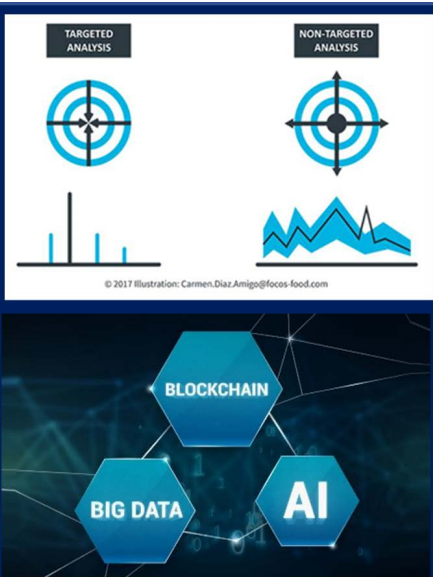


### **fam** FOOD AUTHENTICITY METHODS PROGRAM



### PROGRAM OBJECTIVES

- Forum for industry stakeholders, method experts, and regulators to discuss analytical needs and emerging issues
- Identification of analytical tools to characterize intentional and economically motivated adulteration of foods
- Development of method performance standards and evaluation of analytical methods to support authenticity claims and to detect all recognized and previously unrecognized fraudulent adulterants in a wide range of food commodities

### BUILDING ON PREVIOUS ACCOMPLISHMENTS

Launched in 2019, the FAM Program has sponsored working groups on Non-Targeted (NTT) Testing, Targeted Testing (TT), and Molecular Applications, to establish a metrics-based framework, i.e. Standard Method Performance Requirements (SMPRs®) for not only the suspected adulterant - known or unknown - but also for the commodity as well. This approach provides method developers with the means to precisely validate their methods, provide confidence to testing labs which employ these methods and provide reassurance to industry that the methods used by the laboratory are suitable



### 2022 FAM GOALS

- **Generic SMPR Template Development**
  - develop standards for larger groups of commodities quickly
- **Development of Systematic Tools to Identify EMA**
  - Predictive tools incorporating AI, pre-market intelligence parameters
  - Traceability: pre- and post-production using integrated technologies
  - Mass balance assessment
- **Emergency Response Guidance:**
  - Identify where EMA and public health intersect
  - Mechanism for implementation of standards/method development principles in emergency situations
- **Training on NTT method development**
- **Expert Review Panel Meetings to Evaluate Candidate Methods**

AOAC Standard Method Performance Requirements (SMPRs®) developed by FAM  
Search SMPRs at <http://www.eoma.aoc.org/>, contact AOAC for access

Targeted Testing (TT)	Nontargeted Testing (NTT) of Ingredients for Food Authenticity/Fraud Evaluation
Barley and Malt Extract, Beet Sugar Syrup, Corn and Cane Sugar Syrup, C-4 Plant Sugar, and High-Fructose Corn Sugar for Adulteration of Floral and Acacia Honey 2020.009	Honey 2020.006
Other Vegetable Oils and Low-Quality Olive Oils as Adulterants for Evaluation of Extra Virgin Olive Oil 2020.010	Extra Virgin Olive Oil 2020.007
Formaline/Formaldehyde, Starch, and Soy Protein as Adulterants for Evaluation of Liquid Raw Bovine Milk 2020.011	Pasteurized Whole Liquid Bovine Milk 2020.008
Saffron Adulterants 2021.014	Saffron 2021.012
Turmeric Adulterants 2021.015	Turmeric Spice Powder 2021.011
Vanilla Adulterants 2021.016	Vanilla Powder & Extracts 2021.013
<b>Molecular Applications</b>	
Determination of Biological Spices and Botanicals, and Relevant (Common) Biological Adulterants	



## OTHER PROGRAM CAPABILITIES, 2022 & BEYOND

Annual deliverables are determined by program-specific advisory panels and are dependent on funding levels. Work plans for AOAC integrated programs may include any of the following elements:

- Product/commodity specific guidelines, speciation, best practices, sampling
- Internationally recognized standards (AOAC SMPRs)
- *Performance Tested Methods (PTM)* and *Official Methods of Analysis (OMA)*
- Proficiency testing program development
- Reference materials expertise and identification (TDRM)
- Training workshops
- Guidance documents
- Create much-needed reference methods that do not currently exist
- Generate reliable data for effective compliance-driven quality control of food materials and products
- Support the development of standards leading to Codex Type II methods for dispute resolution in international trade

## JOIN THE ADVISORY PANEL

The FAM Advisory Panel (AP), comprised of funding organizations, meets quarterly to review progress of the program and rank overall priorities. Organizations may join the Advisory Panel with an annual contribution of \$10,000. AP Members support the overall infrastructure, including standing working groups of subject matter experts capable of executing annual work plans and responding to emerging issues as needed.

### Benefits for method developers

- Influence the development of consensus standards, which will be used by AOAC Expert Review Panels to evaluate your candidate methods for possible adoption as AOAC Official Methods of Analysis.
- AOAC Official Methods of Analysis are the benchmark for trade resolutions, instill consumer confidence, and contribute to consumer safety.

### Benefits for manufacturers or food distributors

- Ensure that program priorities meet your needs through AOAC INTERNATIONAL's unique standards development and core programs
- Encourage the development of Official Methods which provide the highest level of analytical confidence for authenticity claims and detect fraudulent adulteration in priority commodities
- Protect producers and consumers alike, maintain the reputation of products and ultimately improve the quality and safety of the food supply

## CONTACT INFORMATION

Palmer A. Orlandi, Jr., Ph. D., Deputy Executive Director,  
Chief Science Officer  
porlandi@aoac.org, Tel: 301-924-7077; ext. 163

Delia Boyd, Standards Development  
dboyd@aoac.org, Tel: 301-924-7977



To join the advisory panel, please contact:  
Alicia Meiklejohn, Director, Business Development,  
ameiklejohn@aoac.org, Tel: 301-924-7077; ext. 101