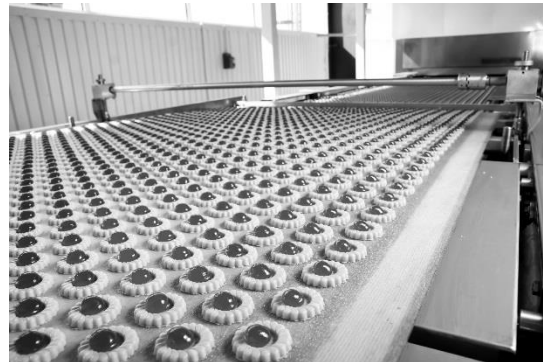




ifpti

INTERNATIONAL
FOOD PROTECTION
TRAINING INSTITUTE



State Human and Animal Food Laboratory Curriculum Framework



- 5-Year project involving
 - APHL
 - AFDO
 - AAFCO
 - FDA OTED (formerly DHRD)
 - IFPTI
- Goal: a Competency-Based Curriculum Framework for State Human and Animal Food Laboratory Professionals

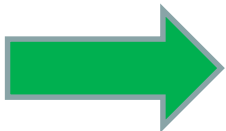
ifpti		State Human and Animal Food Laboratory Professionals Curriculum Framework - July 2017																FDA U.S. FOOD & DRUG ADMINISTRATION							
Senior Administration	Accreditation / Certification	Advocacy	Budget	Change Management	Continuity of Operations	Facility Management	Human Resource Management	ISD (Section 4)	Legislative Affairs	Leadership / Executive Program	Organizational Culture	Policy Making	Program / Grant Management	Public Relations	Risk Analysis (Management & Communication)	Stakeholder Support	Systems Analysis	Instructor Development	Project Management	Future Leaders	IFSS	Business Practices	Emerging Issues / Technologies	Required Period Training	
Supervisor / Manager Program Specific	Advanced Chemistry				Advanced Microbiology				Conflict Resolution and Mediation	Incident Command System (ICS)	Negotiation	Risk Communication Introduction	Animal Health	Animal Food	Human Food	Shellfish	Instrument Repair	Laboratory Evaluation Officer	Mentoring						New Technology
Supervisor / Manager	Advanced Chemistry		Advanced Microbiology				Certificates & Certifications	Animal Food												Human Food	Shellfish	Instrument Repair	Laboratory Evaluation Officer	Mentoring	
Expert (Program Specific)	Animal Food		Human Food		Shellfish				Certificates & Certifications	Instrument Repair	Laboratory Evaluation Officer	Mentoring	New Technology	Animal Health	Animal Food	Human Food	Shellfish	Method Modification / Development	Risk Analysis						Validation Methods
Expert	Acidified Foods	Allergens	Evidence-Based Decision Making		Grant Writing		Certificates & Certifications	Internal Audit												Labeling	Measurement Uncertainty	Method Modification / Development	Risk Analysis	Validation Methods	
Mid (Program Specific)	Animal Food	Animal Health	Dairy	Environmental	Human Food	Shellfish			Certificates & Certifications	Audit	Hazardous Material Shipping	Infectious Agent Shipping	Waste Management	Animal Food Safety	Animal Health	Food Safety	Environmental Conditions	Milk and Dairy Product Safety	Shellfish						Gas Chromatography - Mass Spectrometry (GCMS)
Mid	Critical Thinking	Epidemiology, Foodborne Illness Investigation, & Response		Evidence Management	Regulatory Testing Methods		Certificates & Certifications	Food and Feed Emergencies												Legal Proceedings	National Laboratory Networks	Public Speaking	Root Cause Analysis	Technical Writing Skills	
Entry (Program Specific)	Animal Food	Dairy	Environmental	Animal Health	Biosafety Level 3	Select Agents			Certificates & Certifications	Shellfish	Animal Food Safety	Environmental Conditions	Dairy Product Safety												
Entry	EP7	EP6	EP9	EP13	EP11	EP12	Certificates & Certifications	EP13						EP14	EP15	EP16									
Entry	Basic Chromatography		Basic Separation / Extraction Techniques		Basic Spectroscopy				Certificates & Certifications	Aseptic Techniques	Basic Foodborne Pathogens	Microbial Testing													
Entry	EP1	EP2		EP3		Certificates & Certifications	EP4	EP5					EP6												
Entry	Accreditation/ Certification	Basic Communication Skills	Basic Laboratory Math	Basic Laboratory Statistics	Basic Laboratory Techniques				Chain of Custody	Ethics	Incident Command Systems (ICS)	Laboratory Information Management System (LIMS)		Method Resources	Public Health Principles	Quality Management Systems	Regulatory Programs	Regulatory Sampling	Safety	Sample Handling	Waste Management				
Entry	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12	E13	E14	E15	E16	E17	E18							



