

SOT FDA Colloquia on Emerging Toxicological Science Challenges in Food and Ingredient Safety



Arsenic and Children's Health

December 1, 2021



SOT FDA Colloquia on Emerging Toxicological Science Challenges in Food and Ingredient Safety



Welcome

Conrad Choiniere, PhD

**Director, Office of Analytics and Outreach
CFSAN**

US Food and Drug Administration



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Colloquium Series

- Partnership of US FDA Center for Food Safety and Applied Nutrition (CFSAN) and the Society of Toxicology (SOT)
- Seventh year of colloquia series, two this year
- Stimulate a dialogue among leading toxicology experts on future-oriented toxicological science relevant to food and food ingredient safety assessment
- Are a forum to discuss the latest toxicological science in the context of food chemical safety
- Not a forum for soliciting regulatory advice or discussing food or food ingredient regulatory issues



Colloquium Series

- Open to the public via webcast at no cost
- Global audience from all employment sectors
- Recording and slides for all colloquia are available at www.toxicology.org

SOT FDA Organizing Committee

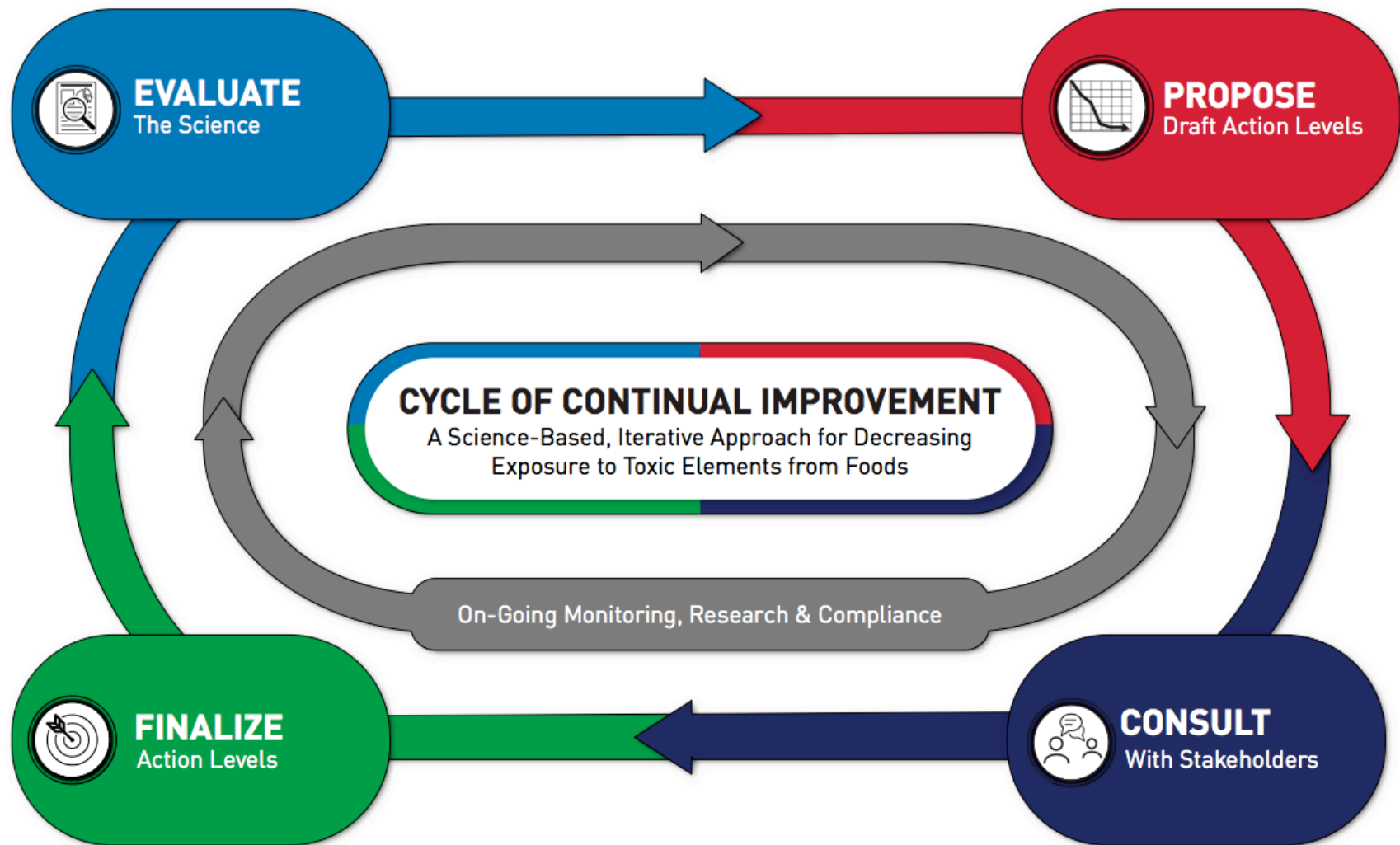
- Udayan Apte, PhD, DABT, Colloquium Series Chair, University of Kansas Medical Center, Kansas City, KS
- Stephen W. Edwards, PhD, Colloquium Series Co-chair, RTI International, Chapel Hill, NC
- Jason L. Aungst, PhD, FDA Liaison, US FDA, College Park, MD
- Omari Bandele, PhD, US FDA, College Park, MD
- Suzanne Compton Fitzpatrick, PhD, DABT, US FDA, College Park, MD
- A. Wallace Hayes, PhD, DABT, ERT, ATS, FRSB, FACFE, University of South Florida and Michigan State University, Temple Terrace, FL
- Willie McKinney, PhD, DABT, McKinney Regulatory Science Advisors, LLC, Henrico, VA
- Christine Perdan Curran, PhD, SOT Council Contact, Northern Kentucky University, Highland Heights, KY

