ICCVAM Update

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2013 A New Vision and Direction for ICCVAM

- Agenda driven by member agencies
- Emphasize “fit for purpose” approach to validation
- Improve communications with stakeholders and the public
- Increase productivity of international collaborations
- Identified projects where there is a reasonable likelihood of success with a reasonable timeframe (1-5 years)
  - *Leptospira* vaccine potency
  - Oral-dermal acute lethality
  - Skin sensitization
Current ICCVAM Working Groups

- Acute Toxicity
- Skin Sensitization
- Ocular and Dermal Irritation
- Reference Chemicals

Working groups include international partners
ICCVAM Acute Toxicity Working Group

ICCVAM Sponsor Agencies: EPA, DOD

23 Members/8 Agencies: CPSC, DOD (AFRL, AIPH, USAF, DTRA, ERDC), DOT, EPA (OPP, ORD), NIEHS, NLM, OSHA, ICATM Liaisons (EURL-ECVAM, KoCVAM)

- Identify and publish current requirements and testing needs for U.S. and international regulatory authorities
- Acquire and curate and make public high quality data \textit{(in vitro and in vivo)}
- Develop and evaluate \textit{in vitro} and \textit{in silico} approaches for predicting acute oral, dermal and/or inhalation systemic toxicity
- Draft ICCVAM strategy and roadmap on using \textit{in vitro} and \textit{in silico} approaches to replace or reduce animal use in acute systemic toxicity testing
Webinar Series: Acute Inhalation Toxicity Testing

- Regulatory guidelines - when and how acute inhalation systemic toxicity data are used for assessing hazard potential
- Existing alternative approaches (in vitro and in silico)
- Mechanisms of acute toxicity that may constitute key events in an AOP for acute inhalation toxicity
- Provided background information for in person workshop

Acute Inhalation Toxicity Testing: Ongoing Efforts

- WORKING GROUP 1: Develop a database of existing acute systemic toxicity data
- WORKING GROUP 2: Prepare a state-of-the-science review on mechanisms and non-animal (*in vitro* and *in silico*) assays for acute inhalation toxicity
- WORKING GROUP 3: Develop an *in silico* decision tree
- WORKING GROUP 4: Design and conduct an *in vitro* proof-of-concept

Scientists from industry, academia, NGOs, and government
New ICCVAM Working Groups 2017

• Developmental and Reproductive Toxicology
• *In Vitro* to *In Vivo* Extrapolation
• Read Across

- Working groups will include international partners & begin to interface with private sector groups
International Cooperation on Alternative Test Methods (ICATM)
OECD

- Organisation for Economic Co-operation and Development

- Provide input on US position
- Lead/Co-lead new projects
- Participate in expert consultations
ICCVAM Communications

• ICCVAM Public Forum
  – ICCVAM Agency updates relevant to 3Rs; opportunities for public comment; in-person or remote attendance

• ICCVAM Communities of Practice Webinars
  – 2016: Fundamentals of Using Quantitative Structure-Activity Relationship Models and Read-across Techniques in Predictive Toxicology
  – 2015: Reverse Toxicokinetics: Using In Vitro Data to Estimate Exposures that Could Be Associated with Adverse Effects In Vivo
ICCVAM Communications

• Society of Toxicology 2017
  – Exhibitor Hosted Sessions
    • Developing an Implementation Strategy for Toxicity Testing in the 21st Century
    • ICCVAM Tools for Validation and Regulatory Application of Alternative Methods

• SACATM - September 18-19, 2017, Bethesda
  – 3Rs Strategic Roadmap
  – Opportunities for public comment; in-person or remote attendance
NIST Joins ICCVAM as 16th Agency
Questions?