

ELIZABETH MARLOWE



CANDIDATE STATEMENT

As a member of ASM I have a long history of serving the society both within my local branch and nationally. The BOD has been very rewarding experience and would be humbled to serve beyond a single term. ASM must continue to build and maintain an infrastructure which supports:

1. Membership by developing key data resources in a convenient user-friendly manner that meets the needs of a data driven world.
2. Career development for new and early career microbiologist across divisions and sectors.
3. Advocacy for key funding and legislation in the microbial sciences.
4. Expanding new and innovative ways to engage membership in an on-demand world that allows for both virtual and face to face interactions.
5. International partnerships to accelerate science, focus policies and global coordination to address worldwide issues such as pandemic preparedness and the impact of global warming on society.
6. DEI within the microbial sciences.

ASM-RELATED ACTIVITIES

- ASM Nominations Committee, 2021-2023 (Stepped down when nominated for COMS-Elected Board Director)
- ASM Elected Board of Directors, Council on Microbial Sciences (COMS) Representative, 2020-2023
- ASM Elected Member, Council on Microbial Sciences (COMS), 2017-2020
- Co-Chair ASM Council on Microbial Sciences (COMS), CPHM Advocacy Committee, 2017-2019
- ASM/CDC Evidence Based Laboratory Medicine Best Practices *C. difficile* Workgroup, 2014-2018
- ASM Sonnenwirth Award for Leadership Selection Committee, 2013-2015
- Southern California Branch of ASM (SCASM), President, 2013-2015

- Southern California Branch of ASM (SCASM), President Elect, 2011-2013
- ASM Division C, Nominating Committee, Chair, 2011
- Southern California Branch of ASM (SCASM), Annual Meeting Committee, 2006-2016
- American Board of Medical Microbiology (ABMM) Part I Exam Committee, 2006-2012
- Southern California Branch of ASM (SCASM), Elected Board Member, 2006-2009
- Southern California Branch of ASM (SCASM), Spring Symposia Committee, 2002-2015

Curriculum Vitae

Elizabeth M. Marlowe, Ph.D., D(ABMM), SM(ASCP)

Current Position: Senior Scientific Director, Associate NY Director, Head R&D, Infectious Diseases & Immunology

Address: Quest Diagnostics, Incorporated
33608 Ortega Highway
San Juan Capistrano, CA 92675-2042
Business: (949) 728-1817
Business email: elizabeth.m.marlowe@questdiagnostics.com
Personal Email: emmarlowe77@gmail.com

Education: **Bachelor of Science:** 1989-1993
University of Arizona, Tucson, AZ
Molecular and Cellular Biology, Minor: Mathematics/Chemistry

Master of Science: 1993-1995
University of Arizona, Tucson, AZ
Environmental Microbiology

Ph.D.: 1995-1999
University of Arizona, Tucson, AZ
Environmental Microbiology

Postdoctoral Fellow: 1999-2001
UCLA Medical Center, Los Angeles, CA
Clinical/Public Health Microbiology

Licenses and Certificates:

Diplomat, American Board of Medical Microbiology (#970)
Specialist in Microbiology, American Society of Clinical Pathology
Clinical Microbiology Scientist, State of California, Department of Health Services (#MTE 846)
NY COQ, New York Department of Public Health (CQP:117910, CQCode: MARLE1)

Executive Programs:

MIT Sloane School of Management Mastering Design Thinking, May 2022

Professional Experience:

2019 -Present Senior Scientific Director, Associate NY Director, Head R&D, Infectious Diseases & Immunology
Scientific Director, Associate NY Director, Head R&D West, Infectious Diseases
Quest Diagnostics, San Juan Capistrano, CA
Duties: Oversight of R&D strategy for Infectious Diseases & Immunology (IDI) for the Quest System, including SARS-CoV-2 diagnostics and innovation. Responsible for IDI R&D including feasibility studies, new product development, modifications and improvements of assays, new and modified testing platforms, assay troubleshooting, and product launch. Accountable for product development projects with design control and compliance with regulatory requirements. Member of regulatory team for FDA submissions (Including of SARS-CoV-2 and Monkeypox testing requiring emergency use authorization). Technical & regulatory oversight for Infectious Disease testing (Bacteriology, Anaerobes, AFB, Mycology, Parasitology, Virology, Molecular Microbiology & Serology) to ensure that assays are performing as expected and laboratory practice meets CLIA, CAP and State regulatory requirements. Provide clinical consultations as needed for clients. Partner with Executive Management and the Clinical Franchise to develop strategy for new diagnostic offerings. Provide expert advice to executive leadership and technical personnel regarding development technologies and activities. Provide inputs for new research developments in the appropriate fields of Infectious Diseases. Member of Subspecialty Teams including the molecular and microbiology best practice teams. Provide and participate in educational programs for medical and laboratory staff.

Professional Experience Continued:

