CURRICULUM VITAE

Michael A. Pentella November, 2016

I. EDUCATIONAL AND PROFESSIONAL HISTORY

A. Education				
Institution	Dates Attended	Field of <u>Study</u>	Degree Obtained	Degree <u>Date</u>
Ohio State University, Columbus, OH	1969- 1972	Microbiology	B.S.	1972
Thomas Jefferson University, Philadelphia, PA	1977- 1980	Clinical Microbiology	Master of Science	1980
University of South Florida, Tampa, FL	1988- 2000	Infectious Disease	Doctor of Philosophy	2000

Certification/Licensure

	<u>Board</u>	<u>Date</u>
SUV20313	State of Florida Laboratory Supervisor	1982
	Specialist in Microbiology, American Society of Clinical Pathology (SM(ASCP))	1986
	Certified in Infection Control (CIC)	1993
	Diplomat, American Board of Medical Microbiology	2005

B. Professional and Academic Positions

Position Title	Dates of Service	Location/Institution
Medical Technologist in Microbiology	1973 - 1975	Aultman Hospital, Canton, OH
Medical Technologist in Microbiology	1975-1978	Jewish Hospital, St. Louis, MO
Supervisor of Microbiology and Immunology	1978-1981	UpJohn Laboratory Procedures, Inc.
Clinical Microbiologist, Manager of Focused Laboratory Services and Infection Control	1981-2002	Lakeland Regional Medical Center, Lakeland, FL
Associate Director	2002-March 2013	University Hygienic Laboratory, University of Iowa, Iowa City, IA
State Public Health Laboratory Director	March 2013	Massachusetts Department of Health, Bureau of Infectious Diseases and Laboratory Sciences
Clinical Associate Professor	2008 - 2013	College of Public Health, University of Iowa, Iowa City, IA
Clinical Professor	2017 – present	College of Public Health, University of Iowa, Iowa City, IA

C. Honors, Awards, Recognitions, Outstanding Achievements

<u>Year</u>	<u>Title</u>
1994	Delta Tau, Public Health Honor Society
2016	University of South Florida College of Public Health 2016 Outstanding
	Alumni Award
	https://hscweb3.hsc.usf.edu/health/publichealth/news/dr-michael-
	pentella-receives-2016-coph-outstanding-alumni-award/
2016	W.J. Haulser, PhD. Award, Director's Achievement in Leadership

II. TEACHING Experience

A. Teaching Assignments

Semester, <u>Year</u>	Course Title/ <u>Number</u>	Semester <u>Hours</u>	# Students	Role	Percent Responsible
Fall 1980	Thomas Jefferson University, Nursing Clinical Microbiology	2	40	Instruct	or
Fall 1982 and 1983	University of Central Florida, Department of Medical Technology			Course designe and profess	er %
	Medical Mycology course	3	15	profess	OI .
Fall 1996- August 2002	University of South Florida, College of Public Health, Dep of Environmental and Occupational Health		varied	Develor certifica progran and tau 3 of the	ate n ght 4
	Certificate Program in Infectio Control	n 12		courses	;
	Provided guest lectures in several courses including: Introduction to Environmental and Occupational Health, Parasitology, Exotic and Emerging Infectious Diseases and Immunology	,			
Fall 2002- 2013	Diagnostic Microbiology Department of Epidemiology	3	Varied	Course Director	
Summer 2011- 2013	Public Health Laboratory		Varied	Course Director	

Other Teaching

Semester, <u>Year</u>	Course Title/ Number	Semester <u>Hours</u>	# Students	Role	Percent Responsible
Fall 2003- 2013	Epidemiology of Infectious Diseases, University of Iowa College of Public Health			Guest lecturer	
2007-13 Medical Microbiology course for Medical students University of Iowa College of Medicine		for		Guest lecturer	

B. Students Advised

Jeff Benfer
Amanda Irish
Cook, Courtney
Gipple, Denyse
MacIntyre, Tracy
Gingerich, Stefan
Rice, Natalie
Fowler, Jana
Graf, Erin
Mullins, Jeremi
Neil, Brock
Kostle, Pamela, MS PH Project
Wallace, Brandon, MPH Project

C. Other Advising/Mentoring

Fall 1982 and 1983

University of Central Florida, Department of Medical Technology Responsible for students from UCF during their laboratory practicum in Microbiology, Serology, and Urinalysis at Lakeland Regional Medical Center.

