



BSC's Perspective for NTP Strategic Realignment

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



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?



- ***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.



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?



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?



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?



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?



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?