

## Advisors learn about the reinvention of ICCVAM

By Robin Mackar

Over the past nine months, representatives from 15 federal agencies have been working together to reinvent how they do business. Members of the Interagency Coordinating Committee on the Validation of Alternative Methods ([ICCVAM](http://iccvam.niehs.nih.gov/))

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presented Sept. 24 a new vision and direction to their external advisors, the Scientific Advisory Committee on Alternative Toxicological Methods ([SACATM](http://ntp.niehs.nih.gov/go/167)).

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"We praise Dr. Birnbaum for stepping up to the plate and changing the way the committee will operate," said SACATM member Ricardo Ochoa, D.V.M., Ph.D., president of Pre-Clinical Safety Inc. Ochoa was referring to an [editorial](http://ehp.niehs.nih.gov/pdf-files/2013/Feb/ehp.1206292_508.pdf)

([http://ehp.niehs.nih.gov/pdf-files/2013/Feb/ehp.1206292\\_508.pdf](http://ehp.niehs.nih.gov/pdf-files/2013/Feb/ehp.1206292_508.pdf))

written earlier this year by NIEHS and NTP Director Linda Birnbaum, Ph.D., in which she called for a reinvention of ICCVAM.

In her editorial and during opening remarks at the public meeting, Birnbaum called for the ICCVAM agencies to take a more active role in setting the priorities of the committee.

"Rather than the NIEHS directing the activities of ICCVAM, the interagency agenda will now be driven by the partner regulatory agencies - the agencies that will ultimately implement the ICCVAM-recommended methods," said Birnbaum.

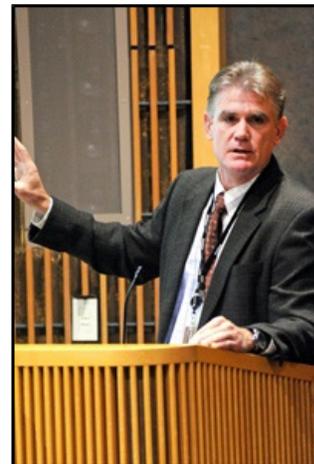
ICCVAM was established by [Congress in 2000](http://iccvam.niehs.nih.gov/docs/about_docs/PL106545.pdf),

([http://iccvam.niehs.nih.gov/docs/about\\_docs/PL106545.pdf](http://iccvam.niehs.nih.gov/docs/about_docs/PL106545.pdf))

to reduce, replace, or refine the use of animals in toxicity testing.

### ICCVAM priority areas

Anna Lowit, Ph.D., from the U.S. Environmental Protection Agency (EPA), interim co-chair of ICCVAM, presented an overview of the committee's draft "[A New Vision and Direction for ICCVAM](http://iccvam.niehs.nih.gov/docs/about_docs/PL106545.pdf),"



Casey discussed the need to take advantage of ongoing activities in the U.S. and internationally that are working on the development of alternative tests. (Photo courtesy of Steve McCaw)



Tice, far right, joined Christine Kelley, Ph.D., center, the NIH ICCVAM representative, and Pertti (Bert) Hakkinen, Ph.D., from the National Library of Medicine, at the SACATM meeting. Tice will now serve as the NIEHS principal representative to ICCVAM. (Photo courtesy of Steve McCaw)



The interim co-chairs for ICCVAM, Anna Lowit, Ph.D., from EPA, and Abigail Jacobs, Ph.D., from FDA, represented the 15 member agencies that make up ICCVAM, at the meeting. (Photo courtesy of Steve McCaw)

([http://ntp.niehs.nih.gov/NTP/About\\_NTP/SACATM/2013/September/ICCVAMNewVision\\_Aug2013\\_508.pdf](http://ntp.niehs.nih.gov/NTP/About_NTP/SACATM/2013/September/ICCVAMNewVision_Aug2013_508.pdf))

which includes setting immediate priorities, improving communications with stakeholders and the public, and exploring new paradigms to validate and use alternative toxicological methods.

Lowit identified several projects that ICCVAM believes can be successful in the short term. These areas include biologics, or non-animal methods, for testing vaccines that protect pets and livestock against the disease leptospirosis; acute oral testing to identify substances that could be poisonous when ingested or absorbed through the skin; and skin sensitization, or testing, to identify substances that could cause allergic contact dermatitis.

SACATM members agreed with the priority areas, although some members, like Daniel Wilson Ph.D., from Dow Chemical Company, told the group to not forgo some of the other areas they were pursuing, such as skin and eye irritation methods.

## **Separation of powers**

NTP Interagency Center for the Evaluation of Alternative Toxicological Methods (NICEATM) acting director Warren Casey, Ph.D., led the discussion on what role NICEATM will play in ICCVAM with a dramatic, but encouraging, analogy. Referring to the spacecraft Voyager, he made the point that working on alternative test methods is like the challenge put forth in the 1960s to put a man on the moon.

"Replacing animals is our challenge, but it is possible," Casey said. "We just need to work together and take advantage of the advances being made in science and technology."

Casey noted that NICEATM will continue to provide administrative and scientific support for ICCVAM, but there will be more of a separation of powers, to ensure ICCVAM activities are driven by agency needs and approved by consensus.

To this end, Casey noted the appointment of Raymond Tice, Ph.D., chief of the NIEHS [Biomolecular Screening Branch](#), to serve as the Institute's principal ICCVAM representative. Tice is also the NIEHS and NTP lead for Tox21, a multiagency effort that uses high throughput and other cutting-edge technologies to assess the safety of chemicals. Both ICCVAM and NICEATM are expanding their efforts to work more closely with Tox21, which represents a new paradigm shift for [toxicity testing](#).  
(<http://iccvam.niehs.nih.gov/Tox21/Tox21.htm>)

## **Agency updates**

Afternoon speakers included Joanna Matheson, Ph.D., of the U.S. Consumer Product Safety Commission, discussing adverse outcome pathways (AOPs). Tice provided an overview of Tox21 activities, and Richard McFarland, M.D., Ph.D., from the U.S. Food and Drug Administration (FDA), and Geetha Srinivas, D.V.M., Ph.D., of the U.S. Department of Agriculture, reported on international vaccine workshops.

Casey concluded by showing the declining number of test method submissions going to one of ICCVAM's international partners, the European Centre for the Validation of Alternative Methods (ECVAM). Unlike its U.S. counterpart, ECVAM was specifically set up with resources, staff, and labs to scientifically validate alternative methods that research laboratories have developed.

"There are not many new methods coming through the pipeline," Casey added. "We have to turn to science to do something different."

(Robin Mackar is the news director in the NIEHS Office of Communications and Public Liaison, and a frequent contributor to the Environmental Factor.)



*Matheson presented the ICCVAM strategy for skin sensitization AOPs. (Photo courtesy of Steve McCaw)*



*Nicole Kleinstreuer, Ph.D., from ILS, a contractor for NICEATM, complemented Matheson's talk, with highlights from current activities by NICEATM on skin sensitization AOPs. (Photo courtesy of Steve McCaw)*



*Birnbaum with outgoing SACATM chair Steven Niemi, D.V.M. (Photo courtesy of Steve McCaw)*



*Ochoa, left, and Tracie Bunton, D.V.M., Ph.D., right, from EICARTE LLC, gave feedback to ICCVAM representatives. (Photo courtesy of Steve McCaw)*

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