Fall 1996-August 2002

University of South Florida, College of Public Health, Dept. of Environmental and Occupational Health

Advised students and regularly offered practicums for them to pursue at Lakeland Regional Medical Center.

Fall 2011

ASM/CDC Fellowship mentoring for Lab Capacity Building Program. Dr. Aree Thattiyaphong,

PhD, National Public Health Laboratory, Thailand.

Summer 2014

ASM/CDC Fellowship mentoring for Lab Capacity Building Program. Drs. Lata Kapoor and Raju Sivadhas from the CDC India.

D. Other Contributions to Institutional Programs

<u>Date</u>	<u>Title</u>	Location
2017-open	CDC: External Laboratory Safety Workgroup CDC: Campylobacter Workgroup CDC: Biosafety Symposium Planning	Atlanta, GA Atlanta, GA Atlanta, GA

E. Course Materials (syllabi, instructional web pages, computer lab materials)

Online trainings that M. Pentella helped to develop, most can be found at: http://www.shl.uiowa.edu/dcd/sentlabtrain/courses/index.xml

Introduction to the Public Health Laboratory System: This one-hour, interactive course follows the progress of public health, from the early days to the modern testing, surveillance and communication available in today's public health laboratory system.

<u>Lab Biosafety: Avoiding Lab Acquired Infections (LAI):</u> Learn about LAI's, potentially dangerous pathogens and when and how to properly use a biosafety cabinet. Practice identifying "trigger points" that will help keep you safe.

<u>BT Rule-out Series:</u> In each of our five, short training modules, you will practice working with a potential agent of bioterrorism and determine if the test results provided can rule out the agent.

BT 1-1: Bacillus anthracis

BT 1-2: Brucella species

BT 1-3: Francisella tularensis

BT 1-4: Burkholderia pseudomallei

BT 1-5: Yersinia pestis

<u>Electronic BT Workshop for Sentinel Labs:</u> In this online workshop, based on our live, Wet Workshops, you can safely practice recognizing a potential agent of bioterrorism and then choose the appropriate rule-out testing.

The Role of Sentinel Labs in Emergency Response: In this course, we explain how the roles of sentinel and public health labs vary in chemical and biological events. Do you know the responsibilities of YOUR lab? Be sure to try our practice scenarios.

Tools for Proficiency Training: (CLIA-related)

Mission Possible: Understanding Training and Competency Assessment: (CLIA-related)

<u>Chain-of-Custody Training:</u> If victims of exposure to a toxic chemical are transported to a facility for evaluation and treatment, laboratories may be directed to submit blood and urine samples to the nearest LRN reference lab, or to CDC, for testing. This course provides training on the proper way to maintain and document chain-of-custody for such samples.

Anatomy of a Foodborne Outbreak: This just-in-time training focuses on testing that should be done in the clinical laboratory to detect Shiga Toxin-producing *E. coli* (STEC). The following three short, interactive e-modules accompanied the lectures in Dr. Pentella's e-course, *Diagnostic Microbiology for Epidemiology*. The goal of this course was to introduce the epidemiologist to the clinical microbiology laboratory to provide them with a better understanding of the testing performed in, and the value of, the clinical laboratory.

Quadrant-Streaking: A Demonstration: An interactive guide to streaking-for-isolation.

Germy the Germ: For K-12: Germy the Germ is a 15-minute, narrated presentation designed for students in kindergarten through third grade.

Virtual Knowledge Assessments: These were developed for CDC and are on the CDC Train web page. There are currently 2 available and 1 is completed and ready to post. These online challenges provide the learner with the opportunity to differentiate between suspect biothreat agents and other pathogens.

