

CURRICULUM VITAE

Nathan A. Ledeboer PhD

Associate Professor
Department of Pathology
Division of Administration

OFFICE ADDRESS:

Froedtert Hospital
9200 W Wisconsin Ave
Milwaukee, WI 53226

BIBLIOGRAPHY

Refereed Journal Publications/Original Papers

1. Boddicker, J.D.*, Ledeboer, N.A.*, Jagnow, J., Jones, B.D., and Clegg, S. Differential Binding to, and Biofilm Formation on, HEp-2 Cells by Salmonella enterica Serovar Typhimurium is Dependent Upon Allelic Variation in the fimH Gene of the fim Gene Cluster. *Mol Microbiol* 2002;45(5):1255-1265. * - These authors contributed equally to this work.
2. Buonaccorsi J.N. and Ledeboer N.A. A Tile Layer's Worst Nightmare: Balamuthia mandrillaris. *J Clin Microbiol.* 2011; 49(5):1707, 2083.
3. Ledeboer, N.A. and Jones, B.D. Exopolysaccharide Sugars Contribute to Biofilm Formation by Salmonella enterica serovar Typhimurium on HEp-2 Cells and Chicken Intestinal Epithelium. *J Bacteriol* 2005;187(9):3214-3226.
4. Patel J., Graham M.B., Presberg K.W., Ledeboer N.A., Lipchik R.J. A rare case of Pneumocystis jirovecii pneumonia: in a non-immunocompromised host. *Case Report in Press, Infectious Diseases in Clinical Practice.*
5. Ledeboer, N.A. Sticking Around: The Role of Fimbriae, Cellulose, and Colanic Acid in Biofilm Formation by Salmonella enterica serovar Typhimurium on Epithelial Cell Surfaces. PhD Dissertation - University of Iowa, Carver College of Medicine. 2005.
6. Anderson N.W., Rao A., and Ledeboer N.A. The Rare Identification of a Common Disease: CMV Cervicitis. *Case Report in Press, J. Clin. Microbiol.*
7. Ledeboer, N.A., Frye, J.G., Porwollik, S., McClelland, M., and Jones, B.D. Salmonella enterica serovar Typhimurium requires the Lpf, Pef, and Tafi Fimbriae for biofilm formation on HEp-2 tissue culture cells and chicken intestinal epithelium. *Infection and Immunity* 2006;74(6):3156-3169.
8. Anderson N.W. and Ledeboer N.A. Endemic Mycoses: Diagnostic Pitfalls. *Case Report in Press, J. Clin. Microbiol.*
9. Daly, M.W., Riddle, D., Ledeboer, N.A., Dunne, W.M., and Ritchie D. Successful Use of Tigecycline for Treatment of Pneumonia and Empyema Caused by Carbapenemase (KPC) Producing Klebsiella pneumoniae. *Pharmacotherapy* 2007; 27(7):1052-1057.
10. Ledeboer, N.A., Das, K., Eveland, M., Roger-Dalbert, C., Mailler, S., Chatellier, S., and Dunne, W.M. Evaluation of a Novel Chromogenic Agar Medium for Isolation and Differentiation of Vancomycin-Resistant Enterococcus faecium and Enterococcus faecalis. *J Clin Microbiol.* 2007;45(5):1556-60.
11. Ledeboer, N.A., Tibbetts, R.J., and Dunne, W.M. A New Chromogenic Agar Medium, ChromID VRE, to Screen for Vancomycin Resistant Enterococcus faecium and faecalis. *Diagnostic Microbiology and Infectious Diseases.* 2007;59(4):477-9
12. Hermann, D.J., Peppard, W.J., Ledeboer, N.A., Theesfeld, M.L., Weigelt, J.A., Buechel, B.J. Linezolid for the Treatment of Drug-Resistant Infections. *Expert Reviews in Anti-Infective Therapies.* 2008; 6(6):825-848.
13. Mulligan E.K., Germer J.J., Arens M.Q., D'Amore K.L., Di Bisceglie A., Ledeboer N.A., Moser M.J., Newman A.C., O'Guin A.K., Olivo P.D., Podzorski D.S., Vaughan K.A., Yao J., Elagin S.A. and

