

CURRICULUM VITAE

NAME Melinda M. Pettigrew
SCHOOL University of Minnesota School of Public Health

EDUCATION

BA Grinnell College, Grinnell, Iowa (Biology), 1992
PhD Yale University, New Haven, Connecticut (Epidemiology of Microbial Diseases), 1999

FACULTY AND ACADEMIC APPOINTMENTS

2024-present Mayo Professor, University of Minnesota School of Public Health, Minneapolis, MN
2021-2023 Anna M. R. Lauder Professor of Epidemiology, Yale School of Public Health, New Haven, CT
2016-2023 Professor, Yale School of Public Health, New Haven, CT
2008-2016 Associate Professor, Yale School of Public Health, New Haven, CT
2002-2008 Assistant Professor, Department of Epidemiology and Public Health, Yale University School of Medicine, New Haven, CT
2002 Instructor, Department of Epidemiology and Public Health, Yale University School of Medicine, New Haven, CT
1999-2002 Postdoctoral Fellow, Department of Epidemiology, University of Michigan School of Public Health, Ann Arbor, MI
1998-1999 Visiting Instructor and Dissertation Fellowship, Department of Biology, Haverford College, Haverford, PA

LEADERSHIP APPOINTMENTS

2024 Dean, University of Minnesota School of Public Health, Minneapolis, MN
2023-2024 Deputy Dean, Yale School of Public Health, New Haven, CT
2022 Deputy Dean, Yale School of Public Health, New Haven, CT
2022-2023 Yale University Cabinet
2022-2023 Provost's Deans Council
2022-2023 Executive Committee, Yale School of Medicine
2020 President's Committee on Diversity, Inclusion, and Belonging, Yale University
2019-present Associate Director of the Scientific Leadership Core (SLC) overseeing Diversity, Equity and Inclusion, Antibacterial Resistance Leadership Group (ARLG)
2019-present Executive Committee, Antibacterial Resistance Leadership Group (ARLG)
2016-2020 Executive Board, Committee on the Status of Women in Medicine (SWIM), Yale School of Medicine
2016-2018 Chair, YSPH Curriculum Rebuild Committee
2013-present Chair, Special Populations Special Emphasis Panel, Antibacterial Resistance Leadership Group (ARLG)
2013-present Steering Committee, Antibacterial Resistance Leadership Group (ARLG)
2012-2019 Deputy Title IX Coordinator, Yale University
2011-2022 Chair, Education Committee, Yale School of Public Health, New Haven, CT
2009-2010 Chair, Diversity Committee, Yale School of Public Health, New Haven, CT

PROFESSIONAL HONORS

2023 Elected Member of the Connecticut Academy of Science and Engineering (CASE)
2018 Yale School of Public Health Distinguished Teaching Award
2018 Yale Graduate and Professional Student Senate Inspiring Yale Award
2018 Edward Alexander Bouchet Graduate Honor Society
2014-2015 Public Voices Thought Leaders Fellow
2009 Yale Global Health Initiative Faculty Travel Award
2009 New Professional Award Association of Yale Alumni in Public Health
2006 Designated Microarray Investigator: NIAID sponsored Pathogen Functional Genomics Resource Center at TIGR
2004 Governing Council, Epidemiology Section, American Public Health Association, 2004
1998 Scholar in Residence, Haverford College
1993 Dorothy Danforth Compton Fellowship, Yale University,
1991 ACM Minority Scholar, Associated Colleges of the Midwest

GRANTS AND CONTRACTS

Active

Agency: National Institute of Allergy and Infectious Diseases (NIAID)
ID#: UM1AI104681
Title: Antibacterial Resistance Leadership Group 2.0 (UM1)
PI: Vance G. Fowler and Henry F. Chambers (multiple PI)
Roles: Associate Director Overseeing Diversity, Executive Committee and Steering Committee Member
Goal: The goal is to develop, design, implement, and manage a national clinical research agenda to increase knowledge of and mitigate the important factors that drive antimicrobial resistance.
Percent effort: 10%
Project period: 12/02/19-11/31/26

Agency: National Institute of Allergy and Infectious Diseases (NIAID)
ID#: R01AI019641
Title: Genome evolution during bacterial persistence in the human airways in COPD
PI: Timothy F. Murphy
Role: Subcontract PI
Goal: The overall goal of this research is to apply modern methods of next generation sequencing to *Haemophilus influenzae* and *Moraxella catarrhalis* in order to elucidate mechanisms by which bacteria persist in COPD airways, thus identifying drug targets, leading directly to innovative approaches to eradicate bacterial persistence.
Percent effort: 10%
Total costs: \$3,142,081
Project period: 07/01/19-06/30/24

Completed

Agency: Centers for Disease Control (CDC)
ID#: NU50CK000488
Title: Connecticut Emerging Infections Program: AMD *Clostridioides difficile* microbiome
PI: Melinda M. Pettigrew

Role: Subcontract PI
Goal: To identify markers of microbiota disruption associated with recurrent *C. difficile*.
Percent effort: 5%
Total costs: \$98,895 per year
Project period: 01/01/19-12/31/23

Agency: Centers for Disease Control (CDC)
ID#: NU50CK000488
Title: Connecticut Emerging Infections Program: AMD *Clostridioides difficile* transmission
PI: Melinda M. Pettigrew
Role: Subcontract PI
Goal: To identify markers of use whole genome sequencing to detect community base transmission of *C. difficile*.
Percent effort: 5%
Total costs: \$105,778 per year
Project period: 01/01/22-12/31/23

Agency: Green Acres
ID#: 20-006612
Title: Generative agriculture versus industrial agriculture and the threat of antimicrobial resistance and zoonotic transmission of antimicrobial resistant pathogens
PI: Melinda M. Pettigrew
Goal: Our goal is to compare levels of pathogenic and antimicrobial resistant *E. coli* and antibiotic resistance genes in grass-fed and free-range cows as compared to grain-fed cows in industrial lots.
Percent effort: 10%
Total costs: \$249,545
Project period: 12/20/20-04/30/23

Agency: Centers for Disease Control (CDC)
ID#: 75D30120C09486
Title: *Clostridioides difficile* in the community setting: Identification of epidemiologic and microbiome-related risk factors for colonization and household transmission
PI: Melinda M. Pettigrew
Goal: Our goal was to conduct a household transmission study of *C. difficile*.
Percent effort: 10%
Total costs: \$540,757
Project period: 09/01/20-12/31/21

Agency: Centers for Disease Control (CDC)
ID#: NU50CK000488
Title: Connecticut Emerging Infections Program: CRE transmission networks
PI: Melinda M. Pettigrew
Role: Subcontract PI
Goal: To describe CRE transmission patterns within the CT EIP catchment area by applying phylogenetic and network analysis of whole genome sequencing (WGS) data.
Percent effort: 10%
Total costs: \$171,297

Project period: 01/01/18-12/31/20

Agency: National Institute of Allergy and Infectious Diseases (NIAID)
ID#: UM1 AI104681
Title: ARLG SCOUTCAP Substudy STARS
PI: Melinda M. Pettigrew
Role: PI
Goal: Our goals were to clarify the association between short course vs. standard course antibiotic therapy for community-acquired pneumonia and a) selection of antibiotic resistance genes and b) risk of antibiotic associated diarrhea.
Percent effort: 15%
Total costs: \$703,509
Project period: 07/01/16-11/31/20

Agency: National Institute of Allergy and Infectious Diseases (NIAID)
ID#: UM1AI104681
Title: Antibacterial Resistance Leadership Group (UM1)
PI: Vance G. Fowler and Henry F. Chambers (multiple PI)
Role: Steering Committee Member and Chair, Special Populations Special Emphasis Panel
Goal: The goal was to create and implement a leadership group that will develop, design, implement, and manage a national clinical research agenda to increase knowledge of and mitigate the important factors that drive antimicrobial resistance.
Percent effort: 10%
Project period: 07/01/13-11/31/19

Agency: National Institute of Allergy and Infectious Diseases (NIAID)
ID#: R01AI019641
Title: Persistent *H. influenzae* in COPD: virulence, vaccines, and antibiotic resistance
PI: Timothy F. Murphy
Role: Subcontract PI
Goal: Our goals were to 1) elucidate the evolutionary dynamics of *H. influenzae* in the human chronic obstructive pulmonary disease (COPD) airways by analyzing the genomes of serially persistent isolates, 2) assess the effect of immune selective pressure on candidate vaccine antigens, and 3) characterize the frequency of antimicrobial resistance markers and tolerance in *H. influenzae* that colonize and infect adults with COPD.
Percent effort: 15%
Total costs: \$3,563,233
Project period: 09/01/13-08/31/19

Agency: Centers for Disease Control (CDC)
ID#: 200-2016-91963
Title: Identification of microbial disruption indices (MDI) predictive of colonization by drug resistant *Pseudomonas aeruginosa*
PI: Melinda M. Pettigrew and Jennifer Kristie Johnson (multiple PI)
Role: Contact PI
Goal: Our goal was to conduct a case-control study to determine relative abundance and diversity of the gastrointestinal microbiota in order to identify microbiota disruption

indices predictive of colonization by imipenem-resistant *P. aeruginosa*.