III. SCHOLARSHIP

A. Publications or Creative Works

Peer-Reviewed Papers

- 1. Redshaw, P.A., P.A. McCann, M.A. Pentella, and B.M. Pogell. 1979. Simultaneous loss of multiple differentiated functions in aerial mycelia negative isolates of Streptomyces. Journal of Bacteriology. 137:891-899.
- 2. Binford, L., M.A. Pentella, and B.H. Kwa. A survey to determine the presence of cryptosporidium infection associated with diarrhea in West Central Florida, 1985-1988. Florida Journal of Public Health. 1991; 3: 18-21.
- 3. Kwa, B.H., and M.A. Pentella. 1993. Sexually transmitted diseases: risks, transmission, and laboratory diagnostic update. Clinical Laboratory Science. 6: 85-89.
- 4. Kwa, B.H., M. Moyad, M. Pentella, and J.B. Rose. 1993. A nude mouse model as an in vivo infectivity assay for cryptosporidiosis. Water Science Technology. 27: 65-68.

- 5. Kwa, B.H., and M.A. Pentella. Dengue: Re-emergence of an urban tropical disease. The Indian Practitioner. 54: 177-181. March 2001.
- 6. Pentella, M.A., B.H. Kwa, T. Ohrmund, T. Fisher, S. Chandler, and B.G. Yangco. Are disinfectants accurately prepared for use in hospital patient care areas? The Indian Practitioner. 54: 166-171. March 2001.
- Franks, F., M. Gilchrist, R. Groepper, M. Pentella, R. Currier, P. Quinlisk, C. Lohff, C. Rupprecht, M. G. Reynolds, and T. Boo. Human Rabies – Iowa 2002. Morbidity and Mortality Weekly Report. 2003. 52: 47-48.
- 8. Sasser M., C. Kunitsky, G. Jackoway, J. W. Ezzell, J. D. Teska, B. Harper, S. Parker, D. Barden, H. Blair, J. Breezee, J. Carpenter, W. V. Cheek, M. DeMartino, B. Evans, J.W. Ezzell, S. Francesconi, E. Franko, W. Gardner, M. Glazier, K. Greth, B. Harper, T. Hart, M. Hodel, K. Holmes-Talbot, K. L. Hopkins, A. Iqbal, D. Johnson, P. Krader, A. Madonna, M. McDowell, M. L. McKee, M. Park, S. Parker, M. Pentella, J. Radosevic, R. A. Robison, B. Rotzoll, K. Scott, M. Smith, N. Syed, J. Tang, J. D. Teska, H. Trinh, L. I. Williams, and M Wolcott. Identification of *Bacillus anthracis* from culture using gas chromatographic analysis of fatty acid methyl esters. J AOAC Int. 2005. 88(1):178-81.
- 9. Rubin, B. D, and M. Pentella. Preparing for Large Scale Emergencies. Advance for Medical Laboratory Professionals. Volume 18, Issue 24, p. 18. Nov. 20, 2006.
- 10. Boddicker, J.D., P. Rota, T. Kreman, A. Wangeman, L. Lowe, R. Thompson, W. Bellini, M. Pentella, and L.E. DesJardin. 2007. Real-time RT-PCR Assay for the Detection of Mumps Virus RNA in Clinical Specimens. Journal of Clinical Microbiology. Volume 45, p. 2902-2908.
- 11. Polgreen, P.M., L.C. Bohnett, S.B. Gingerich, L.E. Desjardin, M.A. Pentella. Duration of Mumps Shedding Following the Onset of Symptoms. 2008. Clinical Infectious Diseases. May 1;46(9):1447-9..
- 12. Polgreen, P.M., Pentella, M.A., et. Al, A Spatial Analysis of the Spread of Mumps in lowa: the Importance of College Students and their Spring-Break Associated Travel. HYG-)M-1883-Jan-09) Epidemiology and Infection 9, September 2009.
- 13. Bennett, B, B Branson, K Delaney, M Own, M Pentella, B Werner. HIV Testing Algorithms: A status report. The Association of Public Health Laboratories and The Centers for Disease Control and Prevention. April 2009. Access at: http://www.aphl.org/aphlprograms/infectious/hiv/Documents/StatusReportFINAL.pdf
- 14. Polgreen PM, Chen Z, Segre AM, Harris ML, Pentella MA, Rushton G. Optimizing influenza sentinel surveillance at the state level. American Journal of Epidemiology. 2009 Nov 15;170(10):1300-6. Epub 2009 Oct 12.PMID: 19822570

