



FINAL: September 25, 2018

Laboratory Methods and Services Committee Report/Minutes

AAFCO Annual Meeting
July 31, 2018, 8:00 – 5:00 PM, Ft. Lauderdale, FL

Committee Recommendations

Committee recommendation summary or list.

- (1) None

Board Recommendations

Board recommendation summary or list.

- (1) None.

Association Actions

Association action summary or list.

- (1) None.

Committee Participants

Members Present:

Aaron Price	CFIA
Nancy Thiex	Life Member
Josh Arbaugh	West Virginia Dept. of Agriculture
Ametra Berry	Georgia Dept. of Agriculture
Deepika Curole	LSU Dept. of Ag Chemistry
Teresa Grant	North Carolina Dept. of Agriculture
Casey Guccione	Kansas Dept. of Agriculture
Dominika Kondratko	Colorado Dept. of Agriculture
H. Dorota Inerowicz	Office of the Indiana State Chemist
Patty Lucas	FL Dept. of Ag and Consumer Services
Kristi McCallum	Colorado Dept. of Agriculture
Louise Ogden	Life Member
Lise-Anne Prescott	CFIA
Brenda Snodgrass	Oklahoma Department of Agriculture
Robert Sheridan	New York Dept. of Agriculture
Michele Swarbrick	Minnesota Dept. of Agriculture
Lei Tang	FDA CVM
Hemakanthi De Alwis	FDA CVM
Sharon Webb	University of Kentucky Regulatory Services
Srinivasulu Chigurupati	FDA ORA
Maryam Khosravifard	CA Dept. of Food & Agriculture
Manisha Das	FDA CVM
Mark LeBlanc	LA Dept. of Agriculture
Gale Hagood	Mississippi State Chemical Laboratory
Jason Kong	Ohio Dept. of Agriculture
Kenneth McManus	Maryland Dept. of Agriculture
Tom Phillips	Maryland Dept. of Agriculture
George Ferguson	AAFCO Board Liaison
Ruiqing Pamboukian	FDA Liaison

Advisors Present:

Kyle Bennett	Neogen
Paul Mostyn	Westway Feed
Andy Crawford	Consultant

Jeff Horst	Agri-King
Lars Reimann	Eurofins
Ken Riter	Nestle-Purina Analytical Labs
Lisa Ruiz	Eurofins NAC
Leo Schilling	Eurofins
John Szpylka	Mérieux NutriSciences

Committee Report

Committee Activities

ACTION: None

Sub-Committee Activities

ACTION: None

Committee Minutes

1.) Call to Order

The Agenda was approved with minor changes.

Introductions – sign-up sheet circulated to participants

2.) Committee Roster was reviewed and updated. Kristi McCallum will add additional updates as needed.

3.) FDA Cooperative Agreement – Robin Randolph of APHL gave a presentation, highlighting the following.

- APHL is continuing work started under the Association cooperative agreements through a 2-year bridge agreement with FDA.
- PFP Lab Best Practices manual coming soon.
- Lessons learned from first labs transitioning over to 2017 standard are being captured to assist other labs facing the transition.
- Consultant (Yvonne Salfinger) has continued helping labs without funding
- Training assistance provided to FDA’s genome tracker labs (Bioinformatics Training).
- Assistance for eLEXNET representation on eLEXNET steering committee.

The CoAg is currently operating on a no cost extension from our first cooperative agreement with FDA. Efforts include Feed Laboratory Curriculum Framework, *GOODSamples* training, and *GOOD Test Portions* publication and training. Beginning 9/1/2018, continuing work on Laboratory Framework development, competency development, and beginning developing courses.

4.) Update from FDA – Abe Brown from FDA gave an update on the Laboratory Flexible Funding Model (LFFM)

- FDA/APHL/State Partners
- Funding Vehicle- Just awarded on human food side.
- Apply to consolidation program- provides funding/ flexibility for picking from several program area needs.
- Developing one for the laboratory.
- Combine multiple cooperative agreements into one funding vehicle.