- Johnson S.C. Detection and Quantitation of Hepatitis C Virus RNA by MultiCode-RTx Real-time PCR Targeting the 3'-Untranslated Region. *J Clin Microbiol.* 2009; 47(8) 2635-2638.
14. Kumar S., Chusid M.J., Willoughby R.E., Havens P.L., Kehl S.C., Ledebor N.A., Li S.H., and Henrickson K.J. Introduction of a Novel Swine-Origin Influenza A (H1N1) Virus into Milwaukee, Wisconsin in 2009. *Viruses.* 2009; 1(1) 72-83.
 15. He J., Bose M.E., Beck E.T., Fan J., Tiwari S., Metallo J., Jurgens L.A., Kehl S.C., Ledebor N.A., Kumar S., Weisburg W., and Henrickson K.J. Rapid Multiplex RT-PCR typing of influenza A and B, and subtyping of influenza A into H1, 2, 3, 5, 7, 9, N1 (human), N1 (animal), N2 and N7 including typing of novel swine-origin Influenza A (H1N1) Virus during current 2009 outbreak in Milwaukee, Wisconsin. *J. Clin. Microbiol.* 2009 47: 2772-2778.
 16. Bose M.E., Beck E.T., Ledebor N.A., Kehl S.C., Jurgens L.A., Patitucci T., Witt L., LaGue E., Darga P., He J., Fan J., Kumar S., and Henrickson K.J. Rapid semi-automated Subtyping of influenza during the 2009 swine-origin influenza A H1N1 virus epidemic in Milwaukee, Wisconsin. *J. Clin. Microbiol.* 2009; 47: 2779-2786.
 17. Peterson J.F., Riebe K.M., Hall G.S., Wilson D., Whittier S., Palavecino E., and Ledebor, N.A. Spectra MRSA, A New Chromogenic Agar Medium to Screen for Methicillin-Resistant *Staphylococcus aureus*. *J. Clin. Microbiol.* 2010; 48(1) 215-219.
 18. Kumar S., Chusid M.J., Willoughby R.E., Havens P.L., Kehl S.C., Ledebor N.A., Li S.H., and Henrickson K.J. Epidemiologic Observations from Passive and Targeted Surveillance during the First Wave of the 2009 H1N1 Influenza Pandemic in Milwaukee, WI. *Viruses.* 2010; 2(4) 782-795.
 19. Peterson J.F., Dionisio A.A., Riebe K.M., Hall G.S., Wilson D.A., Whittier, S., DiPersio J.R., and Ledebor N.A. Alternative Use for Spectra MRSA Chromogenic Agar in Detection of Methicillin Resistant *Staphylococcus aureus* from positive blood cultures. *J. Clin. Microbiol.* 2010;48(6) 2265-2267
 20. Peterson, J.P., Doern C.D., Kallstrom G., Riebe K.M., Sander T., Dunne W.M., and Ledebor, N.A. Evaluation of Spectra VRE, a new chromogenic agar medium designed to screen for vancomycin-resistant *Enterococcus faecalis* and *Enterococcus faecium*. *J Clin Microbiol.* 2010;48(12) 4627-4629.
 21. Buchan B.W. and Ledebor N.A. Identification of two borderline oxacillin resistant strains of *Staphylococcus aureus* by one of three chromogenic agars evaluated for the detection of MRSA from clinical specimens. *Am J Clin Pathol.* 2010;134(6) 921-927.
 22. Jannetto P.J., Buchan B.W., Vaughan K.A., Ledford J.S., Anderson D.K., Henley D.C., Quigley N.B., and Ledebor N.A. Real-Time Detection of Influenza A, Influenza B and Respiratory Syncytial Virus A/B in Respiratory Specimens using Nanoparticle Probes. *J Clin Microbiol.* 2010;48(11) 3997-4002.
 23. Buchan B.W., Ledebor N.A., and Edmiston C.E. *Acinetobacter* infections - Epidemiology and pathogenesis of a significant healthcare-associated pathogen (Review). *Healthcare Infection.* 2011; 16 1-12.
 24. Yu Z., Vodanovic-Jankovic S., Ledebor N.A., Huang S.H., Rajski S.R., Kron M., and Shen B. Tirandamycins from *Streptomyces* sp. 17944 Inhibiting the Parasite *Brugia malayi* Asparagine tRNA Synthetase. *Organic Letters.* 2011; 13(8):2034-2037.
 25. Peterson J.F., Pfaller M.A., Diekema D.J., Rinaldi M.G., Riebe K.M., and Ledebor N.A. Multicenter Comparison of the VITEK 2 Antifungal Susceptibility Test with the CLSI Broth Microdilution Reference Method for Testing Caspofungin, Micafungin, and Posaconazole against *Candida* spp. *J Clin Microbiol.* 2011; 49(5):1765-1771.
 26. Patel, P.A., Ledebor, N.A., Ginocchio, C.C., Condon, S., Bouchard, S., Qin, P., Karchmer, T., and Peterson L.R. Performance of the BD GeneOhm™ MRSA Achromopeptidase (ACP) Extraction for Real-time PCR Detection of Methicillin-resistant *Staphylococcus aureus* (MRSA) in Nasal Specimens. *J Clin Microbiol.* 2011; 49(6):2266-2268
 27. Ledebor N.A. and Hodinka R.L. Molecular Detection of Resistance Determinants (Review). *J Clin Microbiol.* 2011; S1(1)
 28. Buchan B.W., Peterson J.F., Cogbill C.H., Quigley N.B., Jannetto P.J., and Ledebor N.A. Evaluation of a microarray-based genotyping assay for the rapid detection of cytochrome P450 2C19 *2 and *3 polymorphisms from whole blood using nanoparticle probes. *Am J Clin Pathol.* 2011; 136(4):604-608
 29. Buchan, B.W., Riebe, K.M., and Ledebor, N.A. Comparison of matrix assisted laser desorption/ionization time-of-flight (MALDI-TOF) mass spectrometry to routine biochemical methods for the identification of bacteria from positive blood cultures. *J Clin Microbiol.* 2012; 50(2):346-352
 30. Buchan B.W., Anderson N.W., and Ledebor N.A. Comparison of BD Phoenix and Vitek 2 automated systems for the detection of macrolide-lincosamide-streptogramin B resistance among clinical isolates of *Staphylococcus*. *Diagnostic Microbiology and Infectious Diseases.* 2012; 72:291-294