- 15. Harris ML, Massaquoi D, Soyemi K, Brend SM, Klein D, Pentella M, Kraemer J, Nashelsky M, Schmunk G, Smith T, Pleva A. Recent lowa Trends in Sudden Unexpected Infant Deaths: the importance of public health collaboration with medical examiners' offices. American Journal of Forensic Medicine and Pathology. Accepted for publication April 2010
- 16. Harmon K, Bower L, Kim WI, Pentella M, Yoon KJ. A matrix gene-based multiplex real-time RT-PCR for detection and differentiation of 2009 pandemic H1N1 and other influenza A viruses in North America. Influenza Other Respiratory Viruses. 2010 Nov;4(6):405-10. doi: 10.1111/j.1750-2659.2010.00153.x. Epub 2010 Oct 1.PMID: 20958935 [PubMed in process]
- 17. Delany, J., J. Rodriguez, D. Holmes, M. Pentella, K. Baxley, and K. Shah. CDC/APHL Laboratory Biosafety Competencies for the BSL-2, BSL-3, and BSL-4 Laboratories. MMWR, Supplement, April 15, 2011.
- 18. Pentella, M. Infections Among Travelers: The world is not a theme park. Advance for Medical Laboratory Professionals. Vol. 23, No. 8. April 25, 2011. http://laboratorian.advanceweb.com/ebook/magazine.aspx?EBK=MT042511#
- 19. Polgreen PM, Sparks JD, Polgreen LA, Yang M, Harris ML, Pentella MA, Cavanaugh JE. A statewide outbreak of Cryptosporidium and its association with the distribution of public swimming pools. Epidemiol Infect. 2011 Sep 27:1-7.
- 20. Miller, M.J., R. Astles, T. Baszler, K. Chapin, R. Carey, L. Garcia, L. Gray, D. Larone, M. Pentella, A. Pollock, D.S. Shapiro, E. Weirich, and D. Wiedbrauk. Guidelines for safe work practices in Human and Animal medical diagnostic laboratories. MMWR, Supplement, January 6, 2012.
- 21. Tyrell, F., G. Budnick, T. Elliott, L. Gillim-Ross, M. Hildred, P. Mahlmeister, N. Parrish, M. Pentella, J. Vanneste, Y. Wang, and A. Starks. Probability of negative *Mycobacterium tuberculosis* complex cultures based on time-to-detection of positive cultures: a multi-center evaluation of commercial broth-based culture systems. Journal of Clinical Microbiology (Paper #JCM0125-12R1). Accepted for publication July 19, 2012.
- 22. Horvat, R.T., and M. Pentella. From the Arm to the Test Tube: Laboratory's New Role in Tuberculosis Testing. Clinical Microbiology Newsletter. Vol 34, No. 15. P.117-125. August 1, 2012.
- 23. Pentella, M. Diagnosing Latent Tuberculosis in the 21st century. Lab Matters, Summer 2012. P. 19.

- 24. Dubravac, T., T.F. Gahan, M.A. Pentella. Use of the Abbott Architect HIV antigen/antibody assay in a low incidence population. Journal of Clinical Virology. Vol. 58S. 2013. E76-78.
- 25. Hutchinson, A.B.; S.F. Etheridge, L.G. Weslowski, R.K. Shrestha, M. Pentella, B. Bennett, P.G. Farnham, T. Sullivan, P. Patel, and B.M. Branson. Costs and outcomes of laboratory diagnostic algorithms for the detection of HIV. Journal of Clinical Virology. Vol. 58S. 2013. E2-7.
- 26. Laboratory Testing for the Diagnosis of HIV Infection: Updated Recommendations and a quick reference guide can be downloaded from the CDC Division of HIV/AIDS Prevention's website at http://www.cdc.gov/hiv/testing/lab/guidelines. June 27, 2014.
- 27. Collette Fitzgerald, Mary Patrick, Anthony Gonzalez, Joshua Akin, Christopher Polage, Kate Wymore, Laura Gillim-Ross, Karen Xavier, Jennifer Sadlowski, Jan Monahan, Sharon Hurd, Suzanne Dahlberg, Robert Jerris, Renee Watson, Monica Santovenia, David Mitchell, Cassandra Harrison, Melissa Tobin-D'Angelo, Mary DeMartino, Michael Pentella, Celere Leonard, jafar razaq, Carrianne Jung, Ria Achong-Bowe, Yaaqobah Evans, Damini Jain, Billie Juni, fe leano, Trisha Robinson, Kirk Smith, rachel gittelman, Charles Garrigan, Irving Nachamkin, and Campylobacter diagnostics study working group [Paper #JCM01925-15R2], "Multicenter evaluation of clinical diagnostic methods for detection and isolation of Campylobacter spp. from stool." Journal of Clinical Microbiology. May 2016; 54:5; 1209-12-15.
- 28. Nasrullah, Muazzam, L.G. Wesolowski, S.F. Ethridge, K. Cranston, M. Pentella, R.A. Myers, J.T. Rudrik, A.B. Hutchinson, S.B. Bennett, and B.G. Werner. Acute Infections, Cost and Time to Reporting Of HIV Test Results in Three U.S. State Public Health Laboratories. 2016. Journal of Infection. Posted online May 26, 2016. http://www.sciencedirect.com/science/article/pii/S0163445316300913
- 29. Zhowandai, M.H, Jepson, R. T. Ghajar, M., Tyrrell, F, Pentella, M.A. A collaborative study on the performance characteristics of Xpert MTB/RIF in low incidence United States populations. Submitted for publication, November 2016.

