## Improving Alternative Method Adoption Through Tools and Resources to Support Community Knowledge

S. Bell<sup>1</sup>\*, J. Abedini<sup>1</sup>, X. Chang<sup>1</sup>, B. Cook<sup>1</sup>, D. Hines<sup>1</sup>, A. L. Karmaus<sup>1</sup>, E. McAfee<sup>3</sup>, J. Phillips<sup>2</sup>, J. Rooney<sup>1</sup>, K. Mansouri<sup>3</sup>, D.G. Allen<sup>1</sup>, W. Casey<sup>3</sup>, N. Kleinstreuer<sup>4</sup>

<sup>1</sup>ILS, RTP, NC, United States; <sup>2</sup>Sciome, RTP, NC, United States; <sup>3</sup>NIH/NIEHS/DNTP, RTP, NC, United States; <sup>4</sup>NIH/NIEHS/DNTP/NICEATM, RTP, NC, United States

Over the past decade, efforts ranging from publications to workshops to science policy have been directed at moving from traditional, animal-based toxicity testing towards new approach methodologies (NAMs) that do not require animals. Key barriers hindering adoption of NAMs are knowledge gaps, both in terms of technical information deficiencies as well as lack of confidence in the methodologies. Information, comprised of data and the context within which it is used, is constantly evolving, and is typically a focal point when considering knowledge gaps. Efforts using standardized terminologies and improving data FAIRness (data should be findable, accessible, interoperable, and reusable) aid in addressing information challenges. Improving acceptance of information and methods/tools generating the data is equally important and increasing access to resources that promote approachability and transparency can support confidence building in end-users. This can be done by creating user-friendly tools that provide an access point for diverse users to explore data and techniques. These user-friendly resources build comfort and context that aids in bridging the communication gap between naive users often "traditionally" trained in in vivo approaches and subject matter experts in the NAMs. This presentation will highlight the DNTP's Integrated Chemical Environment and other freely available web resources to illustrate ways in which knowledge gaps for NAM adoption are being addressed. Three common questions will be addressed as part of an overarching user story: How do I identify and obtain data for my compound? How can I put this data into a relevant context? How do I interpret and apply the data? Structure similarity, read-across, and in vitro to in vivo extrapolation will be discussed as a series of user-stories highlighting efforts of web-based tools to promote NAM adoption by closing knowledge gaps.

This project was funded with federal funds from the NIEHS, NIH under Contract No. HHSN273201500010C.

<sup>\*</sup>Presenting author