- Funding Opportunity Announcement (FOA) - Lab flexible funding. New awards in spring 2020.
 - Targeted to FDA needs and work with state partners.
 - The scope of LFFM is to include FERN, Genome, ISO supported MRPS and AFRPS, RRT (Rapid Response Team) and Sampling Contracts. Eligibility and criteria outcome based on metrics, based on analytical needs of FDA. Dependent upon individual lab capacity and capability.
- 5.) FSMA Implementation – Robert Sheridan and Teresa Grant provided an update that the FDA document includes methods for various contaminants, etc. This document doesn't reference new or suggested tolerance levels. List has been put out; or is someone doing risk assessment of results. The draft document will be released for comments.
- 6.) State Feed Lab Network (Potential Survey) – Nancy Thiex and Aaron Price stated that a white paper was submitted on the laboratory network centers of excellence. The AAFCO Board of Directors assigned a working group to survey state labs and programs to determine the current state of lab capability and what are the desired capabilities. Some survey question suggestions include:
- Do you have a lab, and what percent of needs are handled by your lab versus a private lab?
 - Where is expertise disappearing?
 - Microscopy, other older methodologies?
 - What future testing needs do you anticipate as a result of FSMA?
 - Analytical tables for labs to mark which analyses they perform
 - Are AOAC OMA methods required?
- 7.) Working Group updates
- a. Tylosin – Leo Shilling will give an update at the mid-year meeting in January 2019. Leo will follow-up on progress with Casey Guccione.
 - b. CTC – Leo Shilling presented data on the CTC HPLC/FL detection method. This method research was performed primarily on poultry feed and fish food samples. Leo will obtain a wider variety of samples from Sharon Webb in KY. Issues with the mobile phase were discussed and Leo has modified the method to address these issues.
 - c. Fat soluble vitamins – Dorota Inerowicz and Ken Riter will perform a single laboratory study to determine minimum sample size. The study will include measuring particle size of vitamin premixes to be used as a guide on theoretical sample weight needed for vitamins.
 - d. Multi-element (mineral) analysis – Robert Sheridan, Sharon Webb, Michelle Swarbrick and LiseAnn Prescott reported that the Metals Working Group is currently working on a "Metals in Feed Guidelines". The chapter titles have been determined and Lise-Anne Prescott presented the outline of the guidelines. The committee will continue to have monthly conference calls so that more progress can be made. An update will be presented at the Mid-year Meeting in 2019.
 - e. Sugar method – J. Horst and D. Berg reported that the method is with AOAC for final adoption.
 - f. Mycotoxin – Robert Sheridan reported on an EU method for detection of mycotoxins in

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feed by LCMSMS. This method has been multi-lab validated by 31 labs in an extensive collaborative study. Several laboratories were interested in this method. The extraction is very similar to the NY method and the analytes are the same except Aflatoxin B₂, G₁ and G₂ are not included. Robert will forward this multi-lab validation study to interested laboratories. Aaron Price suggested that the committee look at above study results; if EU method meets the needs, this would be a good method to suggest for use for labs that need a method.

- g. Best practices – Larry Novotny gave a presentation on best practices for determining the N-Protein Conversion Factor. The recommended method to determine the correct protein content is a complete amino acid analysis. Because most laboratories do not have the capability to perform amino acid analysis, the correct conversion factors have been listed in the N Best Practices document, which was circulated and posted on the AAFCO website.
 - h. Dr. Jane Caldwell presented the validation of loss on drying methods in pet foods for the moisture best practices group. Ken Riter also shared Nestle Purina results for moisture and the oven and Karl Fischer methods showed good data agreement. More work needs to be done to resolve moisture issues in pet food. Volunteers are needed for this workgroup. Contact Larry Novotny if you are interested.
 - i. Fiber best practices recommendations:
 - Fiber needs to be defined by an adjective when on a label.
 - Replace crude fiber with neutral detergent fiber on animal feed labels.
 - Dietary fiber is being recommended by the Pet Food Modernization Working Group as the choice of fiber method for labeling pet foods and feeds for non-ruminant animals.
 - j. Lab Sampling Update – Nancy Thiex gave a presentation of *GOOD Test Portions*. This document is available on AAFCO website and is free. It is suggested that all laboratories read and understand this document. There was a brainstorming session on how laboratories can change practices in their laboratories.
- 8.) Mycotoxin best practices – Nancy Thiex gave an update on this work group. Goal for the group is to produce scientifically supported, publishable best practices recommendations. The working group is very large. The following people are currently taking lead roles in developing best practices documents.
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|----------------------------|-----------------------|
| Kyle Bennett | Test kits |
| Bob Sheridan & Sharon Webb | Instrumental analyses |
| Lei Tang | Regulations |
- 9.) Update on AOAC method for sugars and fructans – Nancy Thiex described the status of these methods within AOAC. Three sugar methods and one fructan method will be considered by an Expert Review Panel at the upcoming AOAC Meeting in Toronto.
- 10.) Lab curriculum framework update – Chris Weiss of IFTPI gave an update. The committee has been working on the curriculum framework with AAFCO for ~ 5 years. This work is being done jointly with APHL, AFDO, AAFCO, FDA, OTED and IFPTI. The goal is to develop a competency framework for US state human and animal food labs. The committee is now working on mid-level core competencies. All competencies and performance indicators are built out for the Entry Level Core Competency areas. Course design documents were delivered to APHL.
- 11.) Quality Assurance Subcommittee update – Srinu Chigurupati and Kristi McCallum played a taped webinar by J. Weitzel on “What’s new with ISO17025:2017”. Kristi McCallum gave an update on



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the APHL “Collaborate Board” where labs can ask questions and receive answers from other labs. The APHL website also has many resources available to labs seeking ISO17025 accreditation including a PT Provider list, SOPs, and a new Reference Material List.