Books/Monographs

Chapters

 Pentella, M.A. Rapid methods and automation in the microbiology laboratory. In Textbook of Diagnostic Microbiology. Mahon, C.R. and Manuselis, Jr. G. editors. 1995. W.B. Saunders Co. Philadelphia, Pa.

- 2. Pentella, M.A. Sexually transmitted diseases. In Textbook of Diagnostic Microbiology. Mahon, C.R. and Manuselis, Jr. G. editors. 1995. W.B. Saunders Co. Philadelphia, Pa.
- 3. Pentella, Michael A., Kostle, Pamela A., DesJardin, Lucy, Gilchrist, Mary J.R., Biosafety for Microorganisms Transmitted Primarily by the Airborne Route Fungi, Mycobacteria and Selected Bacteria, in Biological Safety (4th Ed.). D.O. Fleming & D. Hunt. ASM Press, Washington, D.C. 2006
- Pentella, M.A., Overview of the Biosafety Risk Assessment Process, in Anthropology of Biosafety XI: Worker Safety Issues. J.Y. Richmond and K.B. Byers. American Biological Safety Association, Mundelein, IL. 2008.
- 5. Pentella, M.A. APIC Text of Infection Control and Epidemiology. 3rd Edition. West Nile Virus Chapter 87. Carrico, R. editor. 2009. Association for Professionals in Infection Control and Epidemiology. Washington, DC.
- Shah, K. and M. A. Pentella, Laboratory Biosafety Competency Development for the BSL-2, 3, and 4. in Anthropology of Biosafety XII: Worker Safety Issues. J.Y. Richmond and K.B. Byers. American Biological Safety Association, Mundelein, IL. 2010.
- 7. Pentella MA, Mumps Epidemic: lessons learned from the frontline of testing. In Hunting KL and Gleason BL (eds): *Essential Case Studies in Public Health: Putting Public Health into Practice.* Jones and Bartlett Learning, Sudbury MA. 2011.
- 8. Terry, A., C. Atchison, and M. Pentella. 2009 H1N1 Influenza Epidemic in Iowa. In Landesman, L.Y and I.B. Weisfuse (eds): Case Studies in Public Health Preparedness and Response to Disasters. Jones and Bartlett Learning. Sudbury MA. 2013.
- Snyder, J.A. and M.A. Pentella. Bioterrorism (Chapter 23). Truant, A.L., Editor, Manual of Commercial Methods in Clinical Microbiology. 2nd Edition. (ISBN 1119021863) May 2016.
- 10. Pentella, Michael A. Biosafety for Microorganisms Transmitted Primarily by the Airborne Route Fungi, Mycobacteria and Selected Bacteria, in Biological Safety (5th Ed.). Submitted for publication September 2016.
- 11. Pentella, Michael A, Components of a Biosafety Program for a Clinical Laboratory, in Biological Safety (5th Ed.). Submitted for publication September 2016.