31. Anderson, N.W., Buchan, B.W., Riebe, K.M., Parsons, L.N., Gnacynski, S., and Ledebor, N.A. The effects of solid media type on routine identification of bacterial isolates using matrix-assisted laser desorption/ionization time-of-flight (MALDI-TOF) mass spectrometry. *J Clin Microbiol.* 2012; 50(3):1008-1013
32. Buchan, B.W., Mackey, T.A., Daly, J.A., Alger, G., Denys, G.A., Peterson, L.R., Kehl, S.C., and Ledebor, N.A. Multicenter Clinical Evaluation of the Portrait Toxigenic *C. difficile* Assay for the Detection of Toxigenic *Clostridium difficile* in Clinical Stool Specimens. Manuscript in press for *Journal of Clinical Microbiology*
33. Hicke B, Pasko C, Groves B, Ager E, Corpuz M, Frech G, Munns D, Smith W, Warcup A, Denys G, Ledebor NA, Lindsey W, Owen C, Rea L, Jenison R. Automated detection of toxigenic *Clostridium difficile* in clinical samples: isothermal tcdB amplification coupled to array-based detection. *J Clin Microbiol.* 2012 Aug;50(8):2681-7. PMID: PMC3421499
34. Buchan BW, Mackey TL, Daly JA, Alger G, Denys GA, Peterson LR, Kehl SC, Ledebor NA. Multicenter clinical evaluation of the portrait toxigenic *C. difficile* assay for detection of toxigenic *Clostridium difficile* strains in clinical stool specimens. *J Clin Microbiol.* 2012 Dec;50(12):3932-6. PMID: PMC3502949
35. Bourbeau PP, Ledebor NA. Automation in clinical microbiology. *J Clin Microbiol.* 2013 Jun;51(6):1658-65. PMID: PMC3716104
36. Anderson NW, Buchan BW, Mayne D, Mortensen JE, Mackey TL, Ledebor NA. Multicenter clinical evaluation of the illumigene group A *Streptococcus* DNA amplification assay for detection of group A *Streptococcus* from pharyngeal swabs. *J Clin Microbiol.* 2013 May;51(5):1474-7. PMID: PMC3647941
37. Buchan BW, Ledebor NA. Advances in identification of clinical yeast isolates by use of matrix-assisted laser desorption ionization-time of flight mass spectrometry. *J Clin Microbiol.* 2013 May;51(5):1359-66. PMID: PMC3647935
38. Edmiston, C.E., Ledebor, N.A., Buchan, B.W., Spencer, M., Seabrook, G.R. Is Active Staphylococcal Surveillance an Effective Intrventional Strategy for Preempting the Risk of Surgical Site Infection? In press for *Surgical Infection*.
39. Buchan, B.W., Jannetto, P., Cavagnolo, R., Pancholi, P., Balada-Llasat, J.M., Thomson, R., Kaul, K., Ginocchio, C., and Ledebor N.A. Multiplex detection of Gram-positive bacteria and resistance determinants directly from positive blood cultures using the Verigene Blood Culture Gram-Positive assay. Manuscript in press for *PlosMedicine*.
40. Buchan B.W. and Ledebor N.A. Determining the Optimal Method to Perform MALDI-TOF Mass Spectrometry for Yeast Identification. Invited review in press for *JCM*.
41. Peppard W., Franzene A., and Ledebor N.A. Implementation of polymerase chain reaction to rule out *Clostridium difficile* infection reduces empiric antibiotic duration of therapy. Manuscript in revision for *JCM*.
42. Feih J., Ledebor N.A., and Peppard W.J. A 5 Year Old Male with Multiple Pustules Covering the Entire Scalp. Manuscript in press for *J Clin Microbiol*.
43. Anderson N.W., Plaza J., and Ledebor N.A. A Biblical Rash: *Mycobacterium leprae* in Wisconsin. Case Report Accepted to *JCM*.

