

# Spring 2020 Webinar Discussion: How to Get to Safer Using Non-Animal Testing Methods – Part II

Wednesday, May 20, 2020

9:00 AM - 10:00 AM PT

12:00 PM - 1:00 PM ET

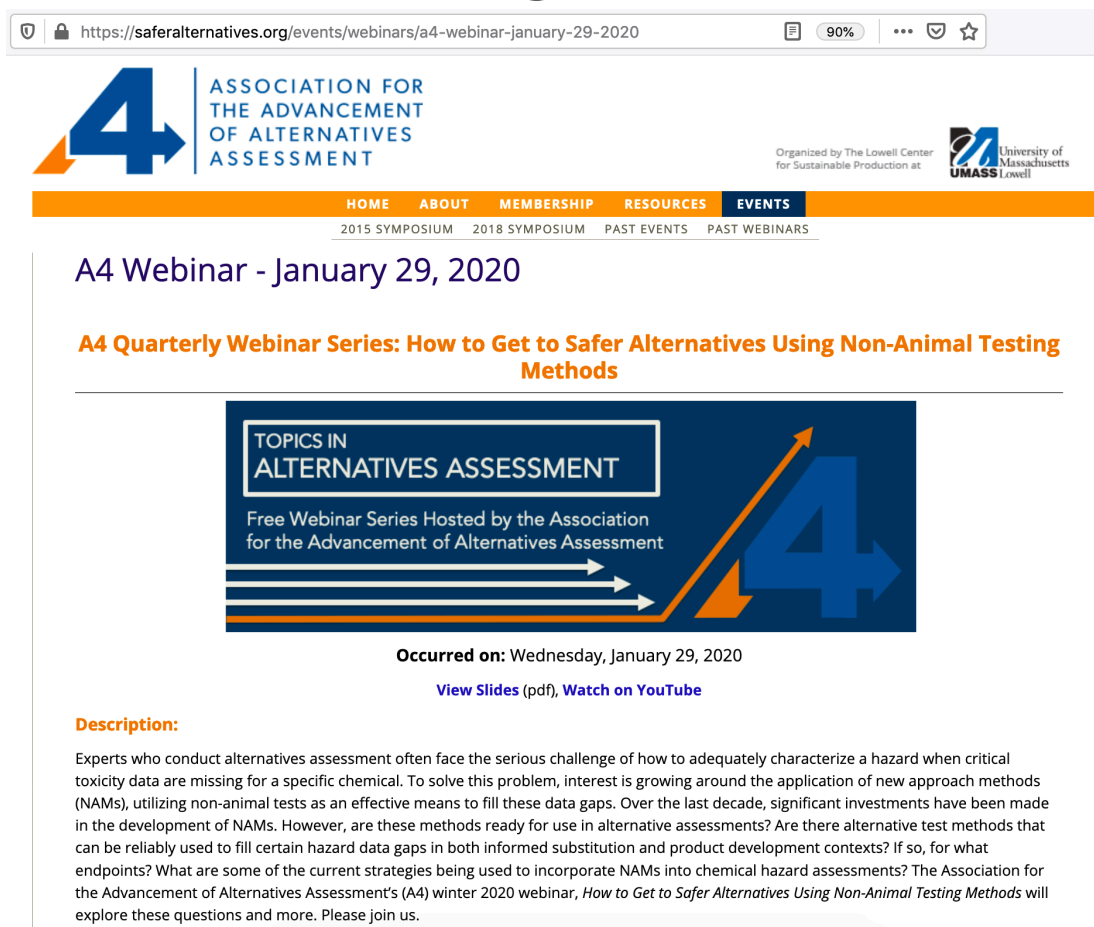
## TOPICS IN ALTERNATIVES ASSESSMENT

Free Webinar Series Hosted by the Association  
for the Advancement of Alternatives Assessment



