

Kimberly E. Walker, Ph.D., MT(ASCP)
Program Director, Medical Diagnostics
303-C Willard Hall

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Contact Information: Department of Medical & Molecular Sciences
University of Delaware
303-C Willard Hall Education Building
kewalker@udel.edu
302-831-8737

Education: May, 1993 Ph.D., Microbiology and Immunology,
Medical College of Virginia / VA Commonwealth University, Richmond, VA
"Isolation and Characterization of the Dermonecrotic Toxins of *Bordetella* species"
Advisor: Alison A. Weiss, Ph.D.

May 1986 B.S., Medical Technology,
University of Maryland at Baltimore, Baltimore, MD

Post Graduate 2000-01, ASM/AAAS Congressional Science Fellow,
Personal Office of Paul D. Wellstone, US Senator for Minnesota
Supervisor: John H. Gilman, M.D., J.D.

July, 1999-August, 2000 Postdoctoral Fellow, UMB
Dental School/Morgan State University, Baltimore, MD
Advisor: Henry N. Williams, Ph.D.

March 1997-July 1999, Post-doctoral fellow, Center of
Marine Biotechnology, UMBI, Baltimore, MD
Advisor: M. Robert Belas, Ph.D.

June 1993-Feb 1997, Post-doctoral fellow, Center for
Vaccine Development, UMAB, Baltimore, MD
Advisor: James P. Nataro, M.D., Ph.D.

Certification: ASCP Medical Technologist, 1986-current

Employment History:

Academic 2020-2022, Program Director, CLSC and PHBT,
Lorain County Community College, Elyria, Ohio

2001-2011, Assistant Professor of Medicine, Department of
Medical and Research Technology (DMRT),
University of Maryland School of Medicine, Baltimore, MD

2006-2011, Graduate Program Director, DMRT

Other Employment 2011-2020, Federal Specialist: Clinical Microbiology and Biosafety
American Society for Microbiology, Washington, DC

1986-1987, Medical Technologist, The Allentown Hospital and
Allentown Osteopathic Medical Center (now St. Luke's)

Professional Societies: National Association of Advisors for the Health Professions (NAAHP)

American Society for Microbiology (ASM)
American Society of Clinical Pathologists (ASCP)
American Society for Clinical Laboratory Science (ASCLS)
American Association for Clinical Chemistry (AACC)
American Association for the Advancement of Science (AAAS)

Honors and Awards: 2020, ASM Exceptional Achievement Award for COVID Registry Activities
Phi Kappa Phi Honor Society
1990-1992, ASM Pre-doctoral Minority Fellowship
1990, ASM Travel Award Recipient
1989 NSF Minority Graduate Fellow Honorable Mention

Administrative Service: 2022: Health and Wellness Dean Search Committee
2021 – current: LCCC Curriculum Committee
2007-2010: School of Medicine Communications Advisory Panel
2006-2011: Chair of Graduate Program Committee, DMRT
2003-2009: School of Medicine Faculty Assembly elected representative.

Local and National Service: Maryland Forensic Laboratory Advisory Committee, 2008-2013
Tele-Screener, AAAS Kavli Science Journalism Award, 2010
AAUW International Fellowship Panel, 2009-2011
Radio Screener, AAAS Science Journalism Award, 2007-08
Mentor, UMBC Meyerhoff Student, 1997-2012

Teaching Service: Course Director (full responsibility) for:
MMSC 407/607 Clinical Chemistry
MMSC 605 Graduate Regulations and Fiscal Matters
MMSC 438/439 Diagnostic Bacteriology
MMSC 402 Body Fluid Analysis
CLSC 221 -Clinical Chemistry 10 credits
CLSC 213 -Clinical Microbiology 9 credits
PHLB 121 -Phlebotomy Practicum 3 credits
MEDT 490-Pathogenic Microbiology 4 credits
MEDT 471-Parasitology/Mycology 3 credits
MEDT 454-Applied Cellular and Mol. Biology 4 credits
MEDT 422-Computer Applications 2 credits
MEDT 628-Graduate Seminar 1 credit
MEDT 687-Quality Control and Regulations 2 credits
MEDT 671-Molecular and Cellular Biology 3 credits
MEDT 491-Clinical Immunology 4 credits

Shared Responsibility:
PHLB 112 – Introduction to Lab
MEDT 410-Product Develop & Commercial Appl.1 credit
MEDT 402-Comprehensive Review 1 credit
MEDT 408-Research Project 1-3 credits

Invited Lecture October 4, 2018: Georgetown University, MCB 606: Public Policy for Scientists
“*Science Communication: The Federal Agencies and Congress*”

Publications: *Duodenoscope Surveillance Sampling and Culturing: Reducing the Risks of Infection*
Developed by the FDA/CDC/ASM Working Group on Duodenoscope Culturing
[February 2018](#)

Journal articles:

Caliendo, A., M. Couturier, C. Ginocchio, K. Hanson, M. Miller, **K. Walker**, and G. Frank. 2016. Maintaining Life-Saving Testing for Patients with Infectious Diseases: IDSA, ASM, and PASCV Recommendations on the Regulation of Laboratory Developed Tests. 2016. [Clin Infect Dis. 63\(2\): 151-154.](#)