Electronic Publications

Abstracts

- 1. Kauffman, L.M., M.A. Pentella, and J.A. Franco. 1980. Evaluation of different methods of preserving urine specimens for routine cultures. ASM abstracts.
- 2. Pentella, M.A. 1982. Comparison of different methods for identification Hemophilus sp. ASM abstracts. March, 1982.
- 3. Pentella, M.A., B.H. Kwa, and A.C. Vickery. 1988. The nude mouse as a model for cryptosporidiosis in the immunodeficient host. Abstract of the 37th annual meeting of the American Society of Tropical Medicine and Hygiene. No. 109.
- 4. Pentella, M.A., B.H. Kwa, K. Balasky, and A.C. Vickery. Detection of Cyclospora sp. In an Andean community in Venezuela. Abstract 1994.
- 5. Pentella, M.A., B.H. Kwa, and J. Lauretta. Prevention of Blood Culture Contamination by Quality Improvement. Abstract. Southeastern Branch American Society for Microbiology. October 30, 1997.
- 6. Yangco, B.G., S. Chandler, T. Fisher, J. Lauretta, M. A. Pentella. Reduction of Postoperative Staphylococcus aureus Infections in Open Heart Surgery By Intranasal Mupirocin. Abstract. 39th Annual Meeting of the Interscience Conference on Antimicrobial Agents and Chemotherapy. September 28, 1999.
- 7. Pentella, M.A., T. Fisher, S. Chandler, T. Britt-Ohrmund, B.H. Kwa, and B.G.Yangco. Are disinfectants accurately prepared for use in hospital patient care areas? Abstract. Fourth Decennial International Conference on Nosocomial and Health care-Associated Infections. March 9, 2000.
- 8. Gompf, S.G., J.C. Sniffen, M.A. Pentella, T.C. Gompf, A.L. Vincent, U. Shah, and J. Bedi. Community-acquired Methicillin Resistant Staphylococcus aureus (MRSA) infections in children. Abstract. Meeting of Infectious Disease Society of America. September 7, 2000.
- 9. Pentella, M.A., B.H. Kwa, and B.G. Yangco. Reduction of Vancomycin Resistant Enterococcal (VRE) transmission in an acute care facility through appropriate disinfectant use. Abstract. 40th Annual Meeting of the Interscience Conference on Antimicrobial Agents and Chemotherapy. September 19, 2000
- 10. Pentella, M.A., R. Yogendra, P. Bhuta, D. Brewer, and B. G. Yangco. Home Laundering: Is it a good infection control practice? Abstract. 42nd Annual Meeting of the Interscience Conference on Antimicrobial Agents and Chemotherapy. September 29, 2002.

- 11. Kostle, P.A., M. Pentella, W. Sanderson. Sample processing recovery operation of *Bacillus anthracis* from environmental sampling media. Abstract. AIHA May 2004.
- 12. Boo T., M. Pentella, R. Volk, L. Desjardin, S. Jirsa, M. Gilchrist, and P. Hartley. Pilot study of oropharyngeal Vaccinia carriage in Smallpox vaccines Iowa 2003. Abstract. International Conference on Emerging Infectious Diseases. February 29, 2004.
- 13. Mera, R., L. A. Miller, M. A. Pentella, T. R. Fritsche, and R. M. Jones. Pneumococcal Conjugate Vaccine Effect on *S. pneumoniae* Serotype Carriage and Multidrug-Resistance in the United States. Abstract. Interscience Conference on Antimicrobial Agents and Chemotherapy. 2006.
- Mera, R., L. A. Miller, M. A. Pentella, T. R. Fritsche, and R. M. Jones. A Mathematical Model for the Impact of the Conjugate Vaccine on S. pneumoniae Vaccine and Non-vaccine serotypes. Abstract. Infectious Disease Society of America. 2006.
- Mera, R., L. A. Miller, Heather Madsen, M. A. Pentella, T. R. Fritsche, and R. M. Jones. Differential Propensity of Serotype Groups to Switch and Acquire Multidrug-Resistance after the Introduction of the Pneumococcal Conjugate Vaccine in the United States. Abstract. 17th European Congress of Clinical Microbiology and Infectious Diseases and 25th International Congress of Chemotherapy. 2007.
- 16. Polgreen, P., L. Bohnett, J. Cavanaugh, S. Gingerich, L. Desjardin, and M. Pentella. A model to predict the duration of viral shedding after onset of symptoms for mumps. Abstract. Infectious Disease Society of America. 2007.
- 17. Lynch, A., T. Gahan, and M. Pentella. Four years of interferon gamma release assay (IGRA) testing: Iowa's perspective. Abstract. Association of Public Health Laboratories. 2012.
- 18. Werner, B., M. Pandori, L. Gillim-Ross, B. Bennett, and M. Pentella. New HIV-1/HIV-2 diagnostic testing algorithm. Abstract. Association of Public Health Laboratories. 2012.
- 19. Dubravac, T., T. Gahan, and M. Pentella. HIV antigen/antibody testing in a low incidence population. Abstract. HIV Diagnostic Conference. 2012.
- 20. Kazianis, A., L. Randall, P.A. Borne, B.G. Werner, T. Stiles, and M.A. Pentella. Performnace of the Abbott Architect HIV Ag/Ab Combo Assay in a low Incidence Population. Abstract. HIV Diagnostic Conference 2016.