Percent effort: 15%
Total costs: \$459,721
Project period: 09/15/16-11/14/17

Agency: National Institute on Deafness and other Communication Disorders (NIDCD)
ID#: R01DC013554
Title: Pneumococcal transition from nasopharyngeal biofilm carriage to otitis media
PI: Anthony A. Campagnari
Role: Subcontract PI
Goal: Our goals were to identify the host and bacterial factors required for pneumococcal transition from nasopharyngeal biofilm colonization to otitis media alone.

Percent effort: 5%
Total costs: \$1,250,000
Project period: 03/01/14-03/31/17

Agency: National Institute on Deafness and other Communication Disorders (NIDCD)
ID#: R21DC011667
Title: Microbial diversity, otitis media, and the pneumococcal transcriptome
PI: Melinda M. Pettigrew
Percent effort: 25%
Total costs: \$455,750
Project period: 07/01/11-06/30/13

Agency: National Institute of Mental Health (NIMHS)
ID#: P30MH062294
Title: Center for Interdisciplinary Research on AIDS
PI: Paul Cleary
Role: Member, Interdisciplinary Research Methods (IRM) Core
Percent effort: 5%
Project period: 09/01/08-06/30/13

Agency: National Institute of Allergy and Infectious Diseases (NIAID)
ID#: R01AI068043
Title: Molecular epidemiologic identification of pneumococcal tissue specific genes
PI: Melinda M. Pettigrew
Percent effort: 65%
Total costs: \$2,336,887
Project period: 04/01/07-03/31/12

Agency: Yale University Endowed Postdoctoral Fellowships
ID#: Anderson Postdoctoral Fellowship
PI: Melinda M. Pettigrew
Percent effort: Funds to support postdoctoral fellow Jonathan Thomas
Total costs: \$37,000
Project period: 06/01/07-05/31/08

Agency: Donaghue Foundation

ID#: DF03-040
Title: Risk in partnerships for repeat sexually transmitted infections
PI: Linda Niccolai
Role: Co-investigator
Percent effort: 5%
Total costs: \$240,000
Project period: 01/01/05-12/31/07

Agency: National Institute on Deafness and other Communication Disorders (NIDCD)
ID#: R21DC006260
Title: Gene discovery for pneumococcal otitis media
PI: Melinda M. Pettigrew
Percent effort: 25%
Total costs: \$519,310
Project period: 07/01/03-6/30/06

Agency: National Institute of Environmental Health Sciences (NIEHS)
ID#: Supplement to R01ES07456
Title: Identification of environmental risk factors for otitis media
PI: Melinda M. Pettigrew
Percent effort: 37%
Total costs: \$355,668
Project period: 7/01/02-6/30/06

Agency: Deafness Research Foundation
Title: Identification of virulence factors associated with *Haemophilus influenzae*
PI: Melinda M. Pettigrew
Total costs: \$37,590
Project period: 01/01/01-02/28/02

Agency: National Institute of Allergy and Infectious Diseases (NIAID)
ID#: R01-AI2530, supplement C036919
Title: RT-PCR assay to detect *Haemophilus influenzae* pili expression *in vivo*
PI: Janet R. Gilsdorf (PI)
Role: Postdoctoral Fellow
Total costs: \$72,032
Project period: 09/01/99-02/28/02

Agency: C.S. Mott Children's Hospital Fund for Research
Title: Identification of virulence factors associated with otitis media caused by *Haemophilus influenzae*
PI: Janet R. Gilsdorf
Role: Co-Investigator
Total costs: \$20,000
Project period: 07/01/00-06/30/01

INVITED TALKS
International/National

- 2023 Expert Panelist: INR Virtual Analytic Exchange on "The Rise of Antimicrobial Resistance and its Global Implications" US State Department, Bureau of Intelligence & Research, Fall 2023.
- 2023 Keynote Speaker: National Summer Undergraduate Research Project. Closing Symposium. "Antibiotic resistance and the microbiome." University of Arizona, August 4, Webinar.
- 2023 ASM Microbe. "Optimizing study designs to elucidate the impact of antibiotics on the human microbiota and resistome." Houston Texas, June 15-19. Invited Speaker.
- 2023 ASM Microbe. "Top Papers of the Year in Antimicrobial Resistance and Susceptibility Testing: AAC, JCM and mBio." Houston Texas, June 15-19, 2023. Moderator.
- 2023 6th Annual Texas Medical Center Antimicrobial Resistance and Stewardship Conference. "Diversity, equity and inclusion in clinical trials for MRSA." Houston Texas, January 18-20, 2023.
- 2022 National Academies' Forum on Drug Discovery, Development, and Translation; the Forum on Medical and Public Health Preparedness for Disasters and Emergencies; and the Forum on Microbial Threats. Accelerating the Development of Rapid Diagnostics to Address Antibiotic Resistance. "Health equity considerations for diagnostic development and use." National Academies of Science, Engineering, and Medicine. Washington, DC. October 13-14.
- 2022 ARLG Grand Rounds. "The microbiota and resistome in clinical trials: Opportunities and challenges." Antibacterial Resistance Leadership Group (Webinar).
- 2022 Pulmonary and Critical Care Medicine Grand Rounds. "Short course antibiotic therapy for pediatric pneumonia: Impact on the respiratory resistome and microbiota." University of Alabama at Birmingham, Birmingham, AL.
- 2021 ASPPH Virtual Sections Retreat, Academic Affairs Section. "Incorporating equity and inclusion into criteria and expectations for promotion and/or tenure." Moderator.
- 2021 2021 ASPPH Virtual Sections Retreat, Opening Plenary Session. "Our journey to being anti-racist academic public health institutions." Invited Speaker.
- 2021 Great Lakes Pharmacy Conference, Panel 4: Antibiotics in Modern Medicine. "Antibiotic associated dysbiosis in the microbiota and resistome." College of Pharmacy, University of Michigan, Ann Arbor, MI.
- 2021 4rd Annual Texas Medical Center Antimicrobial Resistance & Stewardship Conference. "ARLG's Role in Supporting Future Generations of ID Investigators." Texas Medical Center, Houston, TX.
- 2020 UCSF PharmD program, Infectious Disease Seminar. "Antibiotic associated disruption of the microbiome in ICU patients and in community-acquired infections." University of California San Francisco, San Francisco, CA.