- 2016-2019 Global Director of Medical Affairs, Microbiology
Roche Molecular Systems, Incorporated, Pleasanton, CA
Duties: Member of the international business team. Key role in driving of the medical/scientific strategy for demonstrating medical value of diagnostic products including: oversight of a global study program to address gaps in the evidence-based literature post launch of registrational studies, scientific communication, and management of relationships with key opinion leaders, partners, and NGOs as well as strategy for future product pipeline. Supported product launches globally which included the cobas CT/NG, TV/MG, MTB, MAI & RIF/INH assays for use on the cobas 6800/8800 Systems. Also responsible for assisting with the scientific and medical response to customer inquiries related to product performance.
- 2005-2016 Technical Director of Microbiology
Kaiser Permanente, TPMG Regional Reference Laboratories, Berkeley, CA
Assistant Director of Microbiology & Molecular Testing
Kaiser Permanente, SCPMG Regional Reference Laboratories, North Hollywood, CA
Duties: Technical and regulatory oversight of infectious disease testing (Routine Bacteriology, Anaerobes, AFB, Mycology, Parasitology, Virology, Molecular Microbiology & Serology), including assay validations and physician consultation, for the regional laboratory with >160 FTEs and an operating budget of > \$40M. Key role in the evaluation and implementation of instrumentation and technology for building a strong business plan (including business cases and managing budgets) for the development of the department and impacting quality patient care. Member of the regional infectious disease committee, as well as, the national laboratory sourcing, and standardization team. Development and oversight of the translational research program including managing study protocols, IRB approvals, personnel, budgets and outcomes. Additional responsibility included presentation of research at national conferences as well as in peer reviewed publications.
- 2002-2005 Senior Scientist, Research Scientist II, Research Scientist I
Gen-Probe Incorporated, San Diego, CA
Duties: Responsible for assay development of novel rapid infectious disease diagnostics. Lead R&D team that conducted some of the initial prototype and assay feasibility work on the Panther Fusion System. Specific assay development included: MRSA, Quant HCV, Quant HIV, *Legionella pneumophila*, Influenza A/B, *Bacillus anthracis* and probe matrix sepsis. Additional responsibilities included interfacing with marketing for product profile requirements, assay design, assay feasibility studies, and scientific communication both internal and external to the organization.
- 2001-2002 Research Scientist, Project Coordinator
Wadsworth Anaerobe Laboratory
Brentwood Biomedical Research Institute, Los Angeles, CA
Duties: Research scientist/study manager for microbiome research examining the role of the gut microflora in autism. Responsible for study oversight, data analysis, grant writing, and management of other scientists.

Honors and Awards:

1993 University of Arizona Graduate Fellowship Recipient
1995 American Society for Microbiology Student Travel Grant Recipient
2007 Association of Molecular Pathology Blue Ribbon Poster
2020 Quest Diagnostics Gambino Award for Excellence in Medical Quality
2021 Quest Diagnostics Empowering Better Health Award
2022 Quest Diagnostics Empowering Better Health Award

Professional Affiliations:

American Society for Microbiology (ASM)
Southern California American Society for Microbiology (SCASM)
Association of Molecular Pathology (AMP)
Infectious Disease Society of America (IDSA)

Professional Committees:

1999 UCLA Alternate Site Testing Committee
1999-01 UCLA Infection Control Committee
2001 UCLA Joint Commission on Accreditation of Healthcare Organizations Inspection Preparation
2006-2012 American Board of Medical Microbiology Part I Exam Committee
2006-2015 SCPMG Regional Infectious Disease Committee
2013-2017 Center for Disease Control (CDC), Clinical Laboratory Improvement Advisory Committee (CLIAC)
2014-2017 CLIAC Liason to the CDC Board of Scientific Advisors for the Office of Infectious Diseases
2014-2018 ASM/CDC Evidence Based Laboratory Medicine Best Practices *C. difficile* Workgroup
2017-2019 Co-Chair ASM Council on Microbial Sciences, CPHM Advocacy Committee

Service to Professional Organizations:

2002-2015 SCASM, Spring Symposia Committee
2006-2009 SCASM, Elected Board Member
2006-2016 SCASM, Annual Meeting Committee
2011 ASM Division C, Chair Nominating Committee
2011-2013 SCASM, President Elect
2013-2015 SCASM, President
2013-2015 ASM Sonnenwirth Award for Leadership Selection Committee
2017-2020 ASM Elected Member Council on Microbial Sciences (COMS)
2020-2023 ASM Elected Board of Directors, COMS Representative
2022 ASM Nominations Committee

Service to Professional Publications:

2001 Reviewer for Anaerobe
2002-Present Reviewer for Journal of Clinical Microbiology
2015-2019 Editor, Clinical Microbiology Newsletter
2022 Editor, Journal Clinical Virology

Patents:

Patent Number	Title of Patent	Date Issued
20090291431	Composition and methods to detect <i>Legionella pneumophila</i> nucleic acid	November 26, 2009
20100285450	Compositions and assays to detect Influenza A and B nucleic acids	February 28, 2012

Publications

Papers (Peer Reviewed):