- 12.) FDA Presentation on Antibiotics in Distiller’s Grains - Hemakanthi De Alwis of FDA CVM gave a presentation on the LC-MS/MS method developed at FDA for the presence of certain antibiotics in distiller’s grains to address concerns of antimicrobial resistance development.
- 13.) Ergot Alkaloid Test Method Development and Validation – Lise-Anne Prescott of CFIA gave a presentation on the method development and validation for the detection of ergot alkaloids in feed by LC-MS/MS.
- 14.) Brainstorming Session on the Future of the Lab Methods and Services Committee – Nancy Thiex and Aaron Price have stepped down as co-chairs of this committee. Kristi McCallum and Sharon Webb have agreed to co-chair the committee. Dorota Inerowicz and Robert Sheridan also agreed to assist with the organization, agenda and planning for this committee. Discussion took place as to the direction of future meetings, methods needs, updates on surveillance data from State labs.
- 15.) Round table discussion – There was a discussion as to improving the sound quality for people calling in by phone to the meetings.
- 16.) Adjournment

Action Item Table

Responsible	Item #	Action	Timing / Status
K McCallum S Webb	2	Update committee roster based on recent changes and submit to AAFCO BOD	Submitted August 20, 2018
All committee members	7b	Consider whether you are able to assist L Schilling to run sample in your lab using the method developed. Contact Leo Schilling if you are interested	Before end of 2018

Appendix

Attachments:

For a list of presentations given during this meeting, please see the AAFCO Laboratory Methods and Services committee website at the following link:

<https://www.aafco.org/Regulatory/Committees/Laboratory-Methods-and-Services#minutes>

Attendee List

Last Name	First Name	Affiliation	E-mail	Present
Arbaugh	Josh	West Virginia Dept. of Ag	jarbaugh@wvda.us	X - Member
Bailie	Jenny	Milk Specialties	jbailie@milkspecialties.com	X
Bennett	Kyle	Neogen	kbennett@neogen.com	By phone - Advisor
Berry	Ametra	GA Dept. of Agriculture	ametra.berry@agr.georgia.gov	X - Member
Bloomer	Scott	American Oil Chemist Society	Scott.bloomer@aols.org	X
Blunt	Brittany	SC Dept of Ag	bblunt@scda.sc.gov	X
Boykin	Vickie	SC Dept of Ag	vboykin@scda.sc.gov	X
Brown	Abe	FDA	Abe.brown@fda.hhs.gov	X
Buchanan	Ellen	FDA	Ellen.buchanan@fda.hhs.gov	X
Caldwell	Jane	Midwest Laboratories	jcaldwell@midwestlabs.com	X
Chigurupati	Srinu	FDA	Srinivasulu.Chigurupati@fda.hhs.gov	X - Member
Crawford	Andy	AAFCO PTP	andy@crawford.org	X - Advisor
Curole	Deepika	LSU Dept. of Ag Chemistry	dcurole@ldaf.state.la.us	X - Member
Das	Manisha	FDA CVM	Manisha.das@fda.hhs.gov	X - Member
De Alwis	Hemakanthi	FDA CVM	Hemakanthi.dealwis@fda.hhs.gov	X - Member
Flowers	Sally	Nebraska Dept. of Ag	sally.flowers@nebraska.gov	X
Garavaglia	Tom	MI Dept of Ag	garavagliat@michigan.gov	X
Grant	Teresa	NC Dept. of Agriculture	teresa.grant@ncagr.gov	X - Member
Guccione	Casey	KS Dept. in Ag	casey.guccione@ks.gov	By phone - Member
Ha	Tai	Nebraska Dept. of Ag	tai.ha@nebraska.gov	X
Harrelson	Emily	LA Dept of Ag	eharrelson@ldaf.state.la.us	X
Horst	Jeff	Agri-King, Inc.	jeff.horst@agriking.com	X - Advisor
Huyghuesdespointes	Alexis	JH Smuckers	alexis.huyghuesdespointes@jmsmucker.com	X
Inerowicz	H. Dorota	OISC	inerowic@purdue.edu	X - Member
Ivers	Bo	SGS	Kevin.ivers@SGS.com	X
Johnson	Robin	MT Dept of Ag	robinjohnson@mt.gov	X

