



ICCVAM Public Forum

NICEATM Update

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NTP Interagency Center for the Evaluation of Alternative Toxicological Methods (NICEATM), organized as an office under the NTP Division, part of NIEHS









New Paradigms in Validation

- Single laboratory validation
- Pathway-Based Performance Standards



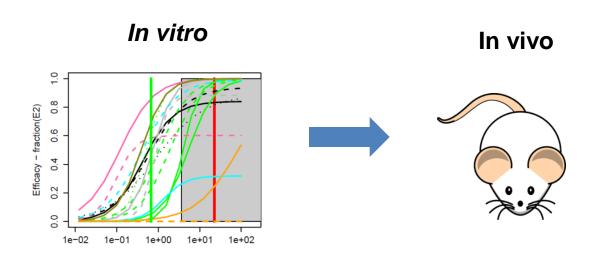
Acute Toxicity Testing

- Data curation from EPA registrations
- Multi-stakeholder effort with monthly webinars and expert group meeting 24-25 February 2015, NIH, Bethesda



In Vitro to In Vivo Extrapolation (IVIVE)

- How do results from in vitro assays relate to bioactivity and toxicity seen in animals and humans?
- Best Practices Workshop EPA (RTP), NC February 17-18
 2016





Reference Chemicals

- Acute Toxicity
- Uterotrophic database, manuscript submitted
- Developmental Toxicity



NICEATM Newsletter



NICEATM News - May 21, 2015

In this Newsletter:

ICCVAM Public Forum: Agenda Available and Registration Reminder

USDA Updates Guidelines for Validation of In Vitro Potency Assays

ICCVAM Public Forum: Agenda Available and Registration Reminder

An agenda for the upcoming ICCVAM Public Forum is now available on the NTP website. A link to registration forms and other information about the Public Forum are also available on this page. Registration closes tomorrow, May 22, for in-person attendance at the Public Forum. Registration to view the webcast of the Public Forum will be available until the meeting ends.

The Public Forum will take place on May 27 from 9:00 a.m. to 12:00 p.m. at the National Institutes of Health Natcher Conference Center in Bethesda, Maryland. Representatives of the federal agencies on ICCVAM will be present to hear ideas and suggestions from interested stakeholders and the public.

The meeting will begin with preser related to the development and va reduce, or refine animal use. Prese procedures. Following each presen



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NICEATM Posters and Presentations, SOT 2015

- Workshop Session: The U.S. Tox21 Collaboration: Advances Made and Lessons Learned
- Poster Session: Alternatives to Mammalian Models I: Cardio, Neuro, Developmental
- Poster Session: Alternatives to Mammalian Models II: Skin, Eye, Liver
- Poster Session: Biological Modeling
- Workshop Session: The EDSP Screening Battery: A Work in Progress for Prioritizing Compounds for Quantitative Risk Assessment
- Poster Session: Alternatives to Mammalian Models III
- Poster Session: Computational Toxicology and Data Integration I
- Symposium Session: Incorporating In Vitro Pharmacokinetic Data and Tools into Toxicity Testing and Risk Assessment: State of the Science
- Platform Session: Applications of ToxCast/Tox21 Data: Confidence and Predictivity
- Poster Session: Regulation/Policy
- Poster Session: Computational Toxicology and Data Integration II



NICEATM Publications

- Alves VM, Muratov E, Fourches D, Strickland J, Kleinstreuer N, Andrade CH, Tropsha A. 2015. Predicting chemically-induced skin reactions. Part I: QSAR models of skin sensitization and their application to identify potentially hazardous compounds. [published online ahead of print 2 Jan 2015]. Toxicol Appl Pharmacol http://dx.doi.org/10.1016/j.taap.2014.12.014.
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- Huang R, Sakamuru S, Martin MT, Reif DM, Judson RS, Houck KA, Casey W, Hsieh J-H, Shockley KR, Ceger P, Fostel J, Witt KL, Tong W, Rotroff DM, Zhao T, Shinn P, Simeonov A, Dix DJ, Austin CP, Kavlock RJ, Tice RR, Xia M. 2014. Profiling of the Tox21 10K compound library for agonists and antagonists of the estrogen receptor alpha signaling pathway. Nature Scientific Reports http://dx.doi.org/10.1038/srep05664.
- Hsu CW, Zhao J, Huang R, Hsieh J-H, Hamm J, Chang X, Houck K, M Xia. 2014. Quantitative high-throughput profiling of environmental chemicals and drugs that modulate farnesoid X receptor. Nature Scientific Reports http://dx.doi.org/10.1038/srep06437.
- Hu Z, Brooks SA, Dormoy V, Hsu C, Hsu H, Lin L, Massfelder T, Rathmell WK, Xia M, Kleinstreuer NC. (2014) Environmental Chemicals in Tumor Angiogenesis. Carcinogenesis (in press).
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 Report on the International Workshop on Alternatives to the Murine Histamine Sensitization Test (HIST) for Acellular Pertussis Vaccines: State of the Science and the Path Forward. Biologicals 42(2):114-122.



NICEATM Publications

- Juberg DR, Borghoff SJ, Becker RA, Casey W, Hartung T, Holsapple MP, Marty MS, Mihaich EM, Van Der Kraak G, Wade MG, Willett CE, Andersen ME, Borgert CJ, Coady KK, Dourson ML, Fowle JR, Gray LE, Lamb JC, Ortego LS, Schug TT, Toole CM, Zorrilla LM, Kroner OL, Patterson J, Rinckel LA, Jones BR. 2014. t4 workshop report: Lessons Learned, Challenges, and Opportunities: The U.S. Endocrine Disruptor Screening Program. ALTEX 31:63-78.
- Kleinstreuer N, Yang J, Berg E, Knudsen T, Richard A, Martin M, Reif D, Judson R, Polokoff M, Dix D, Kavlock R, Houck K. 2014. Phenotypic screening of the ToxCast chemical library to classify toxic and therapeutic mechanisms. Nature Biotechnology. 32:583-591.
- McKim A, Goldberg A, Kleinstreuer N, Busquet F, Andersen M. 2015. Roundtable discussion: Comments on how to make the new vision of toxicity testing in the 21st century a reality. Applied In Vitro Toxicology 1(1): 5– 10.
- Pirone JR, Smith M, Kleinstreuer NC, Burns TA, Strickland J, Dancik Y, Morris R, Rinckel LA, Casey W, Jaworska JA. 2014. Open source software implementation of an integrated testing strategy for skin sensitization potency based on a Bayesian network. ALTEX 31: 336–340.
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Questions?