Walker, K. E. and Meghan O'Brien. 2015. The Policy of Microbiology. [Clinical Microbiology Newsletter. 37:199-202.](#)

Snyder, A., H. Williams, M. Baer, **K. Walker**, and O. Stine. 2002. 16S rDNA Sequence Analysis of Environmental *Bdellovibrio* and Like Organisms (BALO) Reveals Extensive Diversity. [International Journal of Systematic and Evolutionary Microbiology. 52:2089-2094.](#)

Walker, K., S. Moghaddame-Jafari, C. Lockett, D. Johnson, and R. Belas. 1999. ZapA, the IgA-degrading metalloprotease of *Proteus mirabilis*, is avirulence factor expressed specifically in swarmer cells. [Mol. Microbiol. 32:825-826](#)

Temple, L., A. Weiss, **K. Walker**, H. Barnes, V. Christensen, D. Miyamoto, C. Shelton, and P. Orndorf. 1998. *Bordetella avium* virulence measured *in vivo* and *in vitro*. [Infect. Immun. 66:5244-5251](#)

Nataro, J.P., Y. Deng, Y. Deng, and **K. Walker**. 1994. AggR, an Rns homolog, is required for the expression of aggregative adherence fimbria I in entero-aggregative *Escherichia coli*. [J. Bact. 176:4691-4699](#)

Walker, K.E. and A. A. Weiss. 1994. Dermonecrotic toxin sequences in the genus *Bordetella*. [Infect. Immun. 62:3819-3828](#)

Weiss, A., A. Melton, **K. Walker**, C. Andraos-Selim, and J. Meidl. 1989. Use of the promoter fusion transposon *Tn5lac* to identify mutations in *Bordetella pertussis vir*-regulated genes. [Infect. Immun 57:2674-2682](#)

Book Chapters:

Kimberly E. Walker, Connie R. Mahon, and George Manuselis. *Enterobacteriaceae*. In: Mahon, C., Lehman, D. and Manuselis, G.(Eds.), *Textbook of Diagnostic Microbiology*. Philadelphia, PA: W.B. Saunders, Co., 6th Edition 2018

Kimberly E. Walker, Connie R. Mahon, and George Manuselis. *Enterobacteriaceae*. In: Mahon, C., Lehman, D. and Manuselis, G.(Eds.), *Textbook of Diagnostic Microbiology*. Philadelphia, PA: W.B. Saunders, Co., 5th Edition 2015

Kimberly E. Walker, Amy J. Horneman, Connie R. Mahon, and George Manuselis. *Enterobacteriaceae*. In: Mahon, C., Lehman, D. and Manuselis, G.(Eds.), *Textbook of Diagnostic Microbiology*. Philadelphia, PA: W.B. Saunders, Co., 4th Edition 2010

Kimberly E. Walker, Amy J. Horneman, Connie R. Mahon, and George Manuselis. *Enterobacteriaceae*. In: Mahon, C., Lehman, D. and Manuselis, G.(Eds.), *Textbook of Diagnostic Microbiology*. Philadelphia, PA: W.B. Saunders, Co., 3rd Edition 2007

Selected Abstracts:

K. Walker., K. Fernando and J. Girón. 2007. Transposon mutagenesis of *Bacteriovorax stolpii* UKi2 and screening for *pilT* mutants. American Society for Microbiology (ASM) Annual Meeting

K. Walker. 2004. Identification of *Bacteriovorax* Flagellar Amplicons Using Primers with Homology to *fliA*, *flaA*, *flhDC*, *fliE*, *fliC*, *motAB*, and *flgC* from *E. coli*, *Yersinia* ssp. and *Pseudomonas* ssp. ASM Annual Meeting

Snyder, A., **K. Walker**, J. Johnson, and H. Williams. 2000. Environmental Bdellovibrios exhibit widespread molecular diversity using 16S PCR-RFLP and ribotyping analyses. ASM Annual Meeting

Walker, K., S. Mogghadame-Jafari, and R. Belas. 1998. Analysis of the genes encoding an ABC transport mechanism exporting the *Proteus mirabilis* ZapA IgA degrading metalloprotease. Fallen Leaf Lake Conference

Walker, K., C. Lockett, D. Johnson, and R. Belas. 1998. A metalloprotease negative *P. mirabilis* shows altered virulence in a mouse model of ascending urinary tract pathogenesis. ASM Annual Meeting

Walker, K. and J. Nataro. 1997. Domain structure-function studies of the AAF/I regulator, AggR. ASM Annual Meeting

Walker, K., and J. Nataro. 1995. Structure-function studies with AggR, the fimbrial regulator in entero-aggregative *Escherichia coli*. ASM Annual Meeting

Walker, K.E. and A.A. Weiss. 1993. Molecular studies of the *Bordetella* dermonecrotic toxin. Abstracts of the 16th Annual Extra-Chromosomal Elements and Molecular Genetics Meeting in PLASMID **30**:183

Walker, K. and A. Weiss. 1992. A genetic analysis of the dermonecrotic toxin activities in the genus *Bordetella*. ASM Annual Meeting

Walker, K. and A. Weiss. 1990. A comparative study of the dermonecrotic toxin activities of serotype D *Pasteurella multocida* and the genus *Bordetella*. Sixth Annual International Symposium on Pertussis

References:

Available upon request