Framework Development Work Group

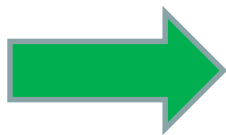
FDA / USDA	State	State	APHL	AFDO	AAFCO
Dan Rice	Patty Lucas (FL)	Steve Sobek (former WI)	Cathy Johnson	Yvonne Salfinger	Nancy Thiex
Holly Rhodes	Maria Ishida (NY)	Dirk Shoemaker (former NE)	Robyn Randolph	Ron Klein	
Paul Morin	Kathleen Wickman (OR)	Reginald Blackwell (DC)	OTED (formerly DHRD)	Karna	CFIA
Cassandra Kontas	Tom Phillips (MD)	Dana Shell (GA)	Will Bet-Sayad	Anthony Barbagallo	Neil Vary
Richelle Richter	Gale Hagood (MS)	Susan Murphy (VA)			Deb Moir
Charles Pixley					Corinne Pequignot

Senior Administration	Accreditation / Certification	Advocacy	Budget	Change Management	Continuity of Operations	Facility Management	Human Resource Management	ISO (Section 4)	Legislative Affairs	Leadership / Executive Program	Organizational Culture	Policy Making	Program / Grant Management	Public Relations	Risk Analysis (Management & Communication)	Stakeholder Support	Systems Analysis	Instructor Development	Project Management	Future Leaders	IFSS	Business Practice	Emerging Issues / Technologies	Required Period Training		
Supervisor / Manager Program Specific	Advanced Chemistry				Advanced Microbiology				Laboratory Evaluation Officer	Mentoring	Nanotechnology	Animal Health	Animal Food	Human Food	Shellfish	Instructor Development	Project Management									
Supervisor / Manager	Conflict Resolution and Mediation		Incident Command System (ICS)		Negotiation		Risk Communication Introduction																			
Expert (Program Specific)	Animal Food		Human Food		Shellfish		Instrument Repair		Laboratory Evaluation Officer		Mentoring		Nanotechnology		Animal Health		Animal Food		Human Food		Shellfish					
Expert	Acidified Foods		Allergens		Evidence-Based Decision Making		Grant Writing		Internal Audit		Labeling		Measurement Uncertainty		Method Modification / Development		Risk Analysis		Validation Methods		Chemistry		Microbiology			
Mid (Program Specific)	Certificates & Certifications																									
Mid	Animal Food	Animal Health	Dairy	Environmental	Human Food	Shellfish	Audit	Hazardous Material Shipping	Infectious Agent Shipping	Waste Management	Animal Food Safety	Animal Health	Food Safety	Environmental Conditions	Milk and Dairy Product Safety	Shellfish										
Mid	Gas Chromatography - Mass Spectrometry (GCMS)		Inductively Coupled Plasma Mass Spectrometry (ICPMS)		Liquid Chromatography - Mass Spectrometry (LCMS)		National Laboratory Networks Methods		Radiological		Advanced Technologies		National Laboratory Networks Methods													
Mid	Critical Thinking		Epidemiology, Foodborne Illness Investigation, & Response		Evidence Management		Regulatory Testing Methods		Food and Feed Emergencies		Legal Proceedings		National Laboratory Networks		Public Speaking		Root Cause Analysis		Technical Writing Skills		Traceability					
Entry (Program Specific)	Certificates & Certifications																									
Entry	Animal Food		Dairy		Environmental		Animal Health		Biosafety Level 3		Select Agents		Shellfish		Animal Food Safety		Environmental Conditions		Dairy Product Safety							
Entry	EP7		EP8		EP9		EP10		EP11		EP12		EP13		EP14		EP15		EP16							
Entry	Basic Chromatography		Basic Separation / Extraction Techniques		Basic Spectroscopy		Aseptic Techniques		Basic Foodborne Pathogens		Microbial Testing															
Entry	Accreditation/ Certification	Basic Communication Skills	Basic Laboratory Math	Basic Laboratory Statistics	Basic Laboratory Techniques	Chain of Custody	Ethics	Incident Command Systems (ICS)	Laboratory Information Management System (LIMS)	Method Resources	Public Health Principles	Quality Management Systems	Regulatory Programs	Regulatory Sampling	Safety	Sample Handling	Waste Management									
Entry	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12	E13	E14	E15	E16	E17	E18								