Books, Chapters, and Reviews

1. Ledebor, N.A. The Dangers of Yard Work: Human West Nile Virus Infections. In *Tietz Applied Laboratory Medicine*, 2nd Edition. Eds., Scott MG, Gronowski AM, Eby CS. John Wiley & Sons, Inc., Hoboken, NJ. 2006.
2. Ledebor, N.A. and Dunne, W.M. Mechanisms of Infectious Disease. In *Pathophysiology: Concepts of Altered Health States*. 8th Ed. Porth, C.M., Ed. Lippincott Williams & Wilkins, Philadelphia, PA. 2008.
3. Ledebor, N.A. and Dunne, W.M. Mechanisms of Infectious Disease. In *Pathophysiology: Concepts of Altered Health States*. 1st Canadian Ed. Hannon, Pooler, and Porth, Eds. Lippincott Williams & Wilkins, Philadelphia, PA. 2009.
4. Ledebor, N.A. and Edmiston, C.E. Reducing the Risk of Nosocomial Dissemination of MRSA: An Infection Control Perspective. In *MRSA*. 2nd Ed, Weigelt Eds. Informa, New York, NY. 2010.
5. Ledebor, N.A. and Dunne, W.M. Mechanisms of Infectious Disease. In *Pathophysiology: Concepts of Altered Health States*. 1st Abbreviated Ed. Hannon, Pooler, and Porth, Eds. Lippincott Williams & Wilkins, Philadelphia, PA. 2010.

6. Ledebor, N.A. and Doern, G.V. Haemophilus. In Manual of Clinical Microbiology. 10th Ed. Murray, Baron, Jorgensen, Landry, and Pfaller Eds. ASM Press, Washington, DC. 2011.
7. Badger VO, Ledebor NA, Graham MB, Edmiston CE Jr. Clostridium difficile: epidemiology, pathogenesis, management, and prevention of a recalcitrant healthcare-associated pathogen. JPEN J Parenter Enteral Nutr. 2012 Nov;36(6):645-62.
8. Buchan B.W. and Ledebor N.A. Determining the Optimal Method to Perform MALDI-TOF Mass Spectrometry for Yeast Identification. Invited review in press for JCM.
9. Bourbeau P.P. and Ledebor N.A. The clinical microbiology laboratory is on the cusp of a wave of automation that will transform practice of clinical microbiology. Invited review submitted to JCM.
10. Buchan B.W., Anderson N.W., and Ledebor N.A. Culture, Molecular and Serologic Methods for Diagnosing Herpes Simplex Virus. Invited review in revision for JCM.

Editorials, Letters to Editor, Other

1. Anderson N.W., Plaza J., and Ledebor N.A. Leprosy in Milwaukee. Case Report Accepted to JCM.

Abstracts

1. Ledebor, N.A., Boddicker, J.D., Clegg, S., and Jones, B.D. Biofilm Formation by Salmonella enterica Serovar Typhimurium on Eukaryotic Cells is Dependent on Allelic Variation of the Salmonella fimH Gene. 8th Annual Midwest Microbial Pathogenesis Meeting. 2001.
2. Ledebor, N.A., Boddicker, J.D., Clegg, S., and Jones, B.D. Biofilm Formation by Salmonella enterica Serovar Typhimurium on Eukaryotic Cells is Dependent on Allelic Variation of the Salmonella fimH Gene. American Society of Microbiology 102nd General Meeting. 2002.
3. Ledebor, N.A., Frye, J.G., Porwollik, S., McClelland, M. and Jones, B.D. Comparison of Global Gene Expression in Salmonella enterica Serovar Typhimurium Forming a Biofilm on Mammalian Cells Compared to Planktonic Bacteria. American Society of Microbiology 103rd General Meeting. 2003.
