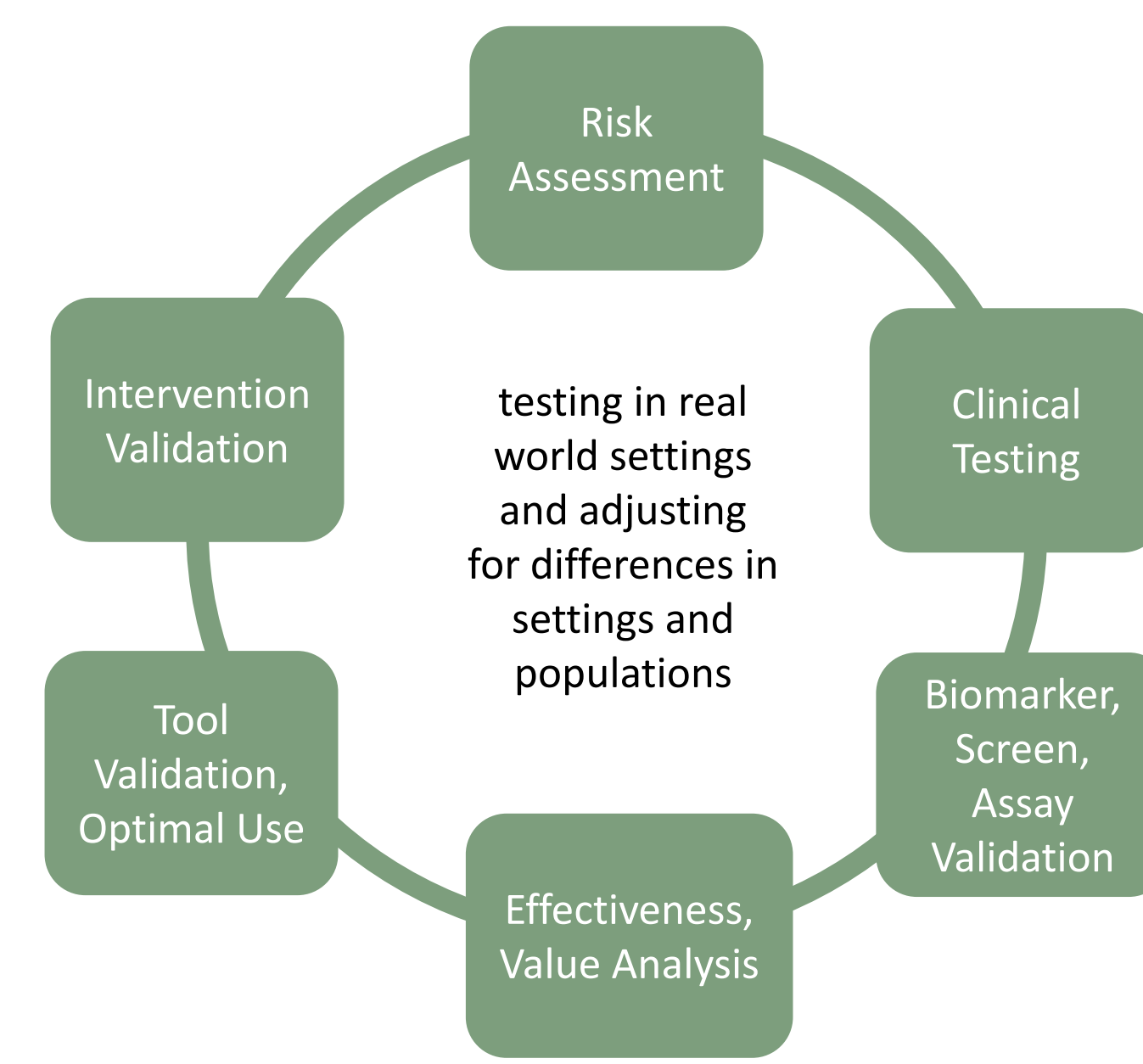
Fundamental Questions



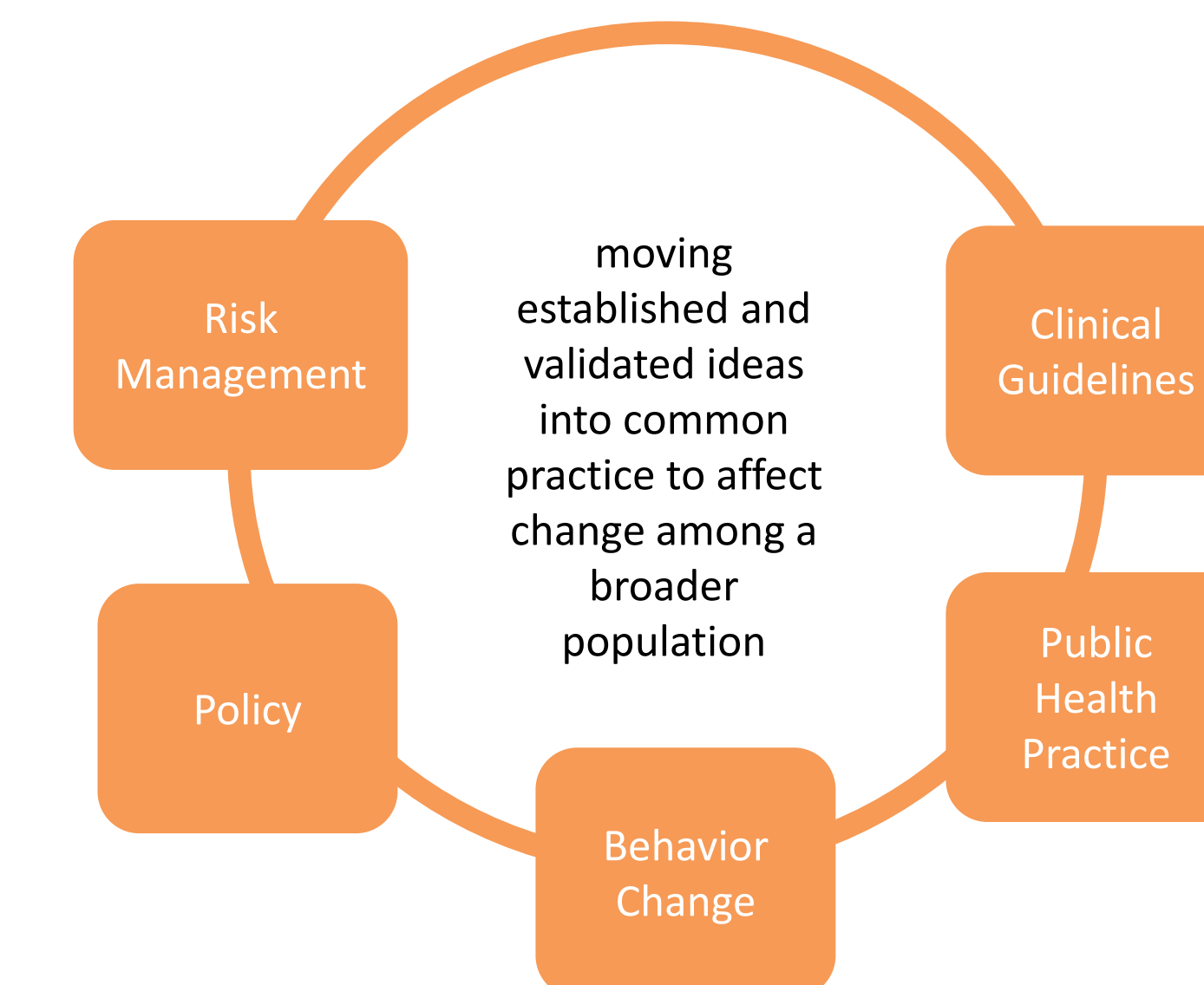
Application & Synthesis



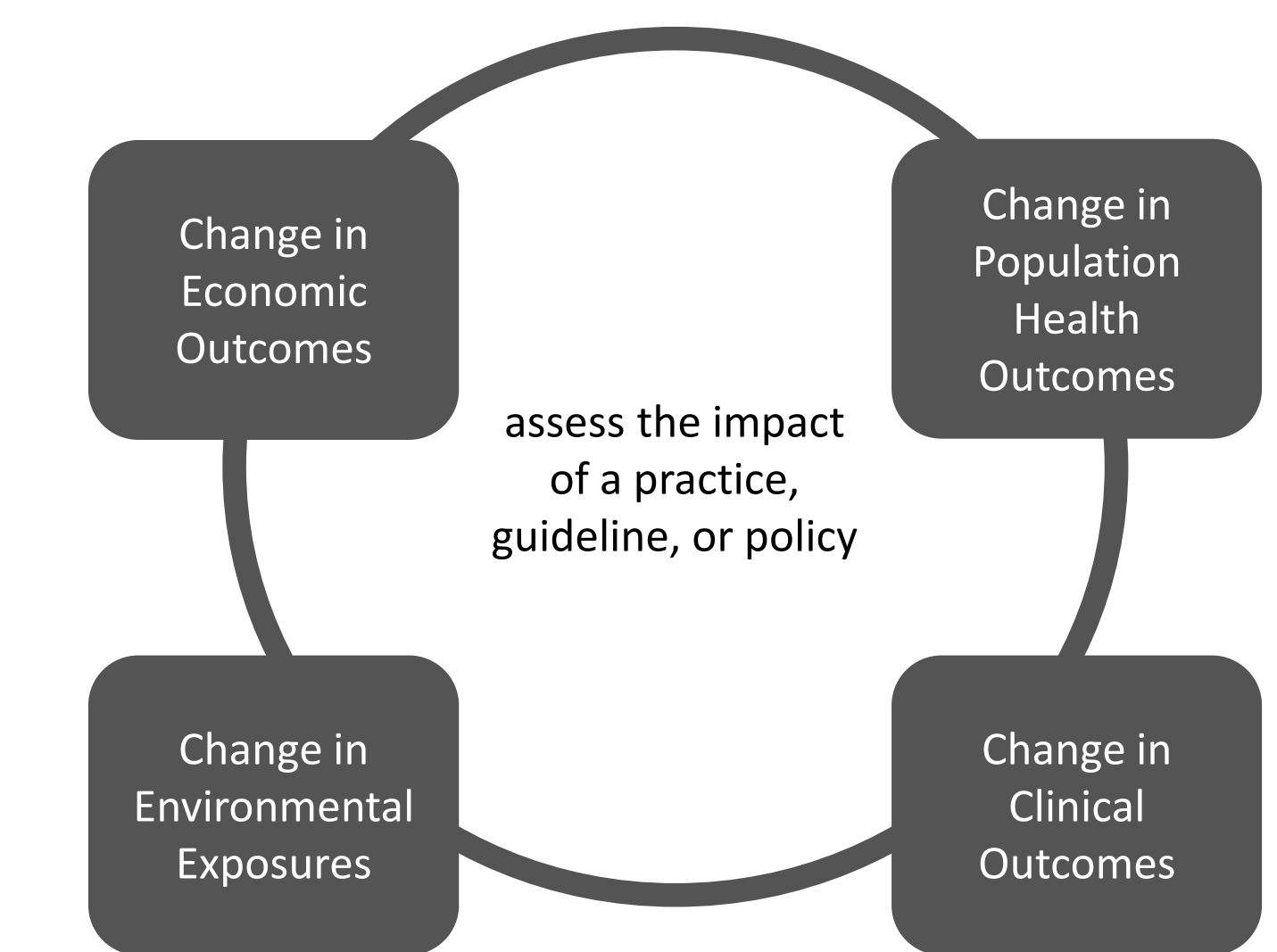
Implementation & Adjustment



Practice



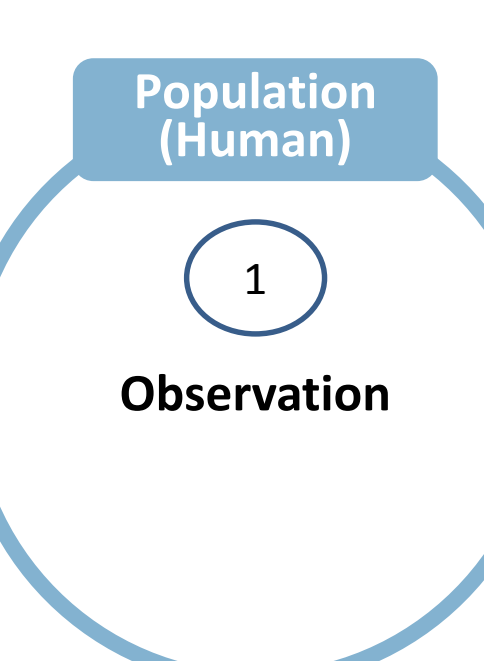
