

Curriculum Vitae
Roy E. Costa, RS, MS (M.B.A)
Public Health Sanitarian and Consultant

Personal objectives:

- To promote public health through education and the application of science

To assist public and private enterprises in identifying their strengths and weaknesses and to develop management programs, which include consulting, training, auditing, microbiological testing and verification procedures to minimize and eliminate disease transmission risk.

Introduction to Professional Background and Qualifications

Degrees include a B.S. in Biological Sciences and an M.S. in Health Services Management with an MBA. A credentialed practitioner in the environmental, sanitary and public health sciences whose vocational efforts are directed towards the evaluation and management of those factors and mechanisms that impact upon the public health, quality of life and determinants of risk. A registered sanitarian (RS) with thirty plus years of experience in a broad range of public health protection and promotion activities; food safety is a specialty. As a field sanitarian, supervisor and trainer with Florida state and county health agencies, I conducted over 10,000 inspections of public facilities including restaurants, supermarkets, processing plants, convenience stores, prisons, outdoor events, schools, institutions, water plants and sewer systems and conducted hundreds of training sessions.

Regulatory experience includes spearheading as an environmental investigator over 100 epidemiological investigations of illness outbreaks including E. coli, salmonellosis, shigellosis, hepatitis A, norovirus, tuberculosis, scabies, and MRSA among others. As a guest speaker for the 1995 FDA broadcast "Investigating Foodborne Illness", I presented the environmental techniques of foodborne investigations. This video broadcast reached over 3,000 health department employees.

In my position as an Education and Training Specialist/Management Review Specialist with the Division of Hotels and Restaurants, Department of Business and Professional Regulation, I developed numerous new training modules and trained over 20,000 food service managers in a three year period.

Highlights included introducing the HACCP concept to Sanitation and Safety Specialists throughout the state of Florida. My course "Applying HACCP Principles" has since been used by colleges, county extension agents and by local jurisdictions as means to certify food service managers. We also maintain state accreditation for our food hygiene courses.

Since retiring from state government, activities include consulting, training, developing food safety programs of instruction, auditing, outbreak investigation, providing expert testimony for law firms in **63** cases, and national and local television programs covering a wide variety of hazards to the public. Consulting includes providing advice and support to the food *safety* industry, the food industry (**29** Food Safety Systems developed), and professional and regulatory bodies from farm to table, nationally and internationally. **6** government funded research projects. Public health and environmental and safety procedures are applied from the farm to the consumer level. Extensive experience in regulations, food safety, potable water, chemistry, microbiology, infection control, environmental health, and vector control. Extensive experience in mitigating foodborne and environmentally transmitted disease in varied settings.

Management experience in the private sector includes managing personnel and programs in marketing, industry training programs, auditing systems, and certification. Classroom teaching experience includes college level courses taught at the Walt Disney World Center for Hospitality and Culinary Arts on the campus of Valencia College in Orlando, Florida, serving 15 years on adjunct faculty.

Presentations include **61** scientific and technical papers at local, national and international conferences and meetings and hundreds of training sessions. Publishing includes 2 book chapter and 2 textbooks and 20 published articles in areas of food safety and food security. I maintain a leadership role in the food safety community, and provide innovative, science-based, technology-driven food safety solutions to my clients.