4. Ledebor, N.A., Frye, J.G., Porwollik, S., McClelland, M. and Jones, B.D. Comparison of Global Gene Expression in Salmonella enterica Serovar Typhimurium Forming a Biofilm on Mammalian Cells Compared to Planktonic Bacteria. 10th Annual Midwest Microbial Pathogenesis Conference. 2003.
5. Ledebor, N.A., Frye, J.G., Porwollik, S., McClelland, M. and Jones, B.D. Exopolysaccharide Production by Salmonella enterica Serovar Typhimurium Biofilms Grown on Eukaryotic Cell Surfaces. American Society of Microbiology 104th General Meeting. 2004.
6. Ledebor, N.A., Frye, J.G., Porwollik, S., McClelland, M. and Jones, B.D. Biofilm Formation by Salmonella enterica Serovar Typhimurium on HEP-2 Cells and Chicken Intestinal Epithelium is Dependent on at least Five Fimbrial Gene Clusters. American Society of Microbiology 105th General Meeting. 2005.
7. Ledebor, N.A., Buller, R.S., Mulford, W.S., and Storch, G.A. Evaluation of Three Real Time RT-PCR Assays for the Detection of Enterovirus in Cerebrospinal Fluid Specimens. 22nd Clinical Virology Symposium. 2006.
8. Ledebor, N.A., Das, K., Eveland, M., and Dunne, W.M. Evaluation of a New Chromogenic Agar Medium for Screening for Vancomycin Resistant Enterococcus faecium and faecalis. 46th Annual Interscience Conference on Antimicrobial Agents and Chemotherapy. 2006.
9. Ledebor, N.A., Tibbetts, R.J., and Dunne, W.M. A New Chromogenic Agar Medium, chromID VRE, to Screen for Vancomycin Resistant Enterococcus faecium and faecalis. 17th Annual European Congress of Clinical Microbiology and Infectious Diseases. 2007.
10. Ledebor, N.A., Zahn, J., Buller, R.S., Mulford, W.S., and Storch, G.A. Advances in Real Time RT-PCR Assays for the Detection of Enterovirus in Cerebrospinal Fluid Specimens, Evaluation of Point-of-Care Tests Compared to Laboratory Based Assays. 23rd Clinical Virology Symposium. 2007.
11. Griffith, R., Messina-Powell, S., Creely, D., Dante, M., Ullery, M., Ledebor, N.A., Shortridge, D. A New Vancomycin Test and Inducible Clindamycin Resistance Test for Gram-Positive Organisms with the VITEK® 2 Systems. American Society of Microbiology 107th General Meeting. 2007.
12. Ledebor, N.A., Tibbetts, R.J., and Dunne, W.M. ChromID VRE, a Novel Chromogenic Medium to Screen for Vancomycin Resistant Enterococcus faecium and Enterococcus faecalis. Annual Meeting of the Academy of Clinical Physicians and Scientists (ACLPS). 2007.
13. Brielmaier, B.D., Reichley, R.M., Casabar, E., Ledebor, N.A. Patel, G.P., Crank, C.W., Segreti, J.A., Ritchie, D.J. Daptomycin for treatment of vancomycin-resistant Enterococcus bloodstream infections. American College of Clinical Pharmacy Annual Meeting. 2007.
14. Vaughan, K.A., D'Amore, K.L., Podzorski, D.S., and Ledebor, N.A. Comparison of MultiCode-RTx HCV and Versant HCV RNA 3.0 bDNA Hepatitis C Viral Load Assays. 24th Clinical Virology Symposium.