21. Hempstead, A, M. Doucette, N. Medina, J. Adams, T. Griswold, A. Osinski, E. Fortes, T. Stiles, and M. Pentella. Comparative Analysis of Molecular Typing Methods for Subcluster Identification within a Salmonella enterica serovar Typhimurium Local Outbreak. Abstract. CDC Advanced Molecular Detection Conference 2016.

B. Areas of Research Interest/Current Projects

Areas of Research Interest

- 1. Bioterrorism Preparedness
- 2. Infectious Disease Prevention
- 3. Antimicrobial Resistance

Current Projects

- 1. Next Generation Sequencing for detection of viruses and bacteria
- 2. MALDI-ToF for identification of Mycobacteria

C. Grants Received

Title		
Source P.I.	% Effort % Salary Support	Direct Funds Period of Funding
1 -1.	76 Galary Support	renod of Funding
Biological Agents Analyses EPA Project Director	5%	\$50,000 2/7/2003- 2/28/2004
Implementing Food Safety Recommer States NIH Project Director	ndations in 10%	\$48,300 7/21/2004- 10/21/2004
CDC Cooperative Agreement for Publ Preparedness and Response for Biote CDC Project Director		\$9,680,149 7/29/2002- 8/30/2013
Innovative Projects to Enhance Food S	Safety 5%	\$20,460 2/17/2005-

Organization

APHL Project Director		6/10/2005
Influenza Surveillance and Preparedness Training for Iowa Clinical Laboratories APHL Project Director	10%	\$16,225 10/24/2006- 5/30/2007
Measles IgM Serology EIA Comparison Study Project Director	2%	\$30,152 1/22/2011- 6/30/2011
Innovation in Quality Public Health Lab Practice Project Director	2%	\$15,000 11/1/11- 6/15/11
TB Nucleic Acid Amplification Testing (NAAT) Improvement and Expansion Project Director	2%	\$35,000 1/1/2011 – 6/30/2011
Evaluation of Molecular Tests for TB Services Project Director	2%	\$77,830 5/15/2012- 6/30/2013
Exploring Novel Approaches to Shared TB Lab Services Project Project Director	2%	\$90,697 7/15/2012- 6/30/2013
Right Size Influenza Virologic Surveillance Project	2%	\$15,000 12/14/2012- 6/30/2013

D. Invited Presentations

Year

Conference Presentations/Posters

Title

 <u> </u>	O. garrization

- 2014 Biosafety Competencies: Embraced or Abandoned CDC Biosafety Conference (Atlanta)
- 2014 How Norovirus exemplifies a successful partnership to support testing needs CDC ELC Meeting (Atlanta)
- 2014 Regulation of Laboratory developed tests: Consideration for Public Health APHL

ASCLS Annual Meeting (Atlanta)