Selected Presentations to Indicate a Variety of Topics and Audiences

1. "The Day Care Center" 11/86 Spruce Creek High School
2. "Cleaning Up Your Act" 4/87 John Knox Village ACLF
3. "ACLF Seminar" 4/87 HRS Adult and Aging Services
4. "Biohazardous Waste" 1990 Volusia County Infection Control Practitioners
5. "Environmental Issues for Child Care" 6/90 Daytona Beach Community College
6. "Child Day Care In-Service" 5/91 United Child Care
7. "Environmental Health Issues in Child Care" 6/92 Daytona Beach Community College
8. "The Americans with Disabilities Act" 9/92 SCORE Chapter 87
9. "Food Hygiene and the Prevention of Communicable Disease" Taco Bell Corp.
10. "Sanitation Concepts for the Lodging Industry" 12/93 National Executive Housekeepers Association
11. "The Role of the Inspector in the Division of Hotels and Restaurants" 4/94 Daytona Beach Community College"
12. "The Epidemiology of Foodborne Illness" 1995-1996 (ten sessions) In-service training Division of Hotels and Restaurants.
13. "Food Irradiation Workshop" 1996 Statewide in conjunction with the Univ. of Florida
14. "Investigating a Foodborne Illness Outbreak" 1995 Satellite Broadcast. FDA. Washington, D.C.

15. "Infection Control for Facilities" 1997 the Florida Environmental Health Association
16. "Licensing Food Establishments" 1996 Florida Association of Licensing Officials
17. "Preventive Medicine in the Hospitality Industry" 1996 Volusia Flagler Safety Council
18. "Comparing the FDA and the State Food Code" 1997 Florida Environmental Health Association. Orlando.
19. "Comparison of Three Different Approaches to HACCP" 1998. Florida Association of Milk, Food and Environmental Sanitarians. Orlando.
20. "Applying HACCP Principles" 1997 Hospitality and Tourism Institute. Orlando.
21. "Applying HACCP Principles" 1997 Statewide to Inspectors and Administrators of the Department of Business and Professional Regulation. Florida Statewide.
22. "Applying HACCP Principles" 1999. University of Florida. Food Safety and Quality In-service.
23. "Applying HACCP Principles" 1999. Florida Environmental Health Association. Orlando.
24. "Street HACCP-A process Approach" 1999 Florida Restaurant Association Food Service Expo. Orlando.
25. "Making a difference in Food Safety through Effective Inspection Techniques" 1999. Florida Environmental Health Association. Tampa
26. "Making a Difference in Food safety" 1999 Institute of Food Technologists. Tampa
27. "Retail HACCP Systems". 2000. University of Florida: IFAS.
28. "The role of HACCP in Preventing Hand to Food Disease Transmission". 2000 Florida Association for Food Protection, Tampa
29. "Food Service Sanitation Management" 2000 Univ. of Florida, College of Public Health. Tampa
30. Hands vs. Gloves Still a Hot Topic" 2000. National Restaurant Association. Chicago
31. "Food Safety is Public Health" 2000. Florida Environmental Health Association. Jacksonville.
32. "Hands vs. Gloves Still a Hot Topic" 2000. International Association for Food Protection. Atlanta, GA.
33. "Keeping it Upbeat! 2001. "University of South Florida, College of Public Health-FIGHTBac" 2001 National Environmental Health Association. Atlanta. GA
34. "The Use of ATP Bioluminescence" Florida Environmental Health Association. Orlando 2001
35. "Food Safety and the Supermarket Trade". Caribbean Food Ind. Cons. Group. Barbados. 2001
36. "Foodborne Illness Outbreak-Fact or Fiction?" Food-handler Conference. Dallas, TX March 5th and 6th.
37. "Rockwell Software and HACCP" Rockwell Software RStechED 2002. Portafino Bay Hotel, Orlando, FL July 23, 24, 2002
38. *Streamlining HACCP Plans at Retail-New Approaches to Hazard Analysis Critical Control Point" Future of Fresh Produce Conference, Pretoria South Africa. July 31, 2002.
39. *"The Case for Hand washing" First International Food Safety Conference. Ocho Rios, Jamaica, November 22, 2002.