- 2008.
15. Griffith, R., Beiner, L., Creely, D., Dante, M., Messina-Powell, S., Burnham, C.A., Ledebor, N.A., Dunne, W.M., Shortridge, D. Daptomycin and Telavancin MIC Tests for Gram-Positive Organisms with the Vitek 2 System. American Society of Microbiology 108th General Meeting. 2008.
 16. Kehl, S.C., Nana, S., Riebe, K.M., Dunne, W.M., and Ledebor, N.A. False-Positive Identification of Vancomycin Resistant Enterococcus from the BD Phoenix Instrument. American Society of Microbiology 108th General Meeting. 2008.
 17. Riebe, K.M. and Ledebor, N.A. Evaluation of a Novel Agar Medium from Remel to Screen for Methicillin Resistant Staphylococcus aureus. American Society of Microbiology 108th General Meeting. 2008.
 18. Riebe, K.M. and Ledebor, N.A. One Step Detection of Methicillin Resistant Staphylococcus aureus Using a Novel Chromogenic Agar Medium from Remel. American Society of Microbiology 108th General Meeting. 2008.
 19. Dionisio A.A., Riebe, K.M. and Ledebor, N.A. A New Use for Remel Spectra MRSA Chromogenic Agar. American Society of Clinical Laboratory Sciences, Wisconsin. 2009.
 20. Vaughan K.A., Rifelj M.L., Podzorski D.S., Riebe K.M., Fangman J.J.W., Petroll A.E., and Ledebor N.A. Elevated HIV-1 Viral Load Obtained By Real Time PCR Resulting From Specimen Collection. 25th Clinical Virology Symposium. 2009.
 21. Jannetto P.J., Vaughan K., Prokhorova A., Brener D., Lonosky P.M., Sonpatki V.M., Marla S.S., Cork W.H., Guaring-Angulo N., Pathak N., Saad R., and Ledebor N.A. Nanoparticle Probes For The Detection And Discrimination Of Influenza A/B And RSV A/B in Respiratory Specimens. 25th Clinical Virology Symposium. 2009.
 22. Kehl S.C., Goodacre S., Vaughn K., Ledebor N.A., and Henrickson K.J. Comparison of the Jaguar System, the Qiagen Biorobot EZ1 and the NucliSens easyMAG for extraction of Enterovirus, RSV and Influenza A. 25th Clinical Virology Symposium. 2009.
 23. Wainaina J.N., Kumar G., Ledebor N.A., and Radzienda M. Rhizobium radiobacter Bacteremia in an Immunocompetent Host. Society for Hospitalist Medicine, Annual Meeting. 2009.
 24. Reimer T., Riebe, K.M. and Ledebor, N.A. ChromID VRE, To Screen For Vancomycin-Resistant Enterococcus faecium And Enterococcus faecalis In Stool Specimens. 109th American Society for Microbiology General Meeting. 2009.
 25. Jannetto P.J., Vaughan K.A., and Ledebor N.A. Real-Time, Random Access Detection of Influenza A/B and RSV A/B in Respiratory Specimens Using Nanoparticle Probes. European Congress on Clinical Microbiology and Infectious Diseases. 2010.
 26. Tuohy M.J., Wilson D.A., Buckner R., Fuller D., Davis T.E., Riebe K., Reimer T., Ledebor N.A., and Hall G.S. Evaluation of chromID™ MRSA Medium (bioMérieux Inc.) for Screening Clinical Nasal Swabs. 110th American Society for Microbiology General Meeting. 2010.
 27. Buchan B.W. and Ledebor N.A. Evaluation of three chromogenic media for the detection of MRSA. 110th American Society for Microbiology General Meeting. 2010.
 28. Peterson J.F., Riebe K.M., Sander T., and Ledebor N.A. Evaluation of a Chromogenic Agar Medium, Spectra VRE, to Screen for Vancomycin-Resistant Enterococcus faecium and Enterococcus faecalis. 110th American Society for Microbiology General Meeting. 2010.
 29. Peterson J.F., Riebe K.M., and Ledebor N.A. Performance of a VITEK 2 Antifungal Susceptibility Card in Determining Candida spp. Susceptibilities. 110th American Society for Microbiology General Meeting. 2010.
 30. Fan J, Trost J, Chen R, Hong M, Bose M, Jurgens L, Beck ET, Kumar S, Kehl S, Ledebor N, and Henrickson KJ. The phenotypic profile of pandemic H1N1 influenza A virus from Milwaukee during the first wave of SOIV pandemic. The American Society for Virology, 29th Annual Meeting. 2010.
 31. Buchan B.W., Jannetto P.J., Anderson N.W., and Ledebor N.A. Random Access, Simultaneous Detection of Influenza A and its Subtypes (H1, H3, 2009 H1N1), Influenza B, and RSV Subtypes A and B in Respiratory Specimens on an Automated, Random Access, Rapid Molecular Platform. 21st European Congress on Clinical Microbiology and Infectious Diseases. 2011.
 32. Buchan B.W., Jannetto P.J., Anderson N.W., and Ledebor N.A. Random Access, Simultaneous Detection of Influenza A and its Subtypes (H1, H3, 2009 H1N1), Influenza B, and RSV Subtypes A and B in Respiratory Specimens using Nanoparticle Probes. The 27th Annual Clinical Virology Symposium. 2011.
 33. Anderson N.W., Buchan B.W., Riebe K.M., and Ledebor N.A. The effects of solid media on identification of routine bacterial isolates by MALDI-TOF MS. 111th American Society for Microbiology General Meeting. 2011.