- 2018 Respiratory Pathogens Research Center Symposium. “*Haemophilus influenzae* and chronic obstructive pulmonary disease (COPD): Is persistence just a phase?” University of Rochester Medical Center, Rochester, NY.
- 2018 MAC-EPID symposium, Microbiome & Population Health: Challenges & Opportunities. “Can the microbiota be harnessed to prevent antibiotic resistance and hospital-acquired infections?” University of Michigan School of Public Health, Ann Arbor, MI.
- 2017 Division of Healthcare Quality and Promotion Work in Progress Seminar Series. “Identification of microbial disruption indices predictive of colonization by drug resistant *Pseudomonas aeruginosa*.” Centers for Disease Control. Atlanta, GA. (Webinar).
- 2017 The US-Japan Cooperative Medical Sciences Program (CMSP) 19th International Conference on Emerging Infectious Diseases in the Pacific Rim. “The microbiome as a tool to prevent transmission and infection due to antimicrobial resistant bacterial pathogens.” Seoul, Korea.
- 2017 The US-Japan CMSP 19th International Conference on Emerging Infectious Diseases in the Pacific Rim. International Conference on Emerging Infectious Diseases. Acute Respiratory Tract Infections Panel, “The respiratory tract microbiota and risk of colonization and infection due to AMR pathogens.” Seoul, Korea.
- 2016 Women in Science- Distinguished Speaker Series, “Tragedy of the commons: the global threat of antibiotic resistance.” Rochester Institute of Technology. Rochester, NY.
- 2016 Women in Science- Distinguished Speaker Series, “Culture trumps planning: A path to leadership at Yale.” Rochester Institute of Technology. Rochester, NY.
- 2016 10th International Symposium on Pneumococci and Pneumococcal Diseases. “Meet the expert: Transcriptomic studies of *Streptococcus pneumoniae*.” Glasgow, Scotland.
- 2015 LeBonheur Children’s Hospital Pediatric Grand Rounds, “Polymicrobial diseases: otitis media in the era of conjugate vaccines.” University of Tennessee Health Science Center, Memphis, TN.
- 2015 Post-Symposium Research Conference to the 18th International Symposium on Recent Advances in Otitis Media, “Vaccines: Expert review and update on progress in the field” Gaylord National Resort and Convention Center, National Harbor, MD.
- 2015 18th International Symposium on Recent Advances in Otitis Media, Plenary Session “Omics,” “Transcriptional profiling of otitis media pathogens: the transition from colonization to disease.” Gaylord National Resort and Convention Center, National Harbor, MD.
- 2014 1st ASM Conference on Polymicrobial Infections, “Bacterial and viral interactions in community-acquired pneumonia.” Washington, DC.
- 2014 Institute for Public Health and Medicine Seminar, “Low tech methods for effective teaching:

- the jigsaw and genital herpes.” Northwestern University Feinberg School of Medicine, Chicago, IL.
- 2013 Child Health Research Center Seminar Series, “*Streptococcus pneumoniae*: transition from asymptomatic colonization to disease.” Nationwide Children’s Hospital, Columbus, OH.
- 2012 Microbiology Departmental Seminar, "Upper respiratory tract microbial communities, antibiotic use, and risk of otitis media." University at Buffalo State University of New York, Buffalo, NY.
- 2011 Infectious Diseases and Immunology Seminar, “Otopathogens, viruses, the normal flora, and risk of acute otitis media.” Rochester General Hospital Research Institute, Rochester, NY.
- 2011 Department of Microbiology and Immunology Seminar Series, “*Streptococcus pneumoniae*: Colonization and disease in the context of diverse microbial environments.” Wake Forest University, Winston-Salem, NC.
- 2011 Tenth International Symposium Recent Advances in Otitis Media, Scientific Session: Microbiologic Correlates of Otitis Media, “Bacterial and viral correlates of otitis media.” New Orleans, LA.
- 2011 Vaccine Panel: Tenth International Symposium Recent Advances in Otitis Media, “Recent advances in *Streptococcus pneumoniae* protein-based vaccine antigens.” New Orleans, LA.
- 2010 Department of Epidemiology Seminar, “*Streptococcus pneumoniae* post-PCV7: From individual strain to polymicrobial interactions.” College of Public Health, University of Iowa, Iowa City, IA.
- 2010 48th Annual Meeting of the Infectious Diseases Society of America (IDSA), Scientific session: Bacterial Virulence in the Genomics Era, “*Streptococcus pneumoniae*: Tissue specific virulence and polymicrobial interactions.” Vancouver, BC, Canada.
- 2010 Simpósio de Epidemiologia Molecular em Doenças I Infecciosas e Parasitárias Emergentes, “*Streptococcus pneumoniae*: Colonization and disease in the context of diversity,” Ministério da Saude, Fiocruz, Fundacao Oswaldo Cruz, Salvador, Brazil.
- 2010 Microbial Pathogenesis Seminar, “*Streptococcus pneumoniae*: Interdisciplinary approaches for understanding tissue specific virulence and polymicrobial interactions.” University of Utah School of Medicine, Salt Lake City, UT.
- 2009 Center for Clinical Epidemiology and Biostatistics Seminar, “*Streptococcus pneumoniae*: Tissue specific virulence and polymicrobial interactions.” Department of Biostatistics and Epidemiology, University of Pennsylvania, Philadelphia, PA.
- 2009 Department of Microbiology and Immunology Seminar, “*Streptococcus pneumoniae* in the era of PCV7: From individual strain to polymicrobial interactions.” New York Medical College, Valhalla, NY.

- 2007 C.S. Mott Children's Hospital Pediatric Grand Rounds, "*Streptococcus pneumoniae* tissue specific virulence and implications for the conjugate vaccine." University of Michigan School of Medicine, Ann Arbor, MI.
- 2006 Biology Department Seminar Series, "*Streptococcus pneumoniae*: Genetic determinants of tissue specific virulence." Emory University, Atlanta, GA.
- 2005 Pediatric Infectious Disease Group Seminar, "Pneumococcal otitis media: are all strains created equal?" Boston University Medical School, Boston, MA.
- 2005 Molecular and Clinical Epidemiology of Infectious Diseases Seminar Series, "Otitis media in infants: Contributions of the host and pathogen." University of Michigan School of Public Health, Ann Arbor, MI.
- 2005 Pediatric Grand Rounds, "Otitis media: Contributions of the host and environment." University of Texas Medical Branch, Galveston, TX.
- 2005 Microbiology Seminar, "Pneumococcal otitis media: Are all strains created equal?" University of Texas Medical Branch, Galveston, TX.

Yale University

- 2023 Epidemiology of Microbial Diseases Departmental Seminar, "Addressing the global health threat of antimicrobial resistance: Duration, happy cows, and health equity." Yale School of Public Health.
- 2022 Keynote Speaker: Biomed Amgen Scholars Closing Symposium. "Shortening the duration of antibiotic treatment: advances in clinical trial design to address the global health threat of antibiotic resistance." Yale University.
- 2021 Yale Institute for Global Health and the Yale Planetary Solutions Project Panel Discussion, "A conversation with Yale faculty: facilitating a One Health perspective for transdisciplinary research on health across silos." Yale University.
- 2021 Graduate Writing Lab & Yale Journal of Biology and Medicine, "Publishing in the biomedical sciences: A panel discussion with scientific editors." Yale University.
- 2021 Epidemiology of Microbial Diseases Departmental Seminar, "Shortening the duration of antibiotic treatment: Advances in clinical trial design to address the global health threat of antibiotic resistance." Yale School of Public Health.
- 2019 Women's working network, "Women of Yale: College to Career" Yale University.
- 2019 Pediatric Infectious Diseases Research in Progress Seminar, "The gastrointestinal microbiota, antibiotics, and carbapenem-resistant *P. aeruginosa* in the ICU." Yale School of Medicine.
- 2018 Keynote Speaker, Yale BioMed Summer Undergraduate Research Fellowship (SURF) Closing Symposium, "Careers in the Biomedical Sciences." Yale School of Medicine.

- 2016 Panelist, United States Public Interest Group (PIRG) Panel Discussion. “Antibiotic resistance: What is it and what should be done to slow it.” Yale School of Public Health and Yale Student Environmental Coalition.
- 2016 Panel Chair, Yale Healthcare Conference: Creating Value and Sustaining Gains: The Next Decade in Healthcare, “End of antibiotics: Rise of the superbug.” Yale School of Public Health and Yale School of Management.
- 2016 MD/PhD program, “Careers in medicine and science, real world perspectives.” Yale School of Medicine.
- 2016 Epidemiology of Microbial Diseases Departmental Seminar, “Tragedy of the commons: antibiotics and chronic obstructive pulmonary disease (COPD),” Yale School of Public Health.
- 2015 Panel Chair, AYA Assembly, YSPH Centennial Event “Current controversies in vaccination.” Yale School of Public Health.
- 2015 YSPH Alumni Day “Public health toolkit for the next century: Education.” Yale School of Public Health.
- 2015 Yale BioMed Summer Undergraduate Research Fellowship (SURF) Symposium, “*Streptococcus pneumoniae*: the transition from colonization to disease,” Yale School of Medicine.
- 2015 Yale BioMed Summer Undergraduate Research Fellowship (SURF), Panel Discussion, “Careers in the Biomedical Sciences.” Yale School of Medicine.
- 2012 Minority Students Researcher’s Lounge, Yale Combined Program in the Biological and Biomedical Sciences “The upper respiratory tract microbiota and risk of respiratory tract infections in children.” Yale School of Medicine.
- 2011 One Year Later: NIH Study Section Members Share their Experience with the New Review Criteria and Application Format. Yale School of Medicine.
- 2010 Yale-Centro Internacional de Entrenamiento e Investigaciones Médicas (CIDEIM) Fogarty Global Infectious Disease Training Program Internet-based Post-graduate Seminar Series, “Pneumococcal conjugate vaccines.” Broadcast in 5 major institutions in Colombia (Universidad de Valle, Universidad de Antioquia, Universidad Javariana, Universidad de los Andes and CIDEIM).