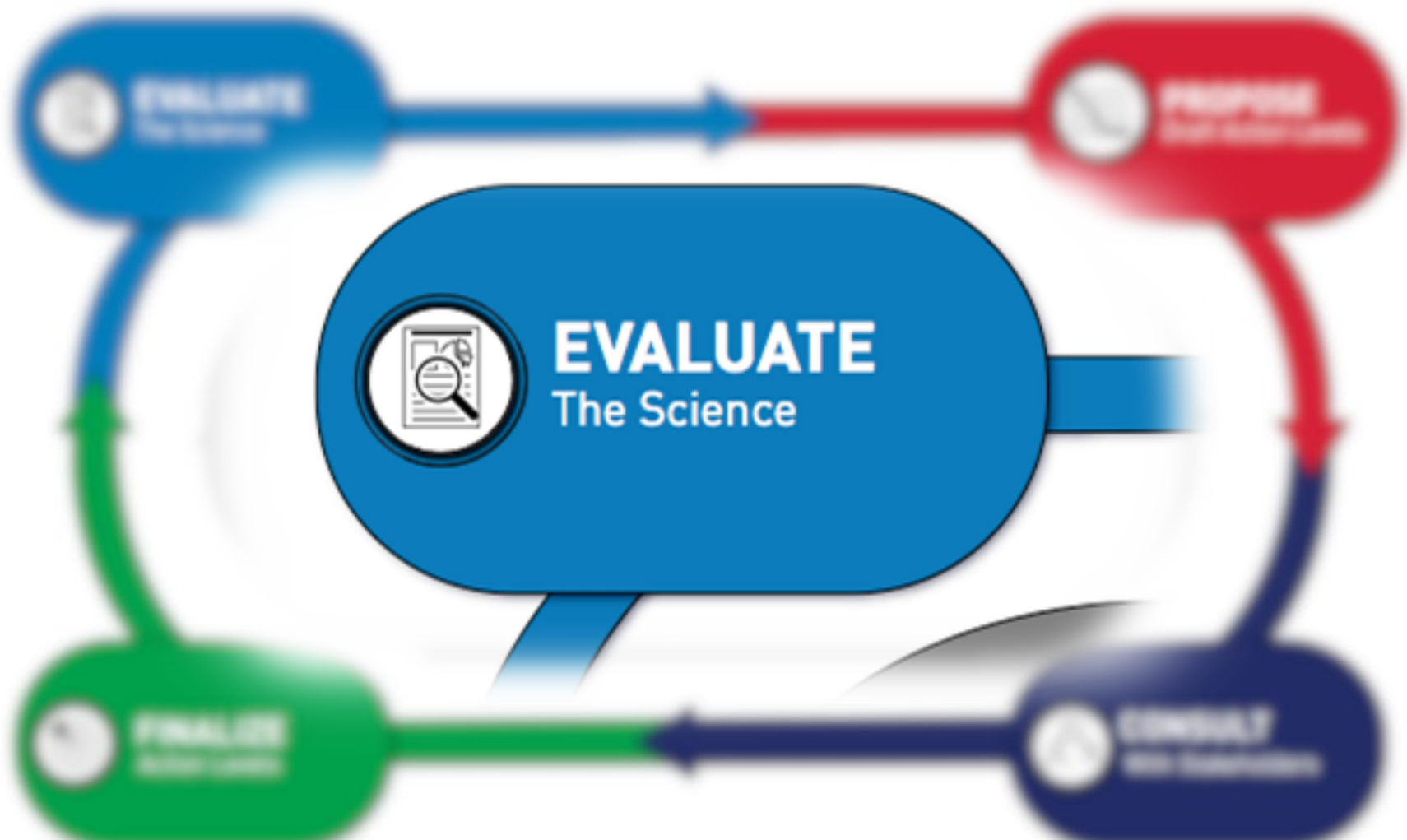




CLOSER TO ZERO

FDA's Action Plan for
Reducing Exposure to
Toxic Elements from Foods for
Babies and Young Children







Arsenic in Rice and Rice Products Risk Assessment Report

Center for Food Safety and Applied Nutrition
Food and Drug Administration
U.S. Department of Health and Human Services

March 2016
Version Released for Public Comment



Center for Food
Safety and Applied Nutrition

**Arsenic in Rice and Rice Products
Risk Assessment Report**

Center for Food Safety and Applied Nutrition
Food and Drug Administration
U.S. Department of Health and Human Services

**March 2016
Version Released for Public Comment**

*“... fetuses may have increased
susceptibility to adverse health effects
from maternal inorganic arsenic intake.”*



Center for Food
Safety and Applied Nutrition

**Arsenic in Rice and Rice Products
Risk Assessment Report**

Center for Food Safety and Applied Nutrition
Food and Drug Administration
U.S. Department of Health and Human Services

**March 2016
Version Released for Public Comment**

*“...exposure to inorganic arsenic during
infancy and early childhood