34. Buchan, B.W., Anderson, N.W., Ledebor, N.A. Comparison of BD Phoenix™ and bioMérieux Vitek® 2 Systems for Detection of iMLSb Phenotype in Staphylococcus. 111th American Society for Microbiology General Meeting. 2011.
35. Buchan, B.W., Riebe, K.R., Anderson, N.W., Ledebor, N.A. Evaluation of MALDI-TOF MS for the Identification of Clinical Yeast Isolates. 111th American Society for Microbiology General Meeting. 2011.
36. Buchan, B.W. and Ledebor, N.A. Evaluation of Two Chromogenic Media for the Detection of VRE. 111th American Society for Microbiology General Meeting. 2011.
37. Pasko, C., Ager, E., Frech, G., Groves, B., Jenison, R., Ledebor, N.A., Lindsey, W., Munns, D., Owen, C., Rea, L., Smith, W., West, M., and Hicke, B. A Molecular Diagnostic Platform and Test for Detection of Clostridium difficile toxin B gene, tcdB, in Clinical Stool Samples. 111th American Society for Microbiology General Meeting. 2011.
38. Buchan, B.W., Mackey, T.L., Cahak, C., Couillard, H., Marla, S.S., Raich, T., Sauer, L., Jannetto, P.J., and Ledebor, N.A. Evaluation of the Microarray-Based Sample-to-Result Verigene BC-GP Assay for Rapid detection of Gram-Positive Bacteria and Resistance determinants Directly from Positive Blood Cultures. 51st Interscience Conference on Antimicrobial Agents and Chemotherapy. 2011.
39. Buchan, B.W., Steed, L.L., Pennington, J.L., Fuller, D.D., Davis, T.E., and Ledebor, N.A. Clinical Evaluation of the Sample-to-Result BD MAX MRSA Assay for the Rapid Detection of MRSA Directly from Nares Swabs. 51st Interscience Conference on Antimicrobial Agents and Chemotherapy. 2011.
40. Paul, J., Milia, D., Peppard, W., Ledebor, N.A., Buchan, B.W., and Brasel, K. Effect of MALDI-TOF on the Time to Antibiotic De-escalation in Patients with Positive Blood Cultures: A Retrospective Study Using a Combined ICU Model. 49th Annual Meeting of the Infectious Diseases Society of America. 2011.
41. Buchan, B.W. and Ledebor, N.A. Evaluation of Matrix-Assisted Laser Desorption/Ionization Time of Flight (MALDI-TOF) for the Identification of Microorganisms Directly from Positive Blood Culture Bottles. 49th Annual Meeting of the Infectious Diseases Society of America. 2011.
42. Dua, A., Rietema, E., Ledebor, N.A., Weigelt, J.A. Drug choices and Outcomes for Hospital and Community Acquired MRSA. Fall Meeting of the Wisconsin Surgical Society. 2011.
43. Kron, M., Yu, Z., Vodanovic-Jankovic, S., Ledebor, N.A., Hagan, S., Rajki, S., and Shen, B. Actinomycete-derived Inhibitors of Filarial Asparaginyl-tRNA Synthetase. 60th Annual Meeting of the American Society of Tropical Medicine and Hygiene. 2011.
44. Franzene, A., Peppard, W.J., and Ledebor, N.A. Impact of Clostridium difficile Nucleic Acid Amplification Test on Hospital Resources. American Society of Health-System Pharmacists (ASHP) Midyear Meeting. 2011.
45. Fuller, D., Talbott, J., Buchan, B.W., Ledebor, N.A., Steed, L.L., Pennington, J., Oethinger, M., Welle, J.T., and Davis, T. Clinical Evaluation of the BD MAX™ MRSA Assay for the Rapid Detection of MRSA Directly from Nares Swabs. 22nd European Congress on Clinical Microbiology and Infectious Diseases. 2012.
46. Buchan, B.W., Mackey, T.A., Jannetto, P.J., and Ledebor, N.A. Rapid detection of Gram-positive bacteria and resistance determinants directly from positive blood cultures using the microarray-based sample-to-result Verigene BC-GP assay. 22nd European Congress on Clinical Microbiology and Infectious Diseases. 2012.
47. Buchan, B.W., Riebe, K.M., Trevino, E., Landes, N., Vance, P., Weissfeld, A.S., and Ledebor, N.A. Comparison of Four Culture and Two Nucleic Acid Detection Methods to Toxigenic Culture for the Detection of Toxigenic Clostridium difficile in Clinical Stool Specimens. The 28th Annual Clinical Virology Symposium and Annual Meeting of the Pan American Society for Clinical Virology. 2012.
48. Ledebor, N.A., Vaughan, K.A., and Buchan, B.W. Performance of Chlamydia trachomatis and Neisseria gonorrhoeae Nucleic Acid Amplification from Liquid Cytology Specimens Compared to Aptima Transport Medium The 28th Annual Clinical Virology Symposium and Annual Meeting of the Pan American Society for Clinical Virology. 2012.
49. Hollenbeak, C.S. and Ledebor, N.A. Financial implications of VRE screening intensive care units. 39th Annual Meeting of the Association for Professionals in Infection Control and Epidemiology. 2012.
50. Hollenbeak, C.S. and Ledebor, N.A. Financial implications of VRE screening intensive care units. 112th General Meeting of the American Society for Microbiology. 2012.
51. Mackey, T.A., Insyxiengmay, K.T., Daly, J.A., Alger, G., Denys, G.A., Peterson, L.R., Kehl, K.S., Buchan, B.W., and Ledebor, N.A. Multicenter clinical evaluation of the Portrait Toxigenic C. difficile Assay