- 2022 Van Gerwen O, Griner S, Davis A, Footman A, Pinto C, Melendez J, Tuddenham S, Exten C, Soge, O, Chakraborty, P, Nenninger, A, **Marlowe E. M**, Joseph, A.M. McGowin, C, Seña, A.C., Fortenberry, J.D., Ghanem, K.G., Van Der Pol B. Summary of the 4th Annual ASTDA Workshop on Improving STI Control Efforts through Cross-Sector Collaboration, Sexually Transmitted Diseases: May 24, 2022 - Volume - Issue - 10.1097/OLQ.0000000000001651, doi: 10.1097/OLQ.0000000000001651
- 2022 Borillo GA, Kagan RM, **Marlowe EM**. Rapid and Accurate Identification of SARS-CoV-2 Variants Using Real Time PCR Assays. *Frontiers in Cellular and Infection Microbiology*. 10 May 2022. ISSN 2235-2988, <https://doi.org/10.3389/fcimb.2022.894613>
- 2022 Azad KN, Realegeno SE, Kagan RM, Schwab DA, Batterman HJ, **Marlowe EM**. An Easily Digestible Review of *Helicobacter pylori* Diagnostics, *Clin Micro Newsletter*, 44: 51-61, ISSN 01964399, <https://doi.org/10.1016/j.clinmicnews.2022.03.001>.
- 2022 Prince HE, Batterman HJ, **Marlowe EM**. Characterization of serum samples with discordant results in two herpes simplex virus type 2 (HSV-2) IgG assays. *Sex Transm Dis*. 2022 Jan 21. doi: 10.1097/OLQ.0000000000001603. Epub ahead of print. PMID: 35067597.
- 2022 Prince HE, Batterman HJ, Realegeno SE, **Marlowe EM**. Transience of interference in an immunoassay measuring serum levels of beta-D-glucan. *Diagn Microbiol Infect Dis*. Jan 6;102(4):115630. doi:10.1016/j.diagmicrobio.2021.115630. Epub ahead of print. PMID: 35074622
- 2021 Van Der Pol B, Rao A, Nye MB, Chavoustie S, Ermel A, Kaplan C, Eisenberg D, Chan PA, Mena L, Pacheco S, Waites KB, Xiao L, Krishnamurthy S, Mohan R, Bertuzis R, McGowin CL, Arcenas R, **Marlowe EM**, Taylor SN. *Trichomonas vaginalis* detection in urogenital specimens from symptomatic and asymptomatic men and women using the cobas TV/MG test. *J Clin Microbiol*. 2021 Jul 28;JCM0026421. doi: 10.1128/JCM.00264-21.
- 2021 Pinto CN, Niles JK, Kaufman HW, **Marlowe EM**, Alagia DP, Chi G, Van Der Pol B. Impact of the COVID-19 Pandemic on Chlamydia and Gonorrhea Screening in the U.S.. *AJPM*. 19 May 2021. <https://doi.org/10.1016/j.amepre.2021.03.009>
- 2021 Cockerill FR, Wohlgemuth JG, Radcliff J, Sabol CE, Kapoor H, Dlott JS, **Marlowe EM**, Clarke NJ. Evolution of Specimen Self-Collection in the COVID-19 Era: Implications for Population Health Management of Infectious Disease. *Popul Health Manag*. 2021 Feb;24(S1):S26-S34. doi: 10.1089/pop.2020.0296.
- 2021 Prince HE, **Marlowe EM**, Schwab DS. Relationship between hepatitis C virus (HCV) IgG index values and quantitative HCV RNA results in HCV IgG-reactive serum samples. *Diagn Microbiol Infect Dis*. 2021 May;100(1):115311. doi: 10.1016/j.diagmicrobio.2021.115311. Epub 2021 Jan 19. PMID: 33524728.
- 2021 Kagan RM, Rogers AA, Borillo GA, Clarke NJ, **Marlowe EM**, Performance of Unobserved Self-Collected Nasal Swabs for Detection of SARS-CoV-2 by RT-PCR Utilizing a Remote Specimen Collection Strategy, *OFID*, DOI: ofab039, <https://doi.org/10.1093/ofid/ofab039>
- 2020 Prince HE, **Marlowe EM**, Schwab DA. Relationship between DiaSorin Liaison Treponema pallidum antibody indices and confirmatory assay results in the reverse syphilis testing algorithm. *Diagn Microbiol Infect Dis*. 2021 May;100(1):115303. doi: 10.1016/j.diagmicrobio.2020.115303. Epub 2020 Dec 29. PMID: 33503569.
- 2020 Borillo GA, Kagan RM, Baumann RE, Fainstein BM, Umaru L, Li H, Kaufman HW, Clarke NJ, **Marlowe EM**. Pooling of Upper Respiratory Specimens Using a SARS-CoV-2 Real Time RT-PCR Assay Authorized for Emergency Use in Low Prevalence Populations for High-Throughput Testing. *OFID*. DOI: 10.1093/ofid/ofaa466
- 2020 Scott L, David S, Govender L, Furrer J, Rakgokong M, Ziyaad W, Martinson N, Eisenberg G, **Marlowe E**, Stevens W. Performance of the Roche Cobas MTB Assay for the Molecular Diagnosis of Pulmonary Tuberculosis in a High HIV Burden Setting. *J Mol Diag* 2020 Oct 22(10):1225-1237, <https://doi.org/10.1016/j.jmoldx.2020.06.018>

Papers (Peer Reviewed Continued):

- 2020 Prince HE, Givens TS, Lapé-Nixon M, Clarke NJ, Schwab DA, Batterman HJ, Jones RS, Meyer III WA, Kapoor H, Rowland CM, Haji-Sheikhi F, **Marlowe EM**. Detection of SARS-CoV-2 IgG Targeting Nucleocapsid or Spike Protein by Four High Throughput Immunoassays Authorized for Emergency Use. *J Clin Microbiol*. Aug 2020, JCM.01742-20; DOI: 10.1128/JCM.01742-20
- 2020 Rogers AA, Baumann RE, Borillo GA, Kagan RM, Batterman HJ, Galdzicka MM, **Marlowe EM**. Evaluation of Transport Media and Specimen Transport Conditions for the Detection of SARS-CoV-2 by Use of Real-Time Reverse Transcription-PCR. *J Clin Microbiol*. 2020;58(8):e00708-20. doi:10.1128/JCM.00708-20
- 2020 Van Der Pol B, Waites KB, Xiao L, Taylor SN, Rao A, Nye M, Chavoustie S, Ermel A, Kaplan C, Eisenberg D, Chan PA, Mena L, Pacheco S, Krishnamurthy S, Mohan R, Bertuzis R, McGowin CL, Arcenas R, **Marlowe EM**. *Mycoplasma genitalium* detection in urogenital specimens from symptomatic and asymptomatic men and women using the cobas TV/MG test. *J. Clin. Microbiol* Mar 2020, JCM.02124-19; DOI: 10.1128/JCM.02124-19
- 2019 von Allmen N, Gorzelniak K, Liesenfeld O, Njoya M, Duncan J, **Marlowe EM**, Hartel T, Knaust A, Hoppe B, Walter M. Liquid and Dry Swabs for Culture- and PCR-Based Detection of Colonization with Methicillin-Resistant *Staphylococcus aureus* during Admission Screening. *Eur J Microbiol Immunol (Bp)*. 2019 Dec 25;9(4):131-137. doi: 10.1556/1886.2019.00022. PMID: 31934365; PMCID: PMC6945996.
- 2019 Kraft CS, Parrott JS, Cornish NE, Rubinstein ML, Weissfeld AS, McNult P, Nachamkin I, Humphries RM, Kirn TJ, Dien Bard J, Lutgring JD, Gullett JC, Bittencourt CE, Benson S, Bobenchik AM, Sautter RL, Baselski V, Atlas MC, **Marlowe EM**, Miller NS, Fischer M, Richter SS, Gilligan, P, Snyder JW. A Laboratory Medicine Best Practices Systematic Review and Meta-analysis of Nucleic Acid Amplification Tests (NAATs) and Algorithms Including NAATs for the Diagnosis of *Clostridioides (Clostridium) difficile* in Adults. *Clin. Micro. Reviews*, May 2019, 32 (3) e00032-18; DOI: 10.1128/CMR.00032-18.
- 2019 **Marlowe EM**, Gohl P, Steidle M, Arcenas R, Schneider T, Loetscher P & Bier C. *Trichomonas vaginalis* detection in female specimens with cobas® TV/MG for use on the cobas® 6800/8800 Systems. *Eur J Microbiol Immunol (Bp)*. doi.org/10.1556/1886.2019.00004.
- 2019 Van Der Pol B, Fife K, Taylor SN, Nye MB, Chavoustie SE, Eisenberg DL, Crane L, Hirsch G, Arcenas R, **Marlowe EM**. Evaluation of the Performance of the cobas® CT/NG Test for Use on the cobas® 6800/8800 Systems for the Detection of *Chlamydia trachomatis* (CT) and *Neisseria gonorrhoeae* (NG) in Male and Female Urogenital Samples. *J. Clin. Microbiol*. Mar 2019, 57 (4) e01996-18; DOI: 10.1128/JCM.01996-18.
- 2019 **Marlowe EM**. Editorial - The Microbiology Laboratorian in a Post Technology World: Indispensable or Obsolete. *Clin. Microbiol. Newsletter*. 41:49-55.
- 2017 **Marlowe EM**, Hardy D, Krevolin M, Gohl P, Bertram A, Arcenas R, Seiverth B, Schneider T & Liesenfeld O. High-Throughput Testing of Urogenital and Extragenital Specimens for Detection of *Chlamydia Trachomatis* and *Neisseria Gonorrhoeae* with cobas® CT/NG. *Eur J Microbiol Immunol (Bp)*. 2017 Sep 11;7(3):176-186. doi: 10.1556/1886.2017.00018.
- 2017 Deak E, **Marlowe EM**. Rightsizing Technology in the Era of Consumer Driven Healthcare. *Clin. Microbiol. Newsletter*. 39:115-123.
- 2017 Wilson DA, Young S, Timm K, Novak-Weekley S, **Marlowe EM**, Madisen N, Lillie JL, Ledebouer NA, Smith R, Hyke J, Griego-Fullbright C, Jim P, Granato PA, Faron ML, Cumpio J, Buchan BW & Procop GW. Multicenter Evaluation of the Bruker MALDI Biotyper CA System for the Identification of Clinically Important Bacteria and Yeasts. *Am J Clin Pathol*. 2017 Jun 1;147(6):623-631. doi: 10.1093/ajcp/aqw225.
- 2015 Faron ML, Buchan, BW, Hyke J, Madisen, N, Lillie JL, Granato, PA, Wilson, DA, Procop, GW, Novak-Weekley, S, **Marlowe, E**, Cumpio, J, Griego-Fullbright, C, Kindig, S, Timm, K, Young, S, Ledebouer, NA.. Multicenter Evaluation of the Bruker MALDI Biotyper CA System for the Identification of Clinical Aerobic Gram-Negative Bacterial Isolates. *PLoS one* 10:e0141350