Impact



Advances from previous models

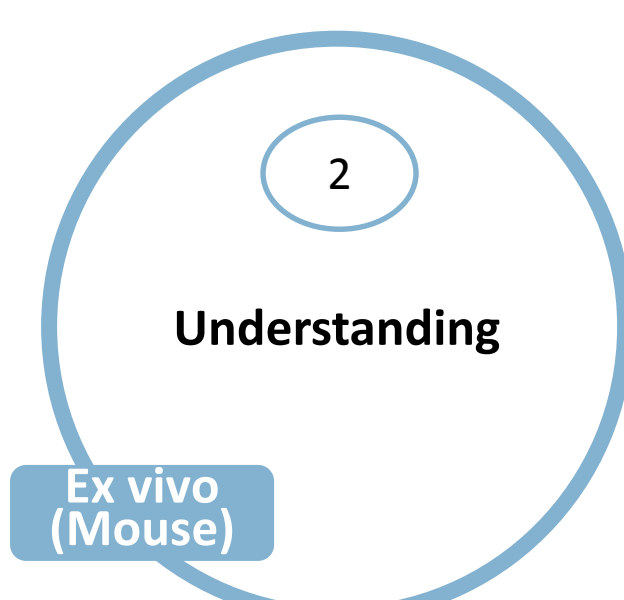
- Provide more nuance throughout the framework, especially in the fundamental questions
- Expand applicability beyond clinical research
- Give translational credit for research