- for detection of toxigenic *C. difficile* directly from clinical specimens. 112th General Meeting of the American Society for Microbiology. 2012.
52. Riebe, K.M., Buchan, B.W., Gnacinski, S., and Ledebor, N.A. Clinical evaluation of the Vitek 2 SS03 panel for antimicrobial susceptibility testing of *Streptococcus* species. 112th General Meeting of the American Society for Microbiology. 2012.
 53. Riebe, K.M., Buchan, B.W., Timke, M., Kostrzewa, M., and Ledebor, N.A. Validation of the MALDI Biotyper for Identification of Acid Fast Bacilli from Solid Media and Broth Culture Using Two Processing Methods. 112th General Meeting of the American Society for Microbiology. 2012.
 54. Buchan, B.W., Anderson, N.W., Vaughan, K.A., Davis, T.E., Fuller, D., Mayne, D., and Ledebor, N.A. Multisite Comparison of the Cepheid Smartcycler and GeneXpert GBS Assays for the Detection of Group B *Streptococcus* from Direct Swab and Broth-Enriched Specimens. 112th General Meeting of the American Society for Microbiology. 2012.
 55. Buchan, B.W., Mackey, T.A., Reymann, G.C., Gnacinski, S., Rashel, J.A., and Ledebor, N.A. Comparison of the integrated MALDI-Trace system to manual specimen accessioning in preparation of specimens for MALDI-TOF analysis. 112th General Meeting of the American Society for Microbiology. 2012.
 56. Anderson, N.W., Kasper, D., Buchan, B.W., and Ledebor, N.A. Rapid Identification of Antibiotic Hydrolysis using MALDI-TOF MS. 112th General Meeting of the American Society for Microbiology. 2012.
 57. Buchan, B.W., Podzorski, D.S., Reymann, G.C., Herman, E.A., Steed, L.L., Pennington, J., Fuller, D., Talbott, J., Oethinger, M., Moloney, C., and Ledebor, N.A. Multicenter Clinical Evaluation of the Sample-to-Result BD MAX MRSA System for the Rapid Detection of MRSA Directly from Nares Swabs. 112th General Meeting of the American Society for Microbiology. 2012.
 58. Buchan, B.W., Riebe, K.M., Dora, R., Graminske, S.J., deArruda Indig, M., and Ledebor, N.A. Comparison of VersaTrek and BacT/ALERT 3D continuous monitoring blood culture systems to detect bacteria in human platelet units. 112th General Meeting of the American Society for Microbiology. 2012.
 59. Riebe, K.M., Buchan, B.W., Timke, M., Kostrzewa, M., and Ledebor, N.A. Comparison of MALDI-TOF MS to Nucleic Acid Sequencing for the Identification of Clinical Isolates of *Mycobacterium* spp. The 52nd Interscience Conference on Antimicrobial Agents and Chemotherapy. 2012.
 60. Kasper, D., Anderson, N.W., Buchan, B.W., and Ledebor, N.A. Rapid Identification of Antibiotic (Beta-Lactam) Hydrolysis in Gram-Negative Bacteria Isolated from Blood Cultures Using MALDI-TOF MS. The 52nd Interscience Conference on Antimicrobial Agents and Chemotherapy. 2012.
 61. Buchan, B.W., Anderson, N.W., Mackey, T.A. and Ledebor, N.A. Clinical Evaluation of the Illumigene Group A *Streptococcus* (GAS) DNA Amplification Assay for the detection of GAS in Pharyngeal Swab Specimens. ID Week. 2012.
 62. Pancholi, P., Granato, P.A., Ledebor, N.A., Dunn, J., Raczowski, M., Swyers, L., Alkins, B.R., Buchan, B.W., Biney-Assan, T., Stenzel, T. Evaluation of the Quidel AmpliVue *C. difficile* Assay for Qualitative Detection of Toxigenic *Clostridium difficile* Compared to Cell Culture Cytotoxicity Neutralization and Xpert *C. difficile* Assays. Association of Molecular Pathology 2012 Annual Meeting on Genomic Medicine. 2012.
 63. Buchan, B. W., Rifelj, M., and Ledebor, N.A. Evaluation of Quidel Influenza A+B Test Run on The Applied Biosystems 7500 Fast Dx and Cepheid SmartCycler Platforms compared to the Cepheid Flu A/B Test for Detection of Influenza A/B in Clinical Specimens. Association of Molecular Pathology 2012 Annual Meeting on Genomic Medicine. 2012.
 64. Riebe, K.M., Buchan, B.W., Timke, M., Kostrzewa, M., and Ledebor, N.A. Comparison of MALDI-TOF MS to Nucleic Acid Sequencing of the Identification of Clinical Isolates of *Mycobacterium* spp. The 5th Annual Mass Spectrometry Applications in the Clinical Laboratory Conference. San Diego, CA. February 2013.
 65. Buchan B.W., Ledebor N.A., Raich T., Hully JI, Sun F., Marla S.S. Evaluation of the Verigene Toxigenic *Clostridium difficile* (CDF) and enteric pathogens (EP) nucleic acid tests for the identification of bacterial and viral agents of diarrhoea directly from stool. 23rd European Congress of Clinical Microbiology and Infectious Diseases (ECCMID). April 2013.
 66. Thomas, I., Welle, J., Buchan, B.W., Podzorski, D.S., Ledebor, N.A., and Oethinger, M. Comparison of the real-time *C. Difficile* toxB PCR Assay on the Sample-to-Result BD MAX Platform with the GeneXpert *C. Difficile* Assay and a Laboratory-Developed *C. difficile* PCR Assay. 113th ASM General Meeting, Denver, CO. May 2013.
 67. Buchan B.W., Pezewski, m., Mackey, T.A. and Ledebor N.A. Evaluation of the ProGastro SSCS Assay for

- the detection of Salmonella, Shigella, Campylobacter and toxin encoding stx1 and stx2 genes in clinical stool specimens. 113th ASM General Meeting, Denver, CO. May 2013.
68. Anderson, N.W., Buchan, B.W., and Ledebor, N.A. Comparison of the BD MAX Enteric Bacterial Panel to routine culture methods for the detection of Salmonella, Shigella, and Campylobacter in preserved stool specimens. 113th ASM General Meeting, Denver, CO. May 2013.
69. Riebe, K.M., Buchan, B.W., and Ledebor, N.A. Validation of the Bruker MALDI-TOF for the identification of filamentous fungi. 113th ASM General Meeting, Denver, CO. May 2013.