CONTINUING EDUCATION/PROFESSIONAL DEVELOPMENT

Academic Public Health Leadership Institute (APHLI), 2022-2023.

Yale School of Management, Business Skills for Faculty Leaders at Yale University. Monthly sessions, September 18, 2015-January 15, 2016.

Harvard School of Public Health. Teaching by Case Method: Principles and Practice for Public Health Educators. January 25-27, 2013.

Hedwig van Ameringen Executive Leadership in Academic Medicine (ELAM) Program. 2012-2013.

Imperial College London. Epidemiology and Control of Infectious Diseases. September 1-12, 2008.

COURSES TAUGHT

- 2022 Fall
Yale University, Yale School of Public Health
EMD 517 Principles of Infectious Diseases
- 2021 Fall
Yale University, Yale School of Public Health
EMD 517 Principles of Infectious Diseases
- 2020 Fall
Yale University, Yale School of Public Health
EMD 517 Principles of Infectious Diseases
- 2019 Fall
Yale University, Yale School of Public Health
EMD 517 Principles of Infectious Diseases
- 2019 Spring
Yale University, Yale School of Public Health
EPH 513B Major Health Threats, Antibiotic Resistance Module
- 2018 Fall
Yale University, Yale School of Public Health
EMD 518A Principles of Infectious Diseases
- 2017 Fall
Yale University, Yale School of Public Health
EMD 518A Principles of Infectious Diseases
- 2017 Fall
Yale University, Yale School of Public Health
EMD 563A/563B Laboratory and Field Studies in Infectious Diseases
- 2016 Fall
Yale University, Yale School of Public Health
EMD 518A Principles of Infectious Diseases
- 2016 Fall
Yale University, Yale School of Public Health

EMD 563A/563B Laboratory and Field Studies in Infectious Diseases

- 2015 Fall
Yale University, Yale School of Public Health
EMD 518A Principles of Infectious Diseases
- 2015 Fall
Yale University, Yale School of Public Health
EMD 563A/563B Laboratory and Field Studies in Infectious Diseases
- 2014 Fall
Yale University, Yale School of Public Health
EMD 518A Principles of Infectious Diseases
- 2014
Yale University, Yale School of Public Health
EMD 563A/563B Laboratory and Field Studies in Infectious Diseases
- 2013 Fall
Yale University, Yale School of Public Health
EMD 518A Principles of Infectious Diseases
- 2013 Fall
Yale University, Yale School of Public Health
EMD 563A/563B Laboratory and Field Studies in Infectious Diseases
- 2012 Fall
Yale University, Yale School of Public Health
EMD 518A Principles of Infectious Diseases
- 2012 Spring
Yale University, Yale School of Public Health
EMD 542B Biology and Epidemiology of Infectious Agents
- 2012 Fall
Yale University, Yale School of Public Health
EMD 563A/563B Laboratory and Field Studies in Infectious Diseases
- 2009 Fall
Yale University, Yale School of Public Health
EMD 525 EMD seminar series
- 2009 Fall
Yale University, Yale School of Public Health
EMD 670 Advanced Research Laboratories
- 2006 Spring
Yale University, Yale School of Public Health
EMD 542B Biology and Epidemiology of Infectious Agents

- 2006 Fall and Spring
Yale University, Yale School of Public Health
EMD 563A/563B Laboratory and Field Studies in Infectious Diseases
- 2004 Fall
Yale University, Department of Epidemiology and Public Health
EMD 543A Molecular Epidemiology of Prokaryotic Pathogens
- 2003 Fall
Yale University, Department of Epidemiology and Public Health
EMD 543A Molecular Epidemiology of Prokaryotic Pathogens
- 1998 Fall
Haverford College, Department of Biology, Haverford, PA
Introduction to Epidemiology and Public Health
- 1999 Fall
Haverford College, Department of Biology, Haverford, PA
Topics in Molecular Parasitology
Introduction to Biology: What is life?

FACULTY MENTORSHIP, YALE UNIVERSITY

Amy Bei, PhD, Assistant Professor, Epidemiology of Microbial Diseases, YSPH, 2019-2023
Leying Guan, PhD, Assistant Professor, Biostatistics, YSPH, 2019-2021
Windy Tanner, PhD, Associate Research Scientist, YSPH, 2019-present

POSTDOCTORAL TRAINING AND MENTORSHIP, YALE UNIVERSITY

Postdoctoral Associate: Jonathan Thomas, PhD, YSPH, 2007-2010

PREDOCTORAL TRAINING AND MENTORSHIP, YALE UNIVERSITY

PhD thesis committee member: Ife Desamours Adeyeri, Microbial Pathogenesis, Yale School of Medicine, PhD degree expected 2025
PhD dissertation defense committee member, external member, Dartmouth University: Rebecca Lebeaux, PhD degree conferred 2022
PhD qualifying exam member: Ife Desamours Adeyeri, PhD degree expected 2025
PhD dissertation reader: Mary Petrone, PhD degree conferred 2021
PhD dissertation reader: Kayoko Shioda, PhD degree conferred 2020
PhD rotation advisor: Zhe Zheng, PhD degree expected 2022
PhD qualifying exam member: Kayoko Shioda, PhD degree conferred 2021
PhD thesis committee member: Joseph Lewnard, PhD degree conferred 2016
PhD qualifying exam chair: Joseph Lewnard, degree conferred 2016
PhD dissertation reader: Alan Fu, PhD degree conferred 2014
PhD thesis committee member: Dylan Davies, MD/PhD degree conferred 2013
MD thesis advisor: Stephen Kelleher, MD degree conferred 2011
PhD thesis advisor: Alison Laufer, PhD degree conferred 2011
PhD thesis committee member: Lynda Odofin, PhD degree conferred 2012
PhD qualifying exam chair: Lynda Odofin, PhD degree conferred 2012

PhD thesis advisor: Kee Chan, PhD degree conferred May 2007
PhD qualifying exam member: Kelly Soderberg, PhD degree conferred 2004
PhD dissertation reader: Erika Samoff, PhD degree conferred 2003

MASTER OF PUBLIC HEALTH TRAINING AND MENTORSHIP, YALE SCHOOL OF PUBLIC HEALTH

First thesis advisor: Zeyu Fu, MPH degree, conferred 2023
First thesis advisor: Lily Carruthers, MPH degree conferred 2022
First thesis advisor: William Pelletiers, MPH degree conferred 2022
First thesis advisor: Jiye Kwon, MPH degree conferred 2021
First thesis advisor, Research advisor: Maria Correa, MPH degree conferred 2020
First thesis advisor: Christopher Jossart, MPH degree conferred 2020
First thesis advisor: Amelia Hanron, MPH degree conferred 2019
Second thesis advisor: Kaylen Brzozowski, MPH degree conferred 2019
First thesis advisor: Nicole Hood, MPH degree conferred 2018
Second thesis advisor: Katherine Desobry, MPH degree conferred 2018
First thesis advisor: Mingzhou Fu, MPH degree conferred 2017
First thesis reader, Research advisor: James Fisher, MPH degree conferred 2016
First thesis reader, Research advisor: Rae Wannier, MPH degree conferred 2015
Second thesis reader: Jessica Wagner, MPH degree conferred 2014
Second thesis reader: Aimee Mead, MPH degree conferred 2014
First thesis reader: Kimberly Lay, MPH degree conferred 2013
First thesis reader: Rosina Pradhananga, MPH degree conferred 2013
First thesis reader: Eileen Huang, MPH degree conferred 2013
First thesis reader: Danica Kuncio, MPH degree conferred 2012
Second thesis reader: Sophia Colantonio, MPH degree conferred 2012
Second thesis reader: Nicole Betenia, MPH degree conferred 2010
Second thesis reader: Akriti Singh, MPH degree conferred 2010
Second thesis reader: Julie Beck, MPH degree conferred 2009
First thesis reader: Rupali Bharadwaj, MPH degree conferred 2009
Second thesis reader: Kara Livingston, MPH degree conferred 2009
First thesis reader: Xiaojie Guo, MPH degree conferred 2008
Second thesis reader: Patrick Byam, MPH degree conferred 2008
Second thesis reader: Maua Herme, MPH degree conferred 2008
First thesis reader, Research advisor: Wei-Ching Chen, MPH degree conferred 2007
First thesis reader, Research advisor: Carolyn Yarian, MPH degree conferred 2007
Second thesis reader: Karen Alelis, MPH degree conferred 2006
First thesis reader, Research advisor: Janelle Anderson, MPH degree conferred 2006
Second thesis reader: Heather Brown, MPH degree conferred 2006
First thesis reader, Research advisor: Desiree Notyce, MPH degree conferred 2004
First thesis reader: Michelle Kuba, MPH degree conferred 2003