Last Name	First Name	Affiliation	E-mail	Present
Kariuki	Solomon	UK Division of Reg	s.kariuki@uky.edu	X
Keavy	Brenda	WV Dept of Ag	BKeavy@wvda.us	X
Khosravifard	Maryam	CA Dept of Food & Ag	Maryam.khosravifard@cdfa.ca.gov	X
Koestner	Mary	Missouri Dept. of Ag	mary.koestner@mda.mo.gov	X
Kondratko	Dominika	CO Dept. of Ag	Dominika.kondratko@state.co.us	X - Member
LeBlanc	Mark	LA Dept of Ag	Mark_L@ldaf.state.la.us	X - Member
Lewis	Joice	LA Dept of Ag	jlewis@ldaf.state.la.us	X
Lucas	Patty	FL Dept of Ag & Consumer Services	Patricia.lucas@freshfromflorida.com	X - Member
McCallum	Kristi	CO Dept. of Ag	kristina.mccallum@state.co.us	X – Co-Chair
Mostyn	Paul	Westway Feed	paulm@westwayfeed.com	X
Muenks	Quintin	MO Dept. of Ag	quintin.muenks@mda.mo.gov	X
Nichols	Matt	Neogen	Mnichols@neogen.com	X
Nichols	Melissa	MO Dept of Ag	Melissa.nichols@mda.mo.gov	X
Nobo	David	KS Dept. in Ag	david.nobo@ks.gov	X
Novotny	Lawrence	SD - retired	lawrence.novotny@sdaqlabs.com	By phone
Ogden	Louise	AAFCO	pt@aafco.org	By phone - Member
Potter	Tiffany	Spectrum Brands	Tiffany.potter@spectrumbrands.com	X
Prescott	Lise-Anne	CFIA	lise-anne.prescott@inspection.gc.ca	X - Member
Price	Aaron	CFIA	Aaron.Price@inspection.gc.ca	X – Member
Randolph	Robyn	APHL	Robyn.randolph@aphl.org	By phone
Reimann	Lars	Eurofins	larsreimann@eurofins.com	X - Advisor
Riter	Ken	Nestle-Purina Analytical Labs	ken.riter@purina.nestle.com	X - Advisor
Ruiz	Lisa	Eurofins NAC	lisar Ruiz@eurofins.com	X - Advisor
Rygiel	Teresa	FL Dept. of Ag	theresa.rygiel@freshfromflorida.com	X
Salfinger	Yvonne	APHL	yhale@aol.com	By phone
Schilling	Leo	Eurofins	LeoSchilling@eurofinsus.com	X - Advisor
Sheridan	Robert	NY Dept. of Ag	robert.sheridan@agriculture.ny.gov	X - Member
Shugart	John	GA Dept of Ag	John.shugart@agr.georgia.gov	X
Sikora	Frank	University of Kentucky	fsikora@uky.edu	X
Smith	Dawn	FDA	Dawn.smith@fda.hhs.gov	X
Snodgrass	Brenda	OK Dept. of Ag	Brenda.Snodgrass@ag.ok.gov	X - Member
Stadler	Taylor	Covance Food	Taylor.stadler@covance.com	X
Swarbrick	Michele	MN Dept. of Ag	Michele.swarbrick@state.mn.us	By phone - Member
Swoboda	Christy	Romer Labs	christy.swoboda@romerlabs.com	X



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Last Name	First Name	Affiliation	E-mail	Present
Szpylka	John	Merieux Nutri Sciences	john.szpylka@mxns.com	By phone - Advisor
Tang	Lei	FDA CVM	lei.tang@fda.hhs.gov	By phone - Member
Thiex	Nancy	Life Member	nancy.thiex@gmail.com	X – Member
Watkins	Victoria	KS Dept. of Ag	victoria.watkins@ks.gov	X
Webb	Sharon	UK Reg. Services	sharon.webb@uky.edu	X – Co-chair
Weigner	Timothy	FDA	Timothy.weigner@fda.hhs.gov	X
Weiss	Chris	IFPTI	chris.weiss@ifpti.org	X
Wu	Dancia	OISC	scharfd@purdue.edu	X
Wu	Xin	AOCS	xwu@aocs.org	X
Zimmerman	Greg	Waypoint Analytical	gzimmerman@wpacorp.com	X