BSC's Perspective for NTP Strategic Realignment

- The Why
- The What
- The How
- Rapid Response Questions

BSC's Perspective for NTP Strategic Realignment

The Why

- NTP should be distinct from a traditional academic research effort or even an industrial safety/hazard assessment function. Consider what makes NTP unique in the community of toxicology and hazard/safety assessors. Is it NTP's:
  - Relative "freedom to operate"?
  - Experience set?
  - Tools?
  - Ability to maintain focus on a challenge for prolonged periods of time?
  - Something else?

- **Polling Question:** What unique value could/should NTP bring to this field of science (or science in general)? What do you think?

The Why: Vision and Mission

- ***Vision***

  To advance public health and the discipline of toxicology through the use of innovative tools and strategies that are translatable, predictive, and timely.

- ***Mission***

  Solve contemporary public health problems by characterizing contemporary environmental hazards in human-relevant systems. Inform a future state that meets rapidly changing public health needs by bridging mechanistic insights to phenotypic outcomes.

DRAFT- In revision with staff engagement

BSC's Perspective for NTP Strategic Realignment

The What

- We shared with you our concept of a *Translational Toxicology Pipeline* with an intent to benefit public health. In that context, *translation* refers to deriving insights into potential human hazards from non-animal test systems. Inherent in that aim is a need for NTP to be "human relevant".
  - What does it mean for NTP's work to be "human relevant" and how would we incorporate this objective into the assessments that NTP carries out?

BSC's Perspective for NTP Strategic Realignment

The How

- We shared with you an intent to build greater confidence in regulatory and policy decision-making from in silico, in vitro, and literature-based evidence.
    - What challenges will NTP face attempting to do this? What approaches might we use to build confidence in decision-making from non-traditional endpoints or evidence?

Whiteboard Question: Are there partnerships that we should be leveraging?

BSC's Perspective for NTP Strategic Realignment

Rapid Response Questions

- Complex 3D in vitro systems are rapidly evolving. What is the opportunity for those systems to enhance our efforts? What are the challenges?

BSC's Perspective for NTP Strategic Realignment

Rapid Response Questions

- Computational approaches are also rapidly evolving. How should NTP be engaging and capitalizing on machine learning capabilities? Where are those capabilities best applied? What are the challenges?

BSC's Perspective for NTP Strategic Realignment

Rapid Response Questions

- There is a growing interest in revising our current approaches to carcinogenicity hazard assessments for a variety of reasons. What do you think about current approaches to carcinogenicity testing? What are the best opportunities to refine or revolutionize that approach?