- Annual Meeting (Little Rock) 2014 What can APHL do to improve biosafety in our nation's labs? **APHL** Annual Meeting (Little Rock) 2014 Influenza Testing: Culture, rapid and molecular Massachusetts Department of Public Health Annual Influenza Update for ILI Providers (Teleconference) 2014 Using Risk Analysis to Assess Biosafety ASCP (Teleconference) 2014 Ebola Update Massachusetts Department of Public Health Public Health Council (Boston) 2015 A rational approach to emerging pathogen biosafety considerations. National Laboratory Training Network (Teleconference) 2015 Laboratory Tools for the Epidemiologist Massachusetts Department of Public Health Bureau of Infectious Diseases (Boston) 2015 Biosafety Workshop APHL Annual Meeting (Indianapolis) 2015 Implementing an Effective Biosafety Program APHL Annual Meeting (Indianapolis) 2015 What can be done to improve biosafety in our nation's labs? CDC CLIAC Committee (Atlanta) 2015 Influenza – A Global Perspective Massachusetts Department of Public Health Annual Influenza Update for ILI Providers (Teleconference) 2015 Moving From Tubes to Lasers With a New Risk Assessment ASM Annual General Meeting (New Orleans) 2015 Massachusetts Ebola Experiences: Connecting to Sentinel Labs – NLTN Annual in person meeting (Atlanta) 2015 Components of a Biosafety Program: what needs to be in place to achieve a culture of biosafety? NLTN Annual in person meeting (Atlanta) 2015 Biosafety and Risk Assessment for New Molecular Methods CDC TB Diagnostics Meeting (Atlanta) 2015 Decontamination and Waste Management Full day workshop CDC Leadership Program (Atlanta)
- 2016 HIV Diagnostics Conference

Annual Meeting (Atlanta)

2015 Components of a Biosafety Program

2016 Three biosafety presentations at the First Joint Meeting of the Northeast Association for Clinical Microbiology and Infectious Disease and the Northeast Branch of ASM conference on April 12, 2016

2015 Implementing an Effective Biosafety Program Laboratory Response Network

B. Other Professional Service

1. Referee Manuscripts
Year Title

2. Organize Conference, Paper Session, etc.

Year <u>Title</u>

- Attended meeting on select agent issues at March 20, 2015 Listening Session at the White House
- 3. Departmental, Collegiate or University Committees (other than teaching)

 Year Title

4. State or National Committees

2004- present	Association of Public Health Laboratories	Member, Infectious Disease Committee
2006-2015	Association of Public Health Laboratories	Chair, HIV Steering Committee
2004-2013	Association of Public Health Laboratories	Member, Performance Standards Committee
2006-2009	Association of Public Health Laboratories	Co-Chair, HIV Testing Algorithm Committee
2005- present	Association of Public Health Laboratories	Influenza Testing Algorithm Committee
2006-2011	Association of Public Health Laboratories	Laboratory Performance Standards Committee
2015- present	Association of Public Health Laboratories	Chair, Biosafety and Biosecurity Committee
2016-2017	Association of Public Health	Board of Directors,

Laboratories

Member at Large

5. Professionally Relevant Community Involvement Year Activity

6.	Professional Year	Consulting Organization	Polo
	<u>1 Cai</u>	Organization	Role
	1987	Investigation in botulism outbreak for attorney representing patient	Consultant
	1993	State of Florida Prosecuting Attorney consultant in sexual abuse case regarding Neisseria gonorrhoeae	Consultant
	1995	Consultant for attorney of manufacturer investigating Salmonella outbreak associated with orange juice	Consultant
	2001	Consultant for State of Florida Prosecuting Attorney, Polk County, in case involving blood alcohol level impacted by bacterial or fungal contamination of specimen. Designated as expert witness by judge	Consultant
	2003	Consultant for public defender in sexual abuse case regarding Chlamydia. Johnson County Iowa.	Consultant

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Dr. Pentella is a Clinical Professor at the University of Iowa, College of Public Health. He previously directed the Massachusetts State Public Health Laboratory and was associate director at the Iowa State Hygienic Laboratory. His experience spans over forty years in clinical microbiology and public health laboratories. He is certified as an American Board of Medical Microbiology Diplomate, a specialist in microbiology through the American Society for Clinical Pathology, and certified in infection control through the Association of Professionals in Infection Control. Dr. Pentella is a member of the Association of Public Health Laboratories (APHL) Infectious Disease Committee, the APHL Biosafety and Biosecurity Committee, and the American Society for Microbiology (ASM) Lab Practices Committee. Over the years, he has made several contributions that have improved diagnostic testing assays. He has written over 40 articles and nine book chapters.