UNDERGRADUATE TRAINING AND MENTORSHIP, YALE UNIVERSITY

Titilayo, Mabogunje, Yale University, thesis advisor, academic year 2019-20
Pauline Kaminski, Yale University, thesis advisor, academic year 2016-17
Kenneth G. Disbrow, Rutgers University, Yale BioMed Summer Undergraduate Research Fellowship (SURF), summer 2010

Patrick Mitchell, Yale University, Yale Biomedical Research Training and Enrichment Program (BioSTEP), summer 2009
Melissa Redwood, Yale Biomedical Research Training and Enrichment Program (BioSTEP), summer 2007
Leonard Moore, Morehouse College, Yale Biomedical Research Training and Enrichment Program (BioSTEP), summer 2006
Jessica Franquez, Yale University, Yale Biomedical Research Training and Enrichment Program (BioSTEP), academic year 2004-05
Lauren Minor, Spelman College, Yale Biomedical Research Training and Enrichment Program (BioSTEP), summer 2005
Janneane Daniels, Spelman College, Yale Biomedical Research Training and Enrichment Program (BioSTEP), summer 2004

PROFESSIONAL SERVICE

Peer Review Groups/Grant Study Sections

2022-23 National Institutes of Health: National Institute on Deafness and Other Communication Disorders (NIDCD), Ad-hoc Advisory council member.
2021 National Institutes of Health Study Section: Host-Bacterial Interactions and Infections (ZRG1-IDIB-C), Ad hoc grant reviewer.
2021 National Institutes of Health Study Section: Clinical Research and Field Studies of Infectious Diseases (CRFS), Ad hoc grant reviewer.
2020 Centers for Disease Control and Prevention: Peer review for Prevention Epicenters Program, Ad hoc grant reviewer
2019 National Institutes of Health Study Section: Special Emphasis Panel for Populations Sciences and Epidemiology review group, Ad hoc grant reviewer
2018 Department of Defense Congressionally Directed Medical Research Programs (CDMRP), Pre-Antimicrobial Resistance-1 (Pre-AMR-1) peer review panel, Ad hoc scientist reviewer
2016 National Institutes of Health Study Section: Infectious Diseases and Microbiology Fellowship Study Section (F13), Ad hoc grant reviewer
2014 The Netherlands Organisation for Scientific Research, Ad hoc reviewer of Innovative Research Incentives Scheme grant proposals
2010-14 National Institutes of Health Study Section: Clinical Research and Field Studies of Infectious Diseases (CRFS), Standing member
2012 Medical Research Council: Developmental Clinical Studies (DCS) proposals, London, UK, Ad hoc scientific reviewer
2011 Medical Research Council: Developmental Clinical Studies (DCS) proposals, London, UK, Ad hoc technical reviewer
2010-15 Research Competitiveness Program (RCP) at AAAS, King Abdulaziz City for Science and Technology: Microbiology and Immunology Block and Epidemiology Block, Ad Hoc grant reviewer
2009-10 National Institutes of Health Study Section: Infectious, Reproductive, Asthma and Pulmonary Conditions, (IRAP), Standing member
2009 The Netherlands Organisation for Health Research and Development, Ad hoc reviewer of TOP grant proposals
2009 National Institutes of Health Study Section: Clinical Research and Field Studies of Infectious Diseases (CRFS), Ad hoc grant reviewer
2008 National Institutes of Health Study Section: Infectious, Reproductive, Asthma and

- 2008 Pulmonary Conditions, (IRAP), Ad hoc grant reviewer
Thrasher Research Fund, Ad hoc grant reviewer
- 2008 National Institutes of Health Study Section: ZRG1 F13 Infectious Diseases and Microbiology F32 Fellowships, Ad hoc grant reviewer
- 2008 National Institutes of Health Study Section: Infectious, Reproductive, Asthma and Pulmonary Conditions, (IRAP), Ad hoc grant reviewer
- 2007 National Institutes of Health Study Section: Infectious, Reproductive, Asthma and Pulmonary Conditions, (IRAP), Ad hoc grant reviewer
- 2007 European Respiratory Society Fellowship, Ad hoc grant reviewer
- 2005 National Institutes of Health NRSA Pre-doctoral Fellowships for Minority Students and Students with Disabilities: Genes, Genomes, and Genetics Section, Ad hoc, grant reviewer, five study review cycles
- 2005 Thrasher Research Fund, Ad hoc grant reviewer

Journal Service Editorial Board

- 2021 mBio Early Career Researcher Reviewer Program (mBio Junior Editorial Board), Selection Committee
- 2015 PLoS Pathogens, Guest Associate Editor
- 2014-2026 mBio Board of Editors
- 2013 mBio Invited Editor
- 2012-15 PLoS Neglected Tropical Diseases, Ad hoc Associate Editor
- 2011-2018 Journal of Clinical Microbiology, Editorial Board
- 2007-2011 Interdisciplinary Perspectives on Infectious Diseases, Editorial Board

Journal Service Reviewer (last five years)

American Journal of Epidemiology, Antimicrobial Agents and Chemotherapy, Clinical Infectious Diseases, Clinical Microbiology and Infection, Emerging Infectious Diseases, Infection and Immunity, ISME Journal, Journal of Infectious Diseases, Journal of Clinical Microbiology, Journal of Pediatrics, mBio, Lancet Infectious Diseases, Microbial Ecology, Future Microbiology, Pediatrics, PLoS Pathogens, Vaccine

Advisory Boards, Working Groups, and External Review Committees

- 2023 External Advisory Panel CDC-RFA-CK22-2203 Strengthening Healthcare Infection Prevention and Control and Improving Patient Safety (HIPSTER)
- 2022 Williams College External Review Committee: Public Health Program
- 2020 National Institute on Deafness and Other Communication Disorders (NIDCD) Otitis Media Working Group: Epidemiology and public health/disease burden (Chair)
- 2017-2023 Connecticut Department of Public Health Multidisciplinary Antimicrobial Resistance/Antimicrobial Stewardship Advisory Group
- 2018-2020 Centers for Disease Control Healthcare Associated Infections Community Interface (HAIC) Advance Molecular Detection (AMD) Working Group

National Committees

- 2016 Hedwig van Ameringen Executive Leadership in Academic Medicine (ELAM) Selection Committee
- 2015, 2016 Hedwig van Ameringen Executive Leadership in Academic Medicine (ELAM) Admissions Review Committee
- 2011-2012 Faculty of 1000 Post-publication peer review: Faculty member in Pediatric

Infectious Diseases
2008-2009 Infectious Diseases Society of America literature review panel, *IDS A News*
2004-2006 Governing Council, Epidemiology Section, American Public Health Association

Meetings Program Planning

2014 Program Planning Committee: 1st ASM Conference on Polymicrobial Infections
2014-2015 Program Planning Committee: International Society for Otitis Media OM2015
2014-2015 Chair, Vaccine Panel: Post-Symposium Research Conference to the 18th International Symposium on Recent Advances in Otitis Media
2011 Session Co-chair: 10th International Symposium on Recent Advances in Otitis Media: Microbial Pathogenesis of otitis media: microbiologic and immunologic correlates, June 5-9
2011 Co-chair, Vaccine Panel: Post-Symposium Research Conference to the 10th International Symposium on Recent Advances in Otitis Media, June 10-11
2007 Member, Vaccine Panel: Post-Symposium Research Conference to the 9th International Symposium on Recent Advances in Otitis Media