Papers (Peer Reviewed Continued):

- 2015 **Marlowe EM**, Novak-Weekley SM & LaRocco M. Affordable healthcare and the business of clinical microbiology: It's all in the delivery. *Clin. Microbiol. Newsletter*. 37:17-21.
- 2014 Bender J, Taylor CS, Cumpio J, Novak-Weekley S., Steinberg E., She R & **Marlowe E**. Infants 1-90 Days Old Hospitalized with Human Rhinovirus Infection. *J. Clin. Lab Anal.* doi:10.1002/jcla.21692
- 2013 Novak-Weekley SM & **Marlowe EM**. Laboratory Automation in the Clinical Microbiology Laboratory. *Clinics in Laboratory Medicine*. 33:567-601.
- 2012 Novak-Weekley SM, **Marlowe EM**, Poulter M, Dwyer D, Speer, D, Rawlinson W, Baleriola C, & Robinson CC. Evaluation of the Cepheid Xpert Flu Assay for Rapid Identification and differentiation of Influenza A, Influenza A 2009 H1N1 and Influenza B Viruses. *J. Clin. Microbiol.* 50:1704-1710.
- 2011 **Marlowe EM** & Bankowski MJ. Conventional and molecular methods for the detection of methicillin-resistant *Staphylococcus aureus*. *J. Clin. Microbiol.* 49:S53-S56.
- 2011 **Marlowe EM**, Novak-Weekley SM, Cumpio J, Sharp SE, Momeny MA, Babst A, Carlson J, Kawamura M, Pandori, M. Evaluation of the Cepheid Xpert MTB/RIF assay for the Direct Detection of *Mycobacterium tuberculosis* complex from Respiratory Specimens. *J. Clin. Microbiol.* 49:1621-1623.
- 2010 Tenover FC, Novak-Weekley S, Woods CW, Peterson LR, Davis T, Schreckenberger P, Fang FC, Dascal A, Gerding, DN, Nomura JH, Goering RV, Akerlund T, Weissfeld AS, Baron EJ, Wong E, **Marlowe EM**, Whitmore J & Persing DH. Impact of strain types on detection of toxigenic *Clostridium difficile*: Comparison of molecular diagnostic and enzyme immunoassay approaches. *J. Clin. Microbiol.* 48:3719-3724
- 2010 Morgan M, **Marlowe EM**, Della-Latta P, Salimnia H, Novak-Weekley SM, Wu F & Crystal BS. Multicenter evaluation of a new shortened PNA FISH procedure for species identification of select Gram negative bacilli from blood cultures. *J. Clin. Microbiol.* 48:2268-2270.
- 2010 Novak-Weekley SM, **Marlowe EM**, Miller, JM, Cumpio J, Nomura JH, Vance PH & Weissfeld A. *Clostridium difficile* testing in the clinical laboratory using multiple algorithms. *J. Clin. Microbiol.* 48:889-893.
- 2008 **Marlowe EM**, Novak-Weekley SM, Dunn, JJ, Smith, A, Cumpio, J, Makalintal, E & Barnes, D. Evaluation of the GeneXpert® Enterovirus assay for the detection of enteroviral RNA in cerebrospinal fluid. *J. Clin. Virol.* 43:110-113.
- 2008 **Marlowe EM** & Wolk DM. GeneXpert® testing: Applications for clinical microbiology, Part I & II. *Clin. Microbiol. Newsletter*.30:175-188.
- 2005 Kaplan S, **Marlowe EM**, Hogan JJ, Doymaz M, Bruckner DA & Simor AE. Sensitivity and specificity of a rapid rRNA gene probe assay for the simultaneous identification *Staphylococcus aureus* and detection of *mecA*. *J. Clin. Microbiol.* 43:3438-3442.
- 2003 **Marlowe EM**, Andruszkiewicz I, Gordon, P, Hindler J, Hogan JJ & Bruckner DA. Application of an rRNA probe matrix for rapid identification of bacteria and fungi from routine blood cultures. *J. Clin. Microbiol.* 41:5127-5133.
- 2003 **Marlowe EM**, Kaplan S, Gibson LR, Hogan, J & Bruckner DA. Conventional and molecular methods for verification of results obtained with BacT/Alert non-vent blood culture bottles. *J. Clin. Microbiol.* 41:1266-1269.
- 2002 **Marlowe EM**, Wang JM, Pepper IL & Maier RM. Application of a RT-PCR assay to monitor regulation of the catabolic *nahAc* gene during phenanthrene degradation. *Bioremediation*. 13:251-260.
- 2002 Finegold SM, Molitotis D, Song Y, Liu C, Vaisanen M, Bolte E, McTeague M, Sandler R, Wexler H, **Marlowe EM**, Collins MD, Lawson P, Summanen P, Baysallar M, Tomzynski T, Read E, Johnson E, Rolfe R, Shah H, Manning P, Kaul A. Gastrointestinal microflora studies in late-onset autism. *Clin. Infect. Dis.* 35(Suppl 1):S6-16.
- 2002 **Marlowe EM**, Linscott AJ, Kanatani M, Bruckner DA. Practical therapeutic application of the Oxoid PBP2' latex agglutination test for rapid identification of methicillin-resistant *Staphylococcus aureus* in blood cultures. *Amer. J. Clin. Path.* 118:287-291.