# WELCOME!

## Today's A4 webinar discussion: **How to get to safer using non-animal testing methods – Part II**



The screenshot shows a web browser window with the URL <https://saferalternatives.org/events/webinars/a4-webinar-january-29-2020>. The page header features the A4 logo (a blue '4' with an orange arrow) and the text "ASSOCIATION FOR THE ADVANCEMENT OF ALTERNATIVES ASSESSMENT". It also mentions "Organized by The Lowell Center for Sustainable Production at University of Massachusetts Lowell". A navigation bar includes links for HOME, ABOUT, MEMBERSHIP, RESOURCES, and EVENTS. Below this, there are links for 2015 SYMPOSIUM, 2018 SYMPOSIUM, PAST EVENTS, and PAST WEBINARS. The main content area is titled "A4 Webinar - January 29, 2020" and features a sub-header "A4 Quarterly Webinar Series: How to Get to Safer Alternatives Using Non-Animal Testing Methods". A promotional graphic for "TOPICS IN ALTERNATIVES ASSESSMENT" is displayed, along with the text "Free Webinar Series Hosted by the Association for the Advancement of Alternatives Assessment". The event date is listed as "Occurred on: Wednesday, January 29, 2020", with links to "View Slides (pdf)" and "Watch on YouTube". A "Description" section follows, discussing the challenges of alternatives assessment and the role of NAMs.

<https://saferalternatives.org/events/webinars/a4-webinar-january-29-2020>

**4** ASSOCIATION FOR THE ADVANCEMENT OF ALTERNATIVES ASSESSMENT

Organized by The Lowell Center for Sustainable Production at **UMASS Lowell** University of Massachusetts Lowell

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### A4 Webinar - January 29, 2020

#### A4 Quarterly Webinar Series: How to Get to Safer Alternatives Using Non-Animal Testing Methods

**TOPICS IN ALTERNATIVES ASSESSMENT**

Free Webinar Series Hosted by the Association for the Advancement of Alternatives Assessment

**4**

**Occurred on:** Wednesday, January 29, 2020

[View Slides \(pdf\)](#), [Watch on YouTube](#)

**Description:**

Experts who conduct alternatives assessment often face the serious challenge of how to adequately characterize a hazard when critical toxicity data are missing for a specific chemical. To solve this problem, interest is growing around the application of new approach methods (NAMs), utilizing non-animal tests as an effective means to fill these data gaps. Over the last decade, significant investments have been made in the development of NAMs. However, are these methods ready for use in alternative assessments? Are there alternative test methods that can be reliably used to fill certain hazard data gaps in both informed substitution and product development contexts? If so, for what endpoints? What are some of the current strategies being used to incorporate NAMs into chemical hazard assessments? The Association for the Advancement of Alternatives Assessment's (A4) winter 2020 webinar, *How to Get to Safer Alternatives Using Non-Animal Testing Methods* will explore these questions and more. Please join us.

# Objective for today

## How to get to safer using non-animal testing methods – Part II

- ***Objective:*** to take a deeper dive together into the application of New Approach Methodologies (NAMs) for use in alternatives assessments, specifically
- Discussion-focused: we want to hear your questions and your experience/insights on the issues being discussed

# Experts to help the discussion



**Pamela Spencer** – *VP  
Regulatory, Product  
Stewardship and Quality*



**Margaret Whittaker**  
– *Managing Director  
and Chief  
Toxicologist*



**Amy Clippinger** – *Director*



Advancing 21st Century Toxicology



# Logistics

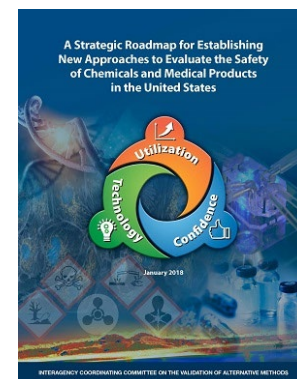
- Goal is constructive discussion; please listen intently and participate as you can to improve the dialogue
- Please mute your line when not talking
- Please use the “raise your hand” button (in the participant’s box) or use the chat box to ask a question or to offer a comment
  - You’ll need to take your hand down afterwards
- Use “**speaker view**” – upper right hand viewing options
- The webinar discussion is being **recorded** and will be posted to the A4 website: [www.saferalternatives.org](http://www.saferalternatives.org)
- At the end of the discussion, we have a quick poll to get your input about the webinar – no longer evaluation this time!