SERVICE

Yale University Committees

2022-2023 Yale University Cabinet
2022-2023 Provost's Deans Council
2020 President's Committee on Diversity, Inclusion, and Belonging, Yale University
2022-2023 Yale Institute for Global Health (YIGH) Advisory Board
2021-2022 Poorvu Center Advisory Board, Yale Poorvu Center for Teaching and Learning
2021 Yale Center for Clinical Investigation (YCCI) Scholar & Yale Physician Scientist Development Award (YPSDA) Selection Committee
2020 YSM Deputy Dean for Education Search Committee
2019 YSM Dean Search Committee
2015-2016 YSPH Dean Search Committee
2014-2015 Global Health Fellows Selection Committee
2013-2015 Provost's Teaching Initiative Steering Committee (Inaugural member)
2012-2021 Deputy Title IX Coordinator

Yale School of Medicine Committees

2022-2023 Yale School of Medicine Executive Group
2022-2023 Institutional Self-Study Task Force (SSTF), Yale School of Medicine accreditation review by the Liaison Committee on Medical Education (LCME)
2022-2023 Microbial Pathogenesis Chair Search Committee
2022-2023 National Clinician Scholars Program at Yale, Institutional Advisory Committee
2019-2020 Ad hoc Faculty Grievance Committee
2019-2023 MSTP Internal Advisory Board
2016-2020 Executive Board: Committee on the Status of Women in Medicine (SWIM)
2011-2012 Department Liaison, YSM Curriculum Rebuild
2004-2009 Medical School Admissions Committee
2007-2009 Yale Biomedical Science Training and Enrichment Program (BioSTEP) Steering Committee Member

Yale School of Public Health Committees

2022-2023	YSPH Appointments & Promotions Committee (Chair)
2017-2022	YSPH Appointments & Promotions Committee
2017	YSPH Online Education Advisory Group
2016-2017	YSPH Curriculum Rebuild Committee (Chair)
2015	Environmental Health Sciences Seed Grant Review Committee
2014-2015	Genomics Faculty Search Committee, Environmental Health Sciences
2013	Admissions Task Force
2012-2021	YSPH Title IX Coordinator
2011-2022	YSPH Education Committee (Chair)
2011-2022	YSPH Dean's Committee
2011-2014	YSPH Accreditation Advisory Committee
2008-2014	Yale University Center for Interdisciplinary Research on AIDS (CIRA): Interdisciplinary Research Methods (IRM) Core
2009-2010	YSPH Diversity Committee (Chair)
2009-2010	EMD Seminar Committee (Chair)
2009-2010	Doctoral Committee
2005-2006	Liaison committee, Yale University 5-year BA/MPH program
2004-2005	Health Disparities Faculty Search Committee, Social and Behavioral Sciences/Chronic Disease Epidemiology
2003-2009	YSPH Education Committee
2003-2009	EMD Divisional Education Committee (Chair)
2002-2009	YSPH Diversity Committee

Advocacy

2023	ASPPH Hill Day: Advocating on Capitol Hill
2020-2021	Pew Charitable Trusts' Stand Up to Superbugs Fly-In, Washington, D.C.

BIBLIOGRAPHY

Peer Reviewed Original Research

1. Roberts, S.C., Barbell, E. S., Barber, D., Dahlberg, S. E., Heimer, R., Jubanyik, K., Vivek Parwani, V., **Pettigrew, M.M.**, Tanner, J.M. Andrew Ulrich, A., Wade, M., Wyllie, A., Yolda-Carr, D., Martinello, R.A., and Tanner, W.D. SARS-CoV-2 RNA and viable virus contamination of hospital emergency department surfaces and association with patient COVID-19 status and aerosol generating procedures. *Infection Control & Hospital Epidemiology*. 2023; 1-3 doi:10.1017/ice.2023.183.
2. Murphy, T.M., Kirkham, C., D'Mello, A., Sethi, S., **Pettigrew, M.M.**, and Tettelin, H. Adaptation of nontypeable *Haemophilus influenzae* in human airways in COPD: Genome rearrangements and modulation of expression of HMW1 and HMW2. *mBio*. 2023; e0014023.
3. **Pettigrew, M.M.**, Kwon, J., Gent, J. F., Kong, Y., Williams, D.J., Creech, C.B., Evans, S., Huskins, W.C. Comparison of the respiratory resistome in children receiving short vs. standard course treatment for community acquired pneumonia. *mBio*. 2022: e00195-22. (*Article Selected for an ASM press release*).
4. Williams, D.J., Creech, C.B., Walter, E.B., Martin, J., Gerber, J., Newland, J., Howard, L., Hofto, M., Staat M., **Pettigrew, M.M.**, Fowler, V.G. Jr., Chambers, H.F., Zaoutis, T., Evans, S., Huskins, W.C. on behalf of the DMID 14-0079 Study Team. Short- vs standard-course

- outpatient antibiotic therapy for community-acquired pneumonia in children: the SCOUT-CAP randomized clinical trial. *JAMA Pediatrics*. 2022; 176: E1-E9.
5. Lebeaux, R.M., Madana, J.C., Nguyena, Q.P., Cokera, M.O., Dadea, E.F., Ross, B.D., **Pettigrew, M.M.**, Morrison, H.G., Karagasa, M.R., Hoen, A.G. Quantifying the effects of antibiotics on off-target microbes and antibiotic resistance genes in the infant gut. *Pediatric Research*. 2022; 92:1757-1766.
 6. Kwon, J., Kong, Y., Wade, M., Williams, D.J., Creech, C.B., Evans, S., Walter, E.B., Martin, J.M., Gerber, J.S., Newland, J.G., Hofto, M.E., Staat, M.A., Chambers, H.F., Fowler, V.G., Huskins, W.C., and **Pettigrew, M.M.** on behalf of the Antibacterial Resistance Leadership Group. Gastrointestinal microbiota disruption and antibiotic associated diarrhea in children receiving antibiotic therapy for community-acquired pneumonia. *Journal of Infectious Diseases*. 2022; 226: 1109-1119.
 7. Broderick, D.T.J, Waite, D.W., Marsh, R.L., Camargo, C.A., Cardenas, P., Chang, A.B., Cookson, W.O.C., Cuthbertson, L., Dai, W., Everard, M. L., Gervaix, A., Harris, J.K Hasegawa, K., Hoffman, L. R., Hong, S-J., Josset, L., Kelly, M.S., Kim, B.-S., Kong, Y., Li, S.C., Jonathan M Mansbach, J. M., O’Toole, G. A., Paalanen, L., Perez-Losada, M., **Pettigrew, M. M.**, Maxime Pichon, M., Ruokolainen, L., Sakwinska, O., Seed, P. C., van der Gast, C. J., Wagner, B. D., Yi, H., Zemanick, E. T., Zhe, Y., Pillarisetti, N., Taylor, M. W. Bacterial signatures of paediatric respiratory disease: an individual participant data meta-analysis. *Frontiers in Microbiology*. 2021; 12: 71134.
 8. Brugger, S.D.*, Eslami, S. M.*, **Pettigrew, M.M.***, Fernandez, I. F., Henke, M. M., Kong, Y., and Lemon, K.P. *Dolosigranulum pigrum* cooperation and competition in human nasal microbiota. *mSphere*. 2020; 5: e00852-20. *Joint first author.
 9. **Pettigrew, M.M.**, Gent, J. F., Kong, Y., Laufer Halpin, A., Pineles, L., Harris, A.D., and Johnson, J.K. Gastrointestinal microbiota disruption and risk of colonization with carbapenem-resistant *Pseudomonas aeruginosa* in ICU patients. *Clinical Infectious Diseases*. 2019; 69: 604-13. (Article Featured as an Editors pick).
 10. Ahearn, C. P., Kirkham, C., Chaves, L.D., Kong, Y., **Pettigrew, M.M.**, and Murphy, T.F. Discovery and contribution of nontypeable *Haemophilus influenzae* NTH1441 to human respiratory epithelial cell invasion. *Infection and Immunity*. 2019; 87: e00462-19.
 11. Atack, J.M., Murphy, T. F., **Pettigrew M.M.**, Seib, K. L. and Jennings, J.P. Non-typeable *Haemophilus influenzae* isolates from patients with chronic obstructive pulmonary disease contain new phase-variable *modA* methyltransferase alleles controlling phasevarions. *Scientific Reports*. 2019; 9:15963.
 12. Murphy, T.M., Brauer, A.L., **Pettigrew, M.M.**, LaFontaine, E.R., and Tetellin, H. Persistence of *Moraxella catarrhalis* in chronic obstructive pulmonary disease and regulation of the Hag/MID adhesin. *Journal of Infectious Diseases*. 2019; 219:1448-1455.
 13. Atack, J.M., Murphy, T. F., **Pettigrew M.M.**, Seib, K. L. and Jennings, J.P. Transcriptome sequencing data sets for determining gene expression changes mediated by phase-variable DNA