40. *"Technology and Inspection" First International Food Safety Conference. Ocho Rios, Jamaica, November 23, 2002.
41. "Epidemic on Land and Sea-A Norovirus Control Workshop". Washoe County Health Department. Reno Nevada. May 28th 29th and 30th 2003.
42. *"Quality Assurance and Hazard Analysis Critical Control Point Verification for Regulatory Personnel" Food Standards Bureau. Kingston Jamaica. July 2003
43. "Turning on the Juice with HACCP" HACCP Systems for the Juice Industry a US Perspective" Kingston Jamaica, International Food Safety and Occupational Health Conference. November 2003.
44. "Swimming Pool Risk Assessment" Kingston Jamaica, International Food Safety and Occupational Health Conference. November 2003.
45. *"Bio-security Systems for the Food Industry" Kingston Jamaica, International Food Safety and Occupational Health Conference. November 2003
46. *Communicable Disease Control in the Cruise Line Industry-Quarantine Seminar" Pre conference workshop. Kingston Jamaica, International Food Safety and Occupational Health Conference November 2003.
47. *"The US Bioterrorism Act", Puerto Montt, Chile. Intesal Salmon Chile. November 2003.
48. "The Benefits of Online Food Safety Education" Orlando, Florida. Florida Environmental Health Association. July 2004.
49. "Food Security by the Numbers" Calculating a Food Security Vulnerability Score." Paper accepted for presentation at the National Environmental Health Association, Rhode Island. June 2005.
50. "Norovirus: Epidemic on Land and Sea": Florida Public Health Association. Sarasota, Florida. June 2005.
51. "Food Security by the Numbers": Calculating a Food Security Vulnerability Score". The Kentucky Environmental Health Association. Louisville, Kentucky. September 2005.
52. "Food Safety and Liability Workshop". Marcus Allen. Chicago Illinois. September 2005.
53. "Food Security by the Numbers: Calculating a Food Security Vulnerability Score". The Michigan Public Health Association. Grand Rapids, Michigan. October 2005.
54. "Norovirus: Epidemic on Land and Sea: Massachusetts Health Officers Association. Hyannis, Massachusetts, November. 2005.
55. "Food Security in the Food Industry: Operational Risk Management of Intentional Food Contamination". South East Homeland Security Conference. December 2005. Savannah, Georgia.
56. "Food Security in the Food Industry: Operational Risk Management of Intentional Food Contamination". Florida Emergency Preparedness Association. January. 2005. St. Pete Beach, Florida.
57. *"Auditing Produce for Food Safety" Caribbean Food Crops Society. University of Puerto Rico. July 2006.
58. *Risk Based Inspection. Dubai Municipality Ministry of Health. Dubai International Food Safety Conference. Feb 2008
59. "CA- MRSA Outbreak Control for Schools. Michigan Department of Health Technology Conference. March 2008.
60. *"The Food Safety Dilemma; is HACCP the Answer"? Kuwait Food Safety Conference. March 2010.

61. "Lessons Learned from Foodborne Illness Lawsuits" Florida Environmental Health Association. October 2011.

*International papers

College Courses Offered:

- Medical Terminology
- Medical law and Ethics
- Food Service Sanitation Management
- Food and Beverage Management
- Food and Beverage Cost Control

Published Articles:

1. Irradiation, the Wave of the Future
2. Sanitizing, its as Easy as 1,2,3
3. HACCP: A Revolution in Food Safety Has Begun
4. Training Food Service Workers
5. In a Pickle Over Salads
6. The Use of Hazard Analysis and Critical Control Point in the Investigation of Foodborne Illness
7. Reducing the Incidence of Foodborne Illness by Prohibiting the Bare Hand Contact of Ready to Eat Foods
8. Applying the Behavioral Sciences to Risk Assessment in Food Service
9. Comparison of Three Different Approaches to HACCP
10. Making Inspection of Foodservice Establishments Meaningful
11. Food Safety in the Age of Bio-terrorism
12. Getting Ready for HACCP
13. New Techniques in Moisture Analysis
14. The Cruise Line Industry, Vanguard of Public Health
15. The Limits of Consumer Food Safety Capacity
16. The Employee's Role in Food Safety
17. The Line on On-line Training
18. Clean Hands Week: A Good Idea on Several Levels
19. Benchmarking Food Safety Education
20. The Produce Field is Ripe for Regulation

Funded Research

- 2003 Expert Elicitation: Funding Agency FDA. Scope: Modeling the Effects of Food Handling Practices on the Incidence of Foodborne Illness. Contracted by: Research Triangle Institute.
- 2004 Expert Elicitation: Funding Agency: FDA. Scope: Product recalls, and recordkeeping. Contracted by: Economic Research Group.