can have neurotoxic effects, although
whether these effects are lasting is
unclear.”*



U.S. FOOD & DRUG
ADMINISTRATION



SOT FDA Colloquia on Emerging Toxicological Science Challenges in Food and Ingredient Safety

Schedule and Speaker Introductions

Aaron Barchowsky, PhD
Colloquium Co-Chair
University of Pittsburgh

Schedule (times Eastern US, UTC-5)

9:20 AM	Current Understanding of Mechanisms Underlying Arsenic-Induced Developmental Toxicity Rebecca Fry, University of North Carolina, Chapel Hill, NC
10:00 AM	Nutritional Manipulation of One-Carbon Metabolism: Effects on Arsenic Methylation and Toxicity Mary Gamble, Columbia University, New York, NY
10:40 AM	Break
10:50 AM	Systematic Review Framework and Dose-Response Methods for Identifying Reference Doses for Inorganic Arsenic Alexandra Larsen, US EPA, Research Triangle Park, NC
11:30 AM	Arsenic Mitigation in Foods and Ingredients Cheryl Callen, Nestle USA, Arlington, VA
12:10 PM	Summary: Brenna Flannery, US FDA, College Park, MD Roundtable Discussion , Moderator: Co-chairs; all speakers; Jeffrey Gift, US EPA, Research Triangle Park, NC
1:00 PM	Conclusion