Papers (Peer Reviewed Continued):

- 2001 **Marlowe EM**, Cohen MD, Hindler JF, Ward KW, Bruckner DA. Practical strategies for detecting and confirming vancomycin intermediate *Staphylococcus aureus*: A tertiary-care hospital laboratory's experience. *J. Clin. Microbiol.* 39:2637-2639.
- 1998 Wang JM, **Marlowe EM**, Miller-Maier RM, Brusseau ML. Cyclodextrin-enhanced biodegradation of phenanthrene. *Env. Sci. Technol.* 32:1907-1912.
- 1997 **Marlowe EM**, Josephson KL, Miller RM, Pepper IL. A method for the detection and quantitation of PCR template in environmental samples by high performance liquid chromatography. *J. Microbio. Methods.* 28:45-53.

Case Studies:

- 2010 Novak-Weekley, S.M. & **Marlowe EM**. LabQ. Infectious Disease in Lung: Case of the Mistaken Neoplasm. American Society of Clinical Pathologists.
- 2008 **Marlowe, EM** & Novak-Weekley, S.M. 2008. Lab Q. A Rare Case of Endocarditis: Improved Laboratory Diagnosis using Molecular Techniques. American Society of Clinical Pathologists. Clinical Laboratory No. CL-6

Papers (Non-Peer Reviewed):

- 2014 Novak, S.M. & **Marlowe, EM**. "The Automatic Choice – Selecting Automated Laboratory Systems". Practical Patient Care Magazine. December 9, 2014.

Book Chapters:

- 2018 She R., Schutzbank T.E. & **Marlowe EM**. Non-PCR Target Amplification Techniques. In: Advanced techniques in diagnostic microbiology, 3rd Edition. Y. Tang & C. Stratton (eds.). Springer Verlag.
- 2016 Wolk DM. & **Marlowe EM**. Molecular method verification. In: Molecular microbiology: Diagnostic principles and practice, 3rd Edition. D. Persing, F. Tenover, R. Hayden, F. Nolte, Y. Tang & A. Van Velkum (eds). ASM press.
- 2015 Novak-Weekley S.M & **Marlowe EM**. Total Laboratory Automation in Clinical Bacteriology. In: Current and emerging technologies in Diagnostic Microbial Infections. A Sails & Y. Tang (eds.). Elsevier.
- 2015 **Marlowe EM**, Novak-Weekley S.M. & LaRocco, M. Improved Diagnostics in Microbiology: Developing a Business Case for Hospital Administration. In: Molecular microbiology: Diagnostic principles and practice, 3rd Edition. D. Persing, F. Tenover, R. Hayden, F. Nolte, Y. Tang & A. Van Velkum (eds). ASM Press.
- 2013 Wolk D, Whitfield NN, **Marlowe EM**, & Marshall MM. The current state of the US food and drug administration process and regulations for diagnostic laboratory assays. In: Clinical Laboratory Management, 2nd Edition. L.S. Garcia (ed). ASM press. Pp 809-816.
- 2012 She R. & **Marlowe EM**. Non-PCR Target Amplification Techniques. In: Advanced techniques in diagnostic microbiology, 2nd Edition. Y. Tang & C. Stratton (eds.). Springer Verlag. Pp 293-306.
- 2011 **Marlowe EM** & Wolk DM. Molecular method verification. In: Molecular microbiology: Diagnostic principles and practice, 2nd Edition. D. Persing, F. Tenover, R. Hayden, F. Nolte, Y. Tang & A. Van Velkum (eds). ASM press. Pp 861-883.
- 2011 **Marlowe EM** & Pancholi P. Molecular detection of Group B streptococcus. In: Molecular microbiology: Diagnostic principles and practice, 2nd Edition. D. Persing, F. Tenover, R. Hayden, F. Nolte, Y. Tang & A. Van Velkum (eds). ASM press. Pp 453-462.
- 2009 Newby DB, **Marlowe EM** & Maier, RM. Nucleic acid based methods of analysis. In: Environmental microbiology; 2nd Edition. IL. Pepper & RM. Maier (eds.). Academic Press. Pp. 243-365.
- 2008 Wolk DM & **Marlowe EM**. Future trends in diagnostics as related to the immunocompromised. In: Diagnostic microbiology in the immunocompromised host. ASM Press. Pp.443-462.
- 2006 **Marlowe EM** & Wolk DM. Pathogen detection in the genomic era. In: Advanced techniques in diagnostic microbiology. Y. Tang & C. Stratton (eds.). Springer Verlag. Pp. 505-523.
- 2000 **Marlowe EM**, Josephson KL & Pepper IL. Nucleic acid based methods of analysis. In: Environmental microbiology. IL. Pepper & RM. Maier (eds.). Academic Press. Pp. 287-316