# What are NAMs?

**New Approach Methodologies, also known as:**

- Predictive Toxicology
- Tox21
- Non-animal alternatives
- Alternative test methods



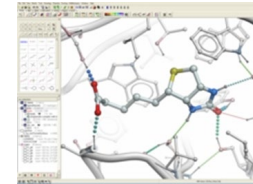
*“adopted as a broadly descriptive reference to any non-animal technology, methodology, approach, or combination thereof that can be used to provide information on chemical hazard and risk assessment.”<sup>1</sup>*

<sup>1</sup>NIEHS A Strategic Roadmap for Establishing New Approaches to Evaluate the Safety of Chemicals and Medical Products in the United States, 2018

# Types of NAMs

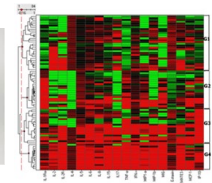
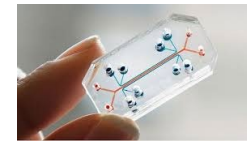
## 1. In silico/computational tools

- QSARs
- Machine learning
- High throughput exposure modeling



## 2. In vitro biological profiling

- Cell cultures
- 2, 3-D organotypic culture systems
- Genomics/transcriptomics
- Organs on a chip



## 3. Frameworks

- Adverse Outcome Pathways (AOPs)
- Defined Approaches (DA)
- Integrated approaches to testing and assessment (IATA)

# Participant Poll – Using NAMs?



## Question to start us off

**Q1: How should we think about NAMs in an alternatives assessment context versus risk assessment or a regulatory safety assessment?**

# Question

**Q2: How are NAMs being used in alternatives assessment in combination with animal test data?**



# Question

**Q3: What is being done to ensure confidence in the use of NAMs, and to make sure they are being used in a consistent manner?**

# NAMs Resources [we'll post these to the A4 website associated with this webinar]

- EPA's List of NAMs: <https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/alternative-test-methods-and-strategies-reduce>
- NTP Interagency Center for the Evaluation of Alternative Toxicological Methods (NICEATM): List of NAMs: <https://ntp.niehs.nih.gov/go/regaccept>
- PETA International Science Consortium:
  - NAMs: [www.piscltd.org.uk/alternatives](http://www.piscltd.org.uk/alternatives)
  - Webinars: [www.piscltd.org.uk/webinars](http://www.piscltd.org.uk/webinars)
  - Companies: [www.piscltd.org.uk/links-resources](http://www.piscltd.org.uk/links-resources)
- Physicians Committee for Responsible Medicine: NAM Use for Regulatory Application: [www.PCRM.org/nura](http://www.PCRM.org/nura)
- Institute for In Vitro Sciences: Annual Workshop (January, 2021): <https://iivs.org/education-outreach/practical-methods-for-in-vitro-toxicology-workshop/>



# Upcoming NAMs webinars and meetings

- **May 21:** ICCVAM Public Forum: <https://ntp.niehs.nih.gov/whatwestudy/niceatm/3rs-meetings/pubforum-2020/iccvamforum-2020.html>
- **May 26:** ASCCT's/ESTIV's "International computational collaborations for predictive toxicology": <https://register.gotowebinar.com/register/4739262759308645647>
- **May 27:** 6th PEP webinar on the use of non-animal skin sensitization methods <https://www.piscld.org.uk/nam-webinars/>
- **May 28:** SOT and FDA colloquium on "Integrated Approaches to Testing and Assessment: The Future of Regulatory Toxicology Assessment": [https://www.toxicology.org/events/shm/fda/FDAColloquia\\_May28-2020.asp](https://www.toxicology.org/events/shm/fda/FDAColloquia_May28-2020.asp)
- **May 28:** EPA Computational Toxicology Communities of Practice webinar on "High Throughput Screening and Environmental Risk Assessment - viewing the forest and a tree": <https://www.epa.gov/research/computational-toxicology-communities-practicehigh-throughput-screening-and-environmental>
- **June 18:** Green Chemistry & Engineering (GC&E) Session on Incorporating New Approach Methodologies (NAMs) into chemical assessment as part of the Session title "Information Driving Greener Design: Uncertainty in Estimating Systems Accuracy and its Impact on Decision-Making": [https://www.gcande.org/register/?cid=email\\_gci\\_direct\\_gce\\_btm\\_05\\_08\\_20](https://www.gcande.org/register/?cid=email_gci_direct_gce_btm_05_08_20)



# Where to Next?

- Should A4 form a specific affinity group on NAMs to continue the discussion?

Possible purpose of such an affinity group:

- Share experience/place for collegial exchange on challenges?
- Work together to outline a framework for the use of NAMs in alternatives assessment?
- Advocate/offer training in NAMs for A4 members?



# Announcements

## Fall 2020 Virtual Symposium on Alternatives Assessment

Program to be announced soon





ASSOCIATION FOR  
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OF ALTERNATIVES  
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the science, practice, and policy of  
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THANK YOU