- 2008 Expert Elicitation: Funding Agency FDA. Scope. Food Defense. Contracting firm Economic Research Group

Technical Reports Published

- Norovirus Contamination and Control
- Use of Micro-Assay in the Mitigation of Norovirus
- An Analysis of Norovirus Outbreaks and Lessons Learned
- Applying HACCP Principles to Norovirus Prevention in Facilities
- Norovirus Control Guide for Resorts and Hotels
- Controlling Outbreaks of Community Associated Staphylococcus Aureus (CAMRSA) in School Settings
- ISO22000:2005 and the Future of Food Safety

Peer Reviewed Publications

- Effect of Electrolyzed Water for Reduction of Foodborne Pathogens on Lettuce and Spinach. E.-J. Park , E. Alexander , G.A. Taylor , R. Costa , and D.-H. Kang Journal of Food Science. Volume 73 Issue 6, Pages M268 - M272. Published Online: 28 Jun 2008. ©2010 Institute of Food Technologists®.

Advisory Board and Panels

- Awards Panel: Serving as a judge for the Food Quality Award Sponsored by DuPont Qualicon 2004-2011
- Protonlabs, Inc.: Scientific Advisory Board. 2004
- 360 Training Board of Directors. 2005-2010

Television, Radio and Newspaper Interviews and Investigations

- Money Magazine: 2003
- Tampa ABC Action News: Dirty Dining; Guest Commentary and Investigation. 2004, 2005, 2006, 2007, 2008, 2010, 2011
- National ABC Inside Edition Investigation: Safety of Buffet Foods. 2005
- Palm Beach NBC Channel 5. WPTV: Guest Commentary and Investigative Reports. Dirty Dining. 2005, 2006,2007, 2008
- Self Magazine. Sushi. 2005
- Wall Street Journal. The USDA FoodSafe List Serve. 2006
- Sam's Club Magazine, Personal Hygiene. 2006
- Ocala Star Tribune: DBPR Failing to Inspect Restaurants. 2006
- Ocala Star Tribune: On Line Food Safety Education. 2006
- Atlanta Constitution: Grading Food Service Establishments. 2006
- National NBC Dateline: Ice and Hand Hygiene. 2006
- Miami Sun Sentinel: Florida Inspection Program Investigative Reports. 2007
- Palm Beach NBC Channel 5. Interview on "Industry Self-Inspection Program". 2007
- Palm Beach NBC Channel5: Investigative reports 2006-2008

- San Antonio Star: Food Safety Inspections. 2007
- Tampa ABC Action News: Food Safety Inspections. 2007-2008
- Orlando Sentinel: Food Safety Inspections. 2007-2008
- Atlanta Fox News: Hotel Hygiene. 2007
- Orlando WFTV: Playing with Fire. 2008
- National Dr. Oz: Supermarket Food Safety 2009
- USA Today: Airline Food 2010
- Tampa ABC Action News: Child Care Inspections 2011
- Los Angeles, KNX Radio: Food Safety Modernization Act 2011
- Tampa ABC Action News: Consumer Food Safety 2011

Books and Chapters:

- Chapter 6.1 The Principles of Modern Food Safety. In The Food Safety Handbook. Wiley and Sons, N.Y.
- Security in the Food Industry. Prentice Hall. (manuscript in review)
- Chapter 7. Pest Control and Management in Food Service. In Pest Control in the Food Industry. Wiley and Son's. (manuscript in review)