Abstracts and Presentations:

- 2022 Hughes LJ, Rogers A, Starolis MW and **Marlowe EM**. Performance of an Automated, Real-Time PCR Assay to Detect *Candida auris* in Surveillance Swabs Using the Hologic Panther Fusion®. Poster #3791. ASM Microbe, Washington D.C. June 9-13, 2022.
- 2022 Lapé Nixon M, **Marlowe EM**, Batterman H and Prince H. Seroprevalence of Hepatitis D antibodies in viremic specimens. Abst # 315 Clinical Virology Symposium, May, West Palm Beach, FL May 1-4, 2022.
- 2022 Borillo GA, Kagan R, **Marlowe EM**. Application of a Multiplexed RT-PCR-Based Strategy for the Surveillance of SARS-CoV-2 Variants. 32nd ECCMID Abst #: 00363, Lisbon, Portugal. April 23-26, 2022.
- 2021 Prince, H.E., Batterman, H.J., and **Marlowe EM**. SARS-COV-2 IgM Detection in Relation to Reactivity in four SAR CoV-2 IgG Assays. 34th AMLI Annual Meeting, Austin, Tx
- 2020 **Marlowe EM** and Kagan RM. STI Testing Beyond *Chlamydia trachomatis* & *Neisseria gonorrhoeae*: *Mycoplasma genitalium* & *Trichomonas vaginalis* Trends Data from a US Commercial Laboratory. STD Prevention Conference (Virtual). Sept 14-24, 2020
- 2020 **Marlowe EM** and Kagan RM. *Mycoplasma genitalium* Trends Among Men and Women in a National Reference Laboratory Database. ASM Microbe (Virtual), Poster FRIDAY-AAR-710.
- 2019 Van Der Pol, B, Waites K.B., Taylor S, Chavoustie S, Emel A, Kaplan C, Eisenberg D, Chan P, Mena L, Arcenas R, McGowin CL, Mohan R, **Marlowe EM**. *Mycoplasma genitalium* Detection in Male and Female Urogenital Specimens Using a Standardized Molecular Assay. STI & HIV 2019 World Congress, Vancouver, Canada.
- 2019 Van Der Pol B, Waites K.B, Taylor S, Chavoustie S, Emel A, Kaplan C, Eisenberg D, Chan P, Mena L, Arcenas R, McGowin CL, Mohan R, **Marlowe EM**. *Trichomonas vaginalis* Detection in Male and Female Urogenital Specimens Using a Standardized Molecular Assay. ASM Microbe 2019, San Francisco, CA.
- 2018 Scott L, David A, Furrer J, Schneider F, Govender L, Kumar SS, Bastos F., Lange S, Lötscher P, Martinson N, **Marlowe EM**, Stevens W. Evaluation of a Prototype cobas® MTB assay for use on the cobas® 6800/8800 Systems for the detection of *Mycobacterium tuberculosis* in a high burden HIV patient population. AIDS 2018, Amsterdam, The Netherlands.
- 2018 Paxinos EE, Marins E, Duncan D, **Marlowe EM**, & Canchola JA. Analytical performance and workflow comparisons of two high throughput viral load platforms. Clinical Virology Symposium, West Palm Beach, FL
- 2018 **Marlowe EM**, Gohl P, Steidle M, Arcenas R, Schneider T, Loetscher P & Bier C. *Trichomonas vaginalis* detection in female specimens with cobas® TV/MG for use on the cobas® 6800/8800 Systems 28th ECCMID. Madrid, Spain
- 2017 Hardy D, Gohl P, Lewinski M, Arcenas R, Seiverth B, Schneider T, **Marlowe EM** & Krevolin M. Performance of cobas® CT/NG for use on the cobas® 6800/8800 Systems for the detection of *Chlamydia trachomatis* and *Neisseria gonorrhoeae* in Oropharyngeal and Anorectal Swab Specimens. 27th ECCMID. Vienna, Austria
- 2017 Hardy D, Krevolin M, Lewinski M, Arcenas R & **Marlowe EM**. Analytical performance of cobas® CT/NG for detection of *Chlamydia trachomatis* and *Neisseria gonorrhoeae* from urogenital specimens on the cobas® 6800/8800 Systems. 27th ECCMID. Vienna, Austria
- 2017 Ferguson J, Krevolin M, Lewinski M, Arcenas R & **Marlowe EM**. Comparison of Two Swabs (Woven and Flocked) used for the Collection of Endocervical Specimens for *Chlamydia trachomatis* and *Neisseria gonorrhoeae* testing on the cobas® 4800 System. 27th ECCMID. Vienna, Austria
- 2017 Hardy D, Krevolin M, Lewinski M, Arcenas R & **Marlowe EM**. Analytical performance of cobas® CT/NG for detection of *Chlamydia trachomatis* and *Neisseria gonorrhoeae* from urogenital specimens on the cobas® 6800/8800 Systems. 27th ECCMID. Vienna, Austria

Abstracts and Presentations Continued:

- 2016 Kinney W, Fetterman, B, Bremer, R, Castle, P, Tokugawa, D, Poitras, N, Hosfield, E, **Marlowe, E**, Lorey, T, Schiffman, M, Wentzensen, N. Evaluation of P16/KI-67 Dual Stain and HPV 16/18 Genotyping in a Large Population of HPV-Positive Women. OC 09-08. EUROGIN 2016 Congress, Salzburg, Austria
- 2016 Johnson JK., Albrecht V, Karlsson M, Robinson GL, Stevens V, Werner B, Schuetz A, Wolk D, **Marlowe EM**, Babady E, Miller M, Culbreath K, Butler-Wu S, Diekema D, Rasheed JK, Limbago B. Detection of Carbapenem-Resistant *Enterobacteriaceae* (CRE) in U.S. Clinical Laboratories. ASM Microbe 2016, Boston, MA
- 2014 **Marlowe E**, Novak-Weekley S. Evaluation of the Verigene[®] Enteric Pathogens Nucleic Acid Test (EP) IUO for Bacterial & Viral causes of Gastrointestinal Infection Clinical Virology Symposium, Daytona Beach, FL
- 2012 Bender J, Taylor C.S., Cumpio J, Novak-Weekley S, Steinberg E, She R, **Marlowe EM**. Infants < 90 Days Old Hospitalized with Rhinovirus Infection Compared to Those with Respiratory Syncytial Virus Infection. IDSA 2012, San Diego, CA
- 2010 **Marlowe EM**, Novak-Weekley S, Cumpio J. Comparison of three molecular methods for the direct detection of *Mycobacterium Tuberculosis* complex from respiratory and non-respiratory specimens. Association of Molecular Pathology Meeting, San Jose, CA
- 2010 Novak-Weekley S, **Marlowe EM**, Lindgren B, Kelly R, Carpenter J, Ewers, S and Campbell T. Comparison of a 2009 H1N1 Influenza A specific monoclonal antibody kit to the CDC RT-PCR molecular Assay for the identification of clinical isolates grown in R-Mix Too[™] mixed cell[™] culture. Clinical Virology Symposium, Daytona Beach, FL
- 2010 **Marlowe EM**, Novak-Weekley S, Miller J, Sheinbaum A. Evaluation of the of the Roche Cobas[®] Ampliprep/Cobas[®] Taqman for the replacement of the versant HCV TMA assay for the qualitative detection of HCV. Clinical Virology Symposium, Daytona Beach, FL
- 2009 Novak-Weekley SM, Miller JM, Cumpio JV, Weissfeld AS, **Marlowe, EM**. Comparison of *Clostridium difficile* testing algorithms using glutamate dehydrogenase, toxins A & B, and cell culture cytotoxicity neutralization to standalone PCR testing on the Cepheid GeneXpert[®]. American Society for Microbiology Annual Meeting, Philadelphia, PA
- 2009 **Marlowe EM**, Miller JM, Miller MA, Novak, SM. Multisite evaluation of a rapid PNA FISH method for the identification of Gram negative rods from positive blood cultures. American Society for Microbiology Annual Meeting, Philadelphia, PA
- 2009 **Marlowe EM**, Miller JM, LaForga E, Amos MJ, Miller MA, Novak, SM. eSwab nares specimens cultured with BioRad MRSASelect[™] media are comparable to the Cepheid Xpert[™] MRSA PCR for use in MRSA surveillance. American Society for Microbiology Annual Meeting, Philadelphia, PA
- 2008 Novak SM, Miller JM, **Marlowe, EM**. Rapid identification of *S. auerus* and coagulase negative *Staphylococci* (CNS) followed by differentiation between MRSA and MSSA from blood culture bottles using *S. aureus*/CNS PNA FISH[™] and *mecA* EVIGENE[™]. American Society for Microbiology Annual Meeting, Boston, MA
- 2007 **Marlowe EM**, Sloane, D, Shepley, D, Miller, M, Spell, CD, Dimech, W, & Wolk, DM. Use of web-based EDCNet and OptiQual[®] external positive controls to monitor quality performance of user-defined & FDA-approved assays for viral load testing. Association of Molecular Pathology Meeting, Los Angeles, CA
- 2005 **Marlowe EM**, Darby P, Turner, S, Wiedbrauk, D. Detection of Influenza A & Influenza B viruses using research prototype real time transcription mediated amplification assays. Clinical Virology Symposium, Clearwater Beach, FL
- 2004 Hogan JJ, Kaplan S, **Marlowe EM**, Schreckenberger P, Tjhio J, Simor AE, Louie L, Gibson L, Bruckner, DA. Simultaneous identification of *Enterococcus* and detection of *vanA* & *B* genes using a rapid DNA probe assay. American Society for Microbiology Annual Meeting, New Orleans, LA
- 2003 **Marlowe EM**, Kaplan S, Hogan JJ, Bruckner DA. Simultaneous identification of *Staphylococcus aureus* and detection of *mecA* gene using a rapid DNA probe assay. American Society for Microbiology Annual Meeting, Washington D.C.
- 2002 Song Y, Liu CX, **Marlowe EM**, Molitoris D, Finegold SM. Isolation and detection of a clostridium sp. DR 6A from human stool by culture and PCR. Anaerobe Society of the Americas Biennial Meeting, Park City, UT

Abstracts and Presentations Continued:

- 2002 Read E, **Marlowe EM**, Finegold, S, Wexler, H. Examination of the *cepA*, *cfiA* and *ermF* antibiotic resistance genes in *Bacteroides fragilis*: Comparison of resistant genes, genotypes and antibiograms of clinical isolates. American Society for Microbiology Annual Meeting, Salt Lake City, UT
- 2001 **Marlowe EM**, Gibson LR, Hogan JJ, Bruckner DA. Controlled verification of the performance of the new BacT/Alert® non-vent blood culture bottles for the detection of microorganisms by conventional and molecular methods. American Society for Microbiology Annual Meeting Abstr. C-8, Orlando, FL
- 2001 **Marlowe EM**, Linscott AJ, Bruckner DA. Evaluation of the Oxoid penicillin binding protein latex agglutination test for rapid identification of MRSA and practical therapeutic application in blood cultures. American Society for Microbiology Annual Meeting Abstr. C-87, Orlando, FL
- 2000 Linscott AJ, **Marlowe EM**, Hindler JF, Bruckner DA. Performance of the Velogene™ Rapid MRSA identification assay for the detection of the *mecA* gene in *Staphylococcus aureus*. American Society for Microbiology Annual Meeting Abstr. C-325, Los Angeles, CA
- 1999 **Marlowe EM**, Miller-Maier RM, Pepper, IL. An evaluation of bacterial gene expression during the biodegradation of organic contaminants. American Society for Microbiology Annual Meeting, Chicago, IL
- 1998 **Marlowe EM**, Miller-Maier RM, Pepper, IL. An RT-PCR assay for evaluating gene expression as an index of biodegradation. American Society for Microbiology Annual Meeting Abstr. D-45, Atlanta, GA
- 1995 **Marlowe EM**, Josephson KL, Miller RM, Pepper, IL. Detection of PCR template: Quantitation by high performance liquid chromatography. American Society for Microbiology Annual Meeting Abstr. Q438, Washington D.C.
- 1995 Huber MS, Zenner **B**, **Marlowe EM**, Pepper IL, Miller, RM. The use of AP-PCR to simultaneously identify multiple bacterial genomes in one sample. American Society for Microbiology Annual Meeting Abstr. N52, Washington D.C.
- 1994 **Marlowe EM**, Miller RM, Pepper, IL. Quantification and separation of polymerase chain reaction amplified products using high performance liquid chromatography. American Society for Microbiology Annual Meeting Abstr. Q264, Las Vegas, NV
- 1994 Burr MD, **Marlowe EM**, Gerba CP, Pepper, IL. *Salmonella* as a biotracer for microbial pollution of marine waters: Strain differentiation by restriction fragment length polymorphism analysis of polymerase chain reaction products. American Society for Microbiology Annual Meeting Abstr. Q253, Las Vegas, NV

Invited Lectures:

- 2022 Adapting to Home Testing & Remote Sample Collection: The View from the Clinical Laboratory. Next Generation Dx Summit, Washington, D.C.
- 2022 Laboratory Medicine Beyond the Box: Leveraging Automation, Artificial Intelligence, & Big Data Analysis in Clinical and Public Health Microbiology: Setting the Stage. ASM Microbe, Washington, D.C.
- 2022 SARS-CoV-2 Variant Surveillance by PlexPCR. ECCMID, Lisbon, Portugal
- 2021 SARS-CoV-2 Diagnostics in a High-Volume Commercial Laboratory: Where are we now? Where are we going? World Microbe Forum. ASM Virtual Conference
Land'O Lakes Bioanalytical Virtual Conference
- 2019 Laboratory Medicine Beyond The Box: Value Based Health Care & Diagnostic Evidence. LabRoots Molecular Diagnostics Virtual Event
- 2018 Comparative Assessment of Urogenital Specimen Types for the Detection of *Mycoplasma genitalium* from Female and Male Specimens using cobas® TV/MG for use on the cobas® 6800/8800 Systems
CDC STD Prevention Conference, Washington, D.C.
- 2017 Supersize, Minimize, Maximize: Rightsizing Technology for Value Driven Diagnostics
ASCLS, Microbiology Grand Rounds Webinar Series
- 2016 Syndrome Specific Infectious Disease Panels: Questions among All the Answers
Molecular Tri Conference, San Francisco, CA
- 2016 The Business of Science in the Clinical Microbiology Laboratory
Northern California ASM Meeting, Pleasanton, CA
- 2016 Case Studies in Molecular Virology
Clinical Virology Workshop, Daytona Beach, CA
- 2016 Development of a Business Case for Purchase and Implementation of a Rapid Diagnostic Platform in the Clinical Microbiology Laboratory
American Society for Microbiology, Boston, MA
- 2015 Syndrome Specific Infectious Disease Panels: Questions Among All the Answers
American Society for Microbiology Annual Meeting, New Orleans, LA
- 2014 It's all in the Delivery: Using Outcome data to talk to Administration
American Society for Microbiology Annual Meeting, Boston, MA
- 2013 Detecting Microbial abnormalities in the Genital Tract
APHL, Ontario, Ca
- 2013 Syndrome Specific Molecular Diagnostics: What Make Sense?
Clinical Virology Molecular Workshop, Daytona Beach, FL
- 2013 The Business of Science in the Modern Healthcare Era
Workshop - American Society for Microbiology Annual Meeting, Denver, Co
- 2012 Evidence Based Clinical Microbiology, Betting with the Odds
American Society for Microbiology Annual Meeting, San Francisco, CA
- 2012 Digging where the Gold is: Using Evidence Based Practices in Molecular Infectious Disease Testing
Association of Molecular Pathology Outreach Course, Long Beach, CA
- 2011 Applying Evolving Technology in the Routine Clinical Laboratory
Southern California American Society for Microbiology Annual Meeting, La Jolla, CA

Invited Lectures Continued:

- 2010 Viral Gastroenteritis
APHL, Rancho Cucamonga, CA

- 2010 Respiratory Virus Diagnostics: An Overview
Arizona Society of Clinical Laboratory Science, Tucson, AZ

- 2010 Molecular Microbiology Methods: Statistics, Struggles and Case Studies in the Verification and Validation of Qualitative and Quantitative Assays
Workshop - American Society for Microbiology Annual Meeting, San Diego, CA

- 2010 Diagnostic Testing Algorithms for *Clostridium difficile*
Southern California American Society for Microbiology Spring Symposia, San Diego, CA
Teleconference Network of Texas, Infectious Diseases Teleconference Series

- 2009 Experimental Design Choices & Data Analysis for Molecular Method Verification
Workshop - American Society for Microbiology Annual Meeting, Philadelphia, PA

- 2009 Respiratory Virus Diagnostics: An Overview
South Central Association of Clinical Microbiology Audio Conference Series

- 2007 Experimental Design Choices and Data Analysis for Molecular Method Verification
Workshop - American Society for Microbiology Annual Meeting, Toronto, Canada

- 2007 The Impact of Rapid Molecular Diagnostics: GeneXpert Testing for GBS and Enterovirus
Southern California American Society for Microbiology Annual Meeting, San Diego, CA
Teleconference Network of Texas, Infectious Diseases Teleconference Series

- 2006 A Nature Lovers Guide to Molecular Testing
American Society for Microbiology Annual Meeting, Orlando, FL

- 2006 Blood Cultures: A Brief Perspective
Teleconference Network of Texas Infectious Diseases, Teleconference Series