Tox21: A New Strategic Plan for Continued Leadership



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Introduction

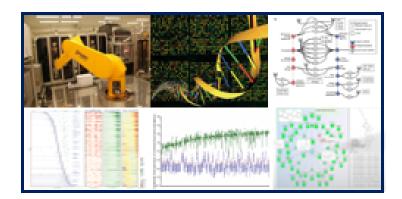
Where Have We Been? Where Do We Want to Go? How Do We Get There?

- Tox21 has been a very successful interagency collaboration
 - Thousands of chemicals tested in over 50 relevant pathways
 - Public release of millions of data points
 - Dozens of joint publications
 - Data now being used for regulatory decisions
- Time is right to broaden the focus beyond developing and applying HTS to toxicology to developing toxicology approaches for the 21st century
- Challenge is that the different partners have different missions
 - No single framework
 - No one-size-fits-all approach
- New strategic plan needs to focus on:
 - Key challenges in toxicology in the 21st century
 - Common goals that have substantial benefit in each organization regardless of mission.

Tox21 2017 Strategic Plan

Tox21 Collaboration

A Strategic Plan for Continued Leadership



Agency Representatives

Russell S. Thomas, Ph.D. Director, National Center for Computational Toxicology U.S. Environmental Protection Agency

Richard S. Paules, Ph.D. Chief, Biomedical Screening Branch National Toxicology Program National Institutes of Environmental Health Sciences

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Primary Goals for Tox21 in Next 5 Years

- 1. Develop and deploy alternative test systems that are predictive of human toxicity and dose response
- 2. Address key technical limitations of current *in vitro* test systems
- 3. Curate and characterize legacy *in vivo* toxicity studies to serve as a resource for interpreting Tox21 data
- 4. Develop framework for efficient validation of Tox21 approaches
- 5. Refine and deploy *in vitro* methods for characterizing pharmacokinetics to increase predictivity and reduce uncertainty

Implementation – Progress to Date

- New Strategic Plan approved
- Infrastructure Projects Started
 - Chemical Library
 - HTS Screening
 - Communications
- Cross Partner Projects Ongoing
 - Cross-partner projects will be limited to 3 years terms, driven by specific aims that match primary goals
 - Partner resource driven
- More formal and detailed presentation at the upcoming World Congress in Seattle - August 2017



Implementation of the New Strategic Plan



Thank you