that moves around a ring and crosses rings

Case Study



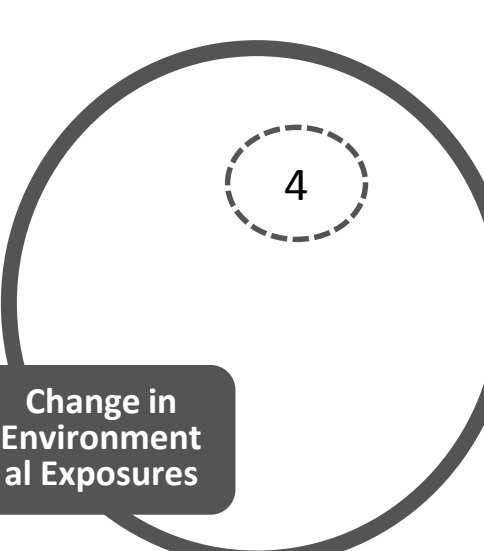
Human Observation
 • Elevated PFC levels in NHANES leads to Pilot Study in Cincinnati BCERP Cohort

Timeframe: 2005
Who was involved: CDC; Antonia Calafat Cincinnati BCERP; Hiatt, Haslam, Osuch



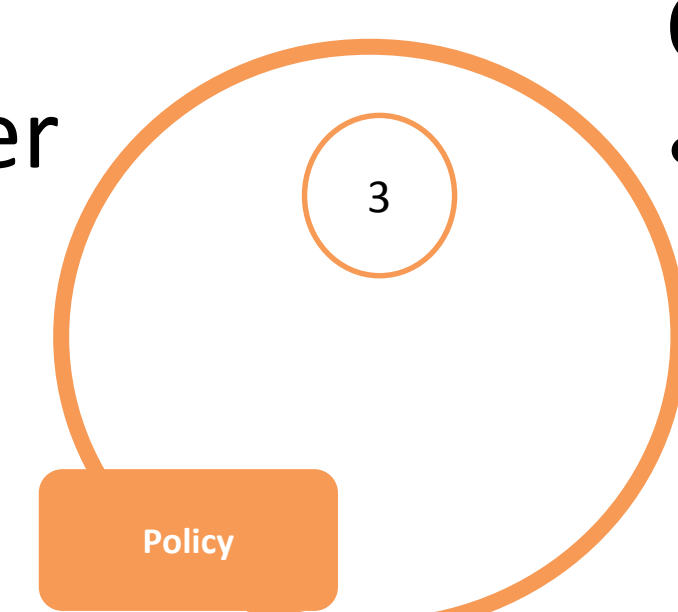
Animal Understanding
 • PFOA stimulates mammary gland development in C57Bl/6 mice

Timeframe: 2006-2008
Who was involved: Hasslam Lab; Michigan State University Cincinnati BCERP