- All competencies and performance indicators built out for the Entry Core Content Areas
- Course Design Documents delivered to APHL

- Competency development for Entry Level Program-Specific Content Areas started May 2017



Senior Administration	Accreditation / Certification	Advocacy	Budget	Change Management	Continuity of Operations	Facility Management	Human Resource Management	ISO (Section 4) Legislative Affairs	Leadership / Executive Program	Organizational Culture	Policy Making	Program / Grant Management	Public Relations	Risk Analysis (Management & Communication)	Stakeholder Support	Systems Analysis	Instructor Development	Project Management	Future Leaders	IFSS	Business Practices	Emerging Issues / Technologies	Required Period Training
Supervisor / Manager Program Specific	Advanced Chemistry			Advanced Microbiology				Conflict Resolution and Mediation	Incident Command System (ICS)	Negotiation	Risk Communication Introduction	Mentoring	Hemo-technology	Animal Health	Animal Food	Human Food	Shellfish	Instrument Repair					
Supervisor / Manager	Advanced Chemistry		Advanced Microbiology				Certificates & Certifications												Animal Food	Human Food	Shellfish	Instrument Repair	Laboratory Evaluation Officer
Expert (Program Specific)	Animal Food	Human Food	Shellfish	Instrument Repair	Laboratory Evaluation Officer	Mentoring		Hemo-technology	Animal Health	Animal Food	Human Food	Shellfish	Instructor Development	Project Management									
Expert	Acidified Foods	Allergens	Evidence-Based Decision Making	Grant Writing	Internal Audit	Labeling	Measurement Uncertainty	Method Modification / Development	Risk Analysis	Chemistry	Microbiology	Validation Methods											
Mid (Program Specific)	Certificates & Certifications																						
Mid (Program Specific)	Animal Food	Animal Health	Dairy	Environmental	Human Food	Shellfish	Audit	Hazardous Material Shipping	Infectious Agent Shipping	Waste Management	Animal Food Safety	Animal Health	Food Safety	Environmental Conditions	Milk and Dairy Product Safety	Shellfish							
Mid	Critical Thinking	Epidemiology, Foodborne Illness Investigation, & Response	Evidence Management	Regulatory Testing Methods	Food and Feed Emergencies	Legal Proceedings	National Laboratory Networks	Public Speaking	Root Cause Analysis	Technical Writing Skills	Traceability												
Entry (Program Specific)	Certificates & Certifications																						
Entry (Program Specific)	Animal Food	Dairy	Environmental	Animal Health	Biosafety Level 3	Select Agents	Shellfish	Animal Food Safety	Environmental Conditions	Dairy Product Safety													
Entry	Accreditation/ Certification	Basic Communication Skills	Basic Laboratory Math	Basic Laboratory Statistics	Basic Laboratory Techniques	Chain of Custody	Ethics	Incident Command Systems (ICS)	Laboratory Information Management System (LIMS)	Method Resources	Public Health Principles	Quality Management Systems	Regulatory Programs	Regulatory Sampling	Safety	Sample Handling	Waste Management						
Entry	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12	E13	E14	E15	E16	E17	E18					

- Build out narrow competencies and performance indicators for Chemistry and Microbiology Program Areas (Entry Level)
- Create Course Design Documents (blueprints) for Chemistry and Microbiology Program Areas (Entry Level)
- Advance upward on the Framework (Mid Level)

- *“Developing a Competency Framework for U.S. State Food and Feed Testing Laboratory Personnel”*
 - *Volume 97, No. 3, 2014*

Christopher Weiss, IFPTI

chris.weiss@ifpti.org