- methyltransferases in nontypeable *Haemophilus influenzae* strains isolated from patients with chronic obstructive pulmonary disease. *Microbiology Resource Announcements*. 2019; 8: e00526-19.
14. **Pettigrew, M.M.**, Ahern, C., Gallo, M., Gent, J.F., Kong, Y., Sethi, S., Tettelin, H., and Murphy, T.M. *Haemophilus influenzae* genome evolution during persistence in the human airways in chronic obstructive pulmonary disease. *Proceedings of the National Academy of Sciences USA*. 2018; 115: E3256-E3265.
 15. Gallo, M.C. Kirkham, C., Eng, S., Bebawee, R., Kong, Y., **Pettigrew, M.M.**, Tetellin, H., and Murphy, T.F. Changes in IgA protease expression are conferred by changes in genomes during persistent infection by nontypeable *Haemophilus influenzae* in chronic obstructive pulmonary disease. *Infection and Immunity*. 2018; 86: e0033-18.
 16. Tsuji, B., Fisher, J., Boadi-Yeboah, R., Holden, P. N., Sethi, S., **Pettigrew, M.M.**, and Murphy, T.M. Azithromycin pharmacodynamics against persistent *Haemophilus influenzae* in chronic obstructive pulmonary disease. *Antimicrobial Agents and Chemotherapy*. 2018; 62: e01995-17.
 17. Blanco, N., Harris, A.D., Rock, C., Johnson, J.K., Pineles, L., Bonomo, R.A., Srinivasan, A., Roghmann, M-C., **Pettigrew, M.M.**, Thom, K.A., for the CDC Epicenters Program. Risk factors and outcomes associated with multidrug-resistant *Acinetobacter baumannii* upon ICU admission. *Antimicrobial Agents and Chemotherapy*. 2017; 62: e01631-17.
 18. Murphy, T.M., Kirkham, C., Gallo, M.C., Yang, Y., Wilding, G.E., and **Pettigrew, M.M.** IgA protease variants facilitate epithelial cell invasion by nontypeable *Haemophilus influenzae* that persist in the human respiratory tract in COPD. *Journal of Infectious Diseases*. 2017; 216:1295-1302.
 19. Otsuka, T., Brauer, A.L., Kirkham, C., Sully, E.K., **Pettigrew, M.M.**, Kong, Y., Geller, B. L., and Murphy T. F. Antimicrobial activity of antisense peptide nucleic acid against nontypeable *Haemophilus influenzae* in planktonic and biofilm forms. *Journal of Antimicrobial Chemotherapy*. 2016;72: 137-144.
 20. Lewnard, J.A., Huppert, A., Givon-Lavi, N., **Pettigrew, M.M.**, Regev-Yochay, G., Dagan, R., and Weinberger, D.M. Density, serotype diversity, and fitness of *Streptococcus pneumoniae* in upper respiratory tract cocolonization with nontypeable *Haemophilus influenzae*. *Journal of Infectious Diseases*. 2016; 214: 1411-1420.
 21. **Pettigrew, M.M.**, Tsuji, B, Gent, J. F., Jones, M. M., Sethi, S., Kong, Y., and Murphy, T.M. Effect of fluoroquinolones and macrolides on eradication of *Haemophilus influenzae* and development of antibiotic resistance in chronic obstructive pulmonary disease. *Antimicrobial Agents and Chemotherapy*. 2016; 60:4151-8.
 22. **Pettigrew, M.M.**, Gent, J.F., Kong, Y., Wade, M., Ganesbom, S., Bramley, A.M., Jain, S., Arnold, S.L.R and McCullers, J.A. Association of sputum microbiota profiles with severity of community-acquired pneumonia in children. *BMC Infectious Diseases*. 2016; 16:317.
 23. Lewnard, J.A., Givon-Lavi, N., Huppert, A., **Pettigrew, M.M.**, Regev-Yochay, G., Dagan, R., and Weinberger, D.M. Epidemiological markers for interactions among *Streptococcus pneumoniae*,

- Haemophilus influenzae*, and *Staphylococcus aureus* in upper respiratory tract carriage. *Journal of Infectious Diseases*. 2016; 213:1596-605.
24. Harris, A.D., Jackson, S.S., Robinson, G., Pineles, L., Leekha, S., Thom, K., Wang, Y., Doll, M., **Pettigrew, M.M.**, and Johnson, J.K. *Pseudomonas aeruginosa* colonization in the ICU: Prevalence, risk factors and clinical outcomes. *Infection Control and Hospital Epidemiology*. 2016; 37:544-8.
 25. Murphy, T.M., Kirkham, C., Jones, M.M., Sethi, S., Kong, Y., and **Pettigrew, M.M.** Expression of IgA proteases by *Haemophilus influenzae* in the respiratory tract of adults with chronic obstructive pulmonary disease. *Journal of Infectious Diseases*. 2015; 212:1798-1805.
 26. **Pettigrew, M.M.**, Marks, L.R., Kong, Y., Gent, J. F. and Hakansson, A.P. Dynamic changes in the pneumococcal transcriptome during transition from biofilm formation to invasive disease upon influenza A virus infection. *Infection and Immunity*. 2014; 82:4607-19.
 27. Huang, E., Gurzau, A.E., Hanson, B. M., Kates, A.E., Smith, T.C., **Pettigrew, M.M.**, Spinu, M. and Rabinowitz, P. M. Detection of livestock-associated methicillin-resistant *Staphylococcus aureus* among swine workers in Romania. *Journal of Infection and Public Health*. 2014; 7:323-32.
 28. Ruohola, A., **Pettigrew, M.M.**, Lindholm, L., Jalava, J., Vuorenoja, K., Vainionpää, R., Waris, M., Lahti, E. Laine, M. K., Tähtinen, P.A., Laine, M.K., Ruuskanen, O., and Huovinen, P. Bacterial and viral interactions within the nasopharynx contribute to the risk of acute otitis media. *Journal of Infection*. 2013; 66:247-54.
 29. **Pettigrew, M.M.**, Laufer, A.S., Gent, J.F., Fennie, K.P., Kong, Y. and Metlay, J.P. Upper respiratory tract microbial communities, acute otitis media pathogens and antibiotic use in healthy and sick children. *Applied and Environmental Microbiology*. 2012; 78:6262-70.
 30. Tekle, Y. I., Nielsen, K. N., Liu, J., **Pettigrew, M.M.**, Meyers, L.M., Galvani, A.P. and Townsend, J.P. Controlling antimicrobial resistance through targeted, vaccine-induced replacement of strains. *PLoS ONE*. 2012; 7: e50688.
 31. Sabharwal, V., Figueira, M., Pelton S.I., and **Pettigrew, M.M.** Virulence of *Streptococcus pneumoniae* serotype 6C in experimental otitis media. *Microbes and Infection*. 2012; 14:712-8.
 32. Laufer, A.S., Metlay, J.P., Gent, J.F., Fennie, K.P., Kong, Y. and **Pettigrew, M.M.** Microbial communities of the upper respiratory tract and otitis media. *mBio*. 2011; 2: e00245-10.
 33. **Pettigrew, M.M.**, Gent, J.F., Nokso-Koivisto, J., K., Patel, J.A., Pyles, R., and Chonmaitree, T. Virus-bacteria interactions and risk of acute otitis media complicating upper respiratory tract infection. *Journal of Clinical Microbiology*. 2011; 49: 3750–3755.
 34. Brooks, K.B., **Pettigrew, M.M.**, and Niccolai, L.M. Multiple chlamydia infection among young women: comparing the role of individual- and neighborhood-level measures of socioeconomic status. *Sexually Transmitted Infections*. 2011; 87:560-562.