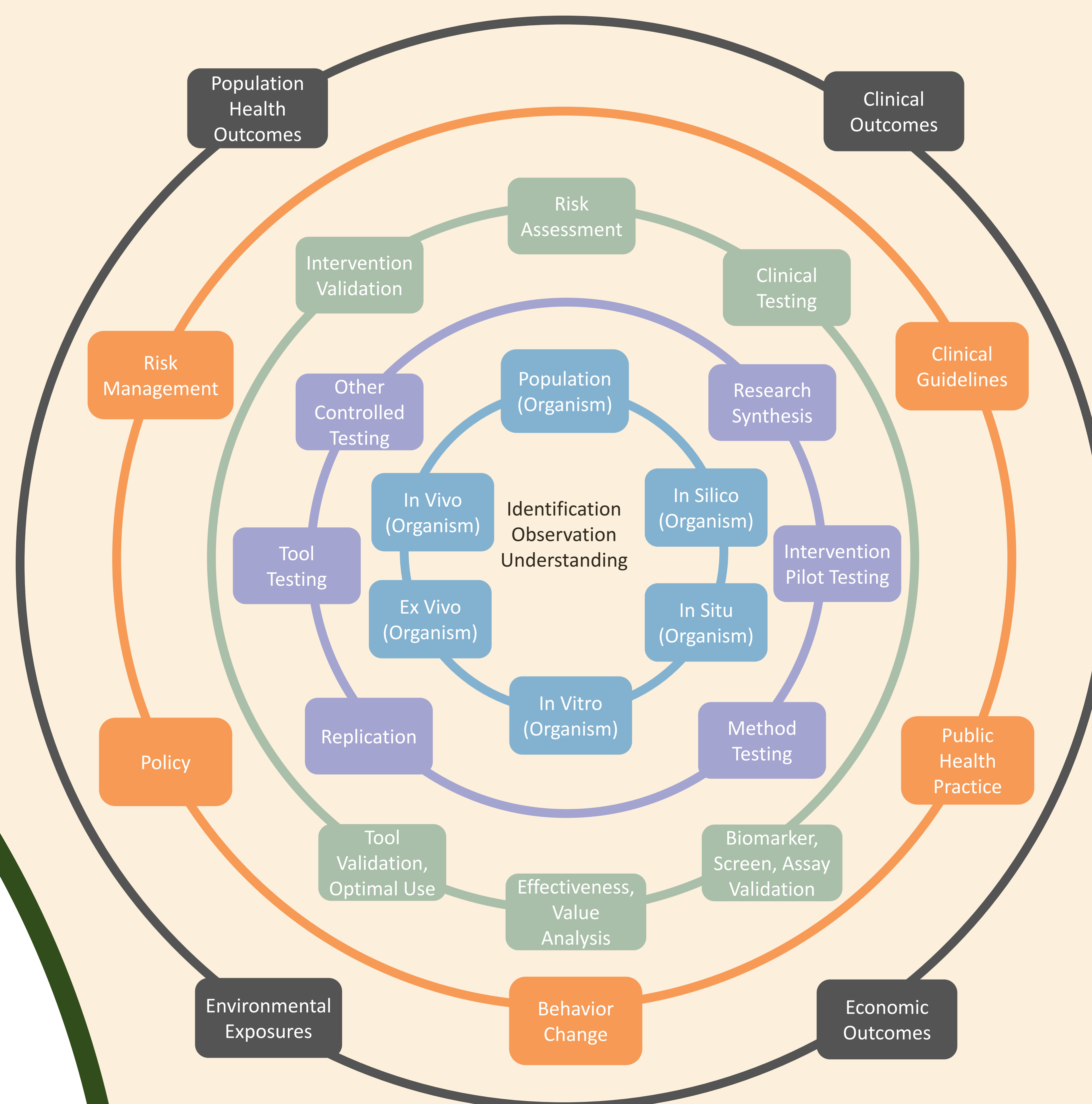
Change in Environmental Exposure
 • Continued monitoring of girls' PFC levels after the water filtering intervention was implemented

Timeframe: 2011 – current
Who was involved: Cincinnati BCERP



Organizational Policy
 • Partnered with city health department to reduce exposure through water filtering

Timeframe: 2007-2012
Who was involved: Cincinnati BCERP, Dr. Robert Bornschein Cincinnati Water Department Cincinnati Health Department



Translational research story template captures

- Context
- Timeframe
- Partners
- Funding Sources
- Bridging Narratives

Evaluation and Program Analysis Tool

- Categorize research into rings and nodes
- Capture full translational narrative over many years
- Count bridges between nodes and across rings
- Identify research gaps
- Facilitate bridging

Benefits of the Translational Research Framework

- Communicate a concept of translational research
- Track movement of research through translational spectrum
- Enable program staff to actively manage bridging science
- Provide a path for researchers to see where research might go

Comments & Questions

If you have comments, please email trf@niehs.nih.gov.

Visit www.niehs.nih.gov/trf for more information.

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