Leadership Roles in Professional Associations:

- President: Infection Control Practitioners. Volusia County, Florida 1990-1992
- Chairman: Central Florida Environmental Health Association. 1994-1996
- President: Florida Association for Food Protection 1998-1999
- President: Florida Environmental Health Association 2000-2001.
- Statewide Facilitator: Operation FightBAC Florida. 1998-2003
- Treasurer and Co-Chairman of Membership and Operations Subcommittee: Centers for Disease Control and Prevention Clean Hands Coalition. 2003-2005

Professional Certifications and Registrations:

- Registered Sanitarian
- Certified Swimming Pool Operator
- Certificate of Completion: Water Plant Operator C. State of Florida
- Certified Environmental Health and Safety Instructor Daytona Beach Community College
- Certified Food Safety Professional. National Environmental Health Association.
- Certified ServSafe Trainer/Administrator (also Texas approved)
- Certified National Registry of Food Safety Professionals Trainer/Administrator
- Certified Experior Testing Trainer Administrator
- Certified Trainer Experior Testing/NSF HACCP
- Certified FDA HACCP
- Certified HACCP Alliance
- Certified Primus Labs Auditor
- Certified Super SafeMark Trainer Food Marketing Institute
- SQF Consultant (inactive status)
- Sanitary Survey Inspector Department of Environmental Regulation

- ISO22000;2005 Lead Auditor
- GFSI Technical Competent Supervisor

Cases Retained In:

- Separate enclosure.

Awards:

- Environmental Health Specialist of the Year: State of Florida.
- National Environmental Health Assoc. Certificate of Merit
- Davis Productivity Awards Florida Tax Watch (2)

Academic Background:

- B.S., Fisheries Biology, minor Chemistry. University of Arizona
- Certificate in Techniques of Supervision, Daytona Beach Community College
- M.S., M.B.A. Health Services Management. Florida Institute of Technology
- Certificate in Fire Safety Inspection; Florida Fire College (CERT. NON ACTIVE)
- Public Health Post Graduate Course Work; University of South Florida, College of Public Health

International Experience:

- Nine scientific papers at international conferences and meetings
- Moderator for four international conferences
- Consultant to the Caribbean Epidemiological Center; Project (1). Training of Health Officers for seven Caribbean nations in workshops in Trinidad-Tobago WI. Project (2). Edited the "Quality Tourism for the Caribbean Food Code"
- Food Hygiene Bureau of Jamaica. HACCP Certification and Professional Food Manager Training for 50 food and beverage managers in the Jamaican hospitality industry
- Consultant and Trainer for the Barbados Community College. Trained and certified 300 hotel managers in HACCP and Food Safety Sanitation Management in seven island nations
- Consultant to QC Fresh. South Africa. Trained 15 South African food safety managers in the produce industry.
- Food Standards Bureau of Jamaica. Trained and certified 40 Jamaican Health Officers in NSF-HACCP
- Consultant to Mr. Special Supermarkets. Puerto Rico. Developed HACCP plans for 14 supermarkets. Translated the HACCP plans into Spanish
- Trainer for the National Registry of Food Safety Professionals. Puerto Rico. Trained and certified 20 Taco Bell Managers as Professional Food Managers. Conducted training in Spanish
- Consultant and Trainer for the Inter-American Institute for Cooperation on Agriculture; Barbados, WI. Trained and certified 200 food managers in Food Service Sanitation Management and HACCP.

- Trainer to the Dubai Municipality. Presented training on effective inspection techniques to the attendees at the 2nd Annual Dubai International Food Safety Conference 2009.
- USAID consultant to the office of Technology and Policy Planning and Review. Assignment: Cairo, Egypt. 2009.
- Facilitator to the Ministry of Health; Kuwait, and Session Chairmen and Moderator of the Kuwait Food Safety Conference. 2010.
- Consultant to Caribbean-based growers of fruits and vegetables. 2011.