35. Thomas, J.C., Kong, Y., Sabharwal, V., Pelton, S.I., and **Pettigrew, M.M.** *Streptococcus pneumoniae* serotype 6C: An intra- and inter- clonal complex comparison. *Journal of Bacteriology*. 2011; 193:3409-1.
36. Thomas, J.C., Figueira, M., Fennie, K.P., Kong, Y., Laufer, A.S., Pichichero, M., Pelton, S.I., and **Pettigrew, M.M.** *Streptococcus pneumoniae* clonal complex 199: genetic diversity and tissue specific virulence potential. *PLoS ONE*. 2011; 6: e18649.
37. Niccolai, L.M., Livingston, K.A., Laufer, A.S., and **Pettigrew, M.M.** Behavioral sources of repeat *Chlamydia trachomatis* infections: The importance of different sex partners. *Sexually Transmitted Infections*. 2011; 87:248-253.
38. Byam, P., Pierre, R. B., Christie, C.D., Andiman, W.A., **Pettigrew, M.M.**, The Kingston Pediatric and Perinatal (KPAIDS) Study. Antibiotic resistance among pathogens causing disease in Jamaican children with HIV/AIDS. *West Indian Medical Journal*. 2010; 59:386-391.
39. Byington, C.L. Hulten, K.G. Ampofo, K., Sheng, X., Pavia, A.T., Blaschke, A.J., **Pettigrew, M.M.**, Korgenski, K., Daly, J., and Mason, E.O. Molecular epidemiology of pediatric pneumococcal empyema in Utah 2001-2007. *Journal of Clinical Microbiology*. 2010; 48:520-5.
40. Laufer, A.S., Thomas, J.C., Gent, J.F., Figueira, M., Pelton, S.I., and **Pettigrew, M.M.** Capacity of serotype 19A and 15B/C *Streptococcus pneumoniae* isolates for experimental otitis media: Implications for the conjugate vaccine. *Vaccine*. 2010; 28:2450-2457.
41. Foulkes, H.B., **Pettigrew, M.M.**, Livingston, K.A, and Niccolai, L.M. Comparison of sexual partnership characteristics and associations with inconsistent condom use among a sample of adolescent and adult women diagnosed with *Chlamydia trachomatis*. *Journal of Women's Health*. 2009; 3:393-399.
42. **Pettigrew, M.M.**, Gent, J.F., Revai, K., Patel, J.A., and Chonmaitree, T. Microbial interactions during upper respiratory tract infection. *Emerging Infectious Diseases*. 2008; 14:1584-1591.
43. Niccolai, L.M., Livingston, K.A., Teng, F.H. and **Pettigrew, M.M.** Behavioral intentions in sexual partnerships following a diagnosis of *Chlamydia trachomatis*. *Preventive Medicine*. 2008; 46:170-176.
44. Berrens Z.J., Marrs, C.F., **Pettigrew, M.M.**, Sandstedt, S.A., Patel, M. and Gilsdorf, J.R. Genetic diversity of paired middle ear and nasopharynx non-typeable *Haemophilus influenzae* isolates from children with acute otitis media. *Journal of Clinical Microbiology*. 2007; 45:3764-3767.
45. **Pettigrew, M.M.**, Gent, J.F., Zhu, Y, Hang. L., Triche, E.W., Belanger, K.D., Holford, T.R., Bracken, M.B. and Leaderer, B.P. Respiratory symptoms among infants at risk for asthma: association with surfactant protein A haplotypes. *BMC Medical Genetics*. 2007; 8:15.
46. **Pettigrew, M.M.**, Gent, J.F., Zhu, Y, Hang. L., Triche, E.W., Belanger, K.D., Holford, T.R., Bracken, M.B. and Leaderer, B. P. Association of surfactant protein A polymorphisms with otitis media in infants. *BMC Medical Genetics*. 2006; 7:68.

47. **Pettigrew, M.M.**, Fennie, K.P., York, M.P., Daniels, J., Ghaffar, F. Variation in the presence of neuraminidase genes among *Streptococcus pneumoniae* isolates of identical sequence type. *Infection and Immunity*. 2006; 74:3360-3365.
48. Barbosa-Cesnik, C., Farjo, R., Patel, M., Gilsdorf, J.R., McCoy, S.I., **Pettigrew, M.M.**, Marrs, C.F., and Foxman, B. Predictors for *Haemophilus influenzae* colonization, antibiotic resistance, and for sharing an identical isolate among children attending 16 licensed Day Care Centers in Michigan. *Pediatric Infectious Diseases Journal*. 2006; 25:219-223.
49. **Pettigrew, M.M.** and Fennie, K.P. Genomic subtraction followed by dot blot screening of *Streptococcus pneumoniae* clinical and carriage isolates identifies genetic differences associated with strains that cause otitis media. *Infection and Immunity*. 2005; 73:2805-2811.
50. **Pettigrew, M.M.**, Gent, J.F., Triche, E.W., Belanger, K.D., Bracken, M.B. and Leaderer, B.P. Infant otitis media and the use of secondary heating sources. *Epidemiology*. 2004; 15:13-20.
51. **Pettigrew, M.M.**, Gent, J.F., Triche, E.W., Belanger, K.D., Bracken, M.B. and Leaderer, B.P. Association of early-onset otitis media in infants and exposure to household mold. *Paediatric and Perinatal Epidemiology*. 2004; 18:441-447.
52. Ecevit, Z.I., McCrea, K.W., **Pettigrew, M.M.**, Marrs, C.F. and Gilsdorf, J.R. Prevalence of *hlyB-C*, *hmw1A*, *hmw2A*, *hmwC* and *hia* genes in *Haemophilus influenzae* isolates. *Journal of Clinical Microbiology*. 2004; 42:3065-3072.
53. Farjo, R.S., Foxman B., Patel, M.J., Zhang, L., **Pettigrew, M.M.**, McCoy, S.I., Marrs, C. F., Gilsdorf, J.R. Diversity and sharing of *Haemophilus influenzae* strains colonizing healthy children attending daycare centers. *Pediatric Infectious Diseases Journal*. 2004; 23:41-46.
54. **Pettigrew, M.M.**, Khodae, M., Gillespie, B., and Foxman, B. Relationship between breastfeeding, daycare, and physician visits in children six months and younger. *Annals of Epidemiology*. 2003; 13:431-435.
55. **Pettigrew, M.M.**, Foxman, B., Marrs, C.F., Gilsdorf, J.R. Comparison of ribotyping, pulsed-field gel electrophoresis and enterobacterial repetitive PCR as methods to assess the genetic diversity of non-typeable *Haemophilus influenzae* strains. *Journal of Clinical Microbiology* 2002; 40:660-662.
56. **Pettigrew, M.M.**, Foxman, B., Marrs, C.F., Gilsdorf, J.R. Identification of the LOS biosynthesis gene *lic2B* as a putative virulence factor in strains of non-typeable *Haemophilus influenzae* that cause otitis media. *Infection and Immunity*. 2002; 70:3551-3556.
57. Bourtzis, K., **Pettigrew, M.M.**, O'Neill, S.L., *Wolbachia pipientis* neither induces or suppresses the insect immune system. *Insect Molecular Biology* 2000; 9:635-639.
58. O'Neill, S.L., **Pettigrew, M.M.**, Sinkins, S.L., Braig, H.R., Andreadis, T.G., Tesh, R.B. *In vitro* cultivation of *Wolbachia pipientis* in an *Aedes albopictus* cell line. *Insect Molecular Biology* 1999; 8:409-414.

59. **Pettigrew, M.M.**, O'Neill, S.L. Semliki Forest virus as an expression vector in insect cell lines. *Insect Molecular Biology* 1999; 8:409-414.

Peer Reviewed Reviews and Commentaries

60. Doernberg, S. B., Arias, C. A., Altman, D., Babiker, A., Boucher, H. W., Creech, B., Cosgrove, S. E., Evans, S., Fowler Jr, V.F., Fritz, S., Hamasaki, T., Kelley, B., Leal, S., Liu, C., Lodise, T.P., Miller, L., Munita, J.M., Murray, B., **Pettigrew, M.M.**, Ruffin, F., Scheetz, M., Shopsin, B., Tran, T.T., Turner, N.A., Williams, D., Zaharoff, S., and Holland, T.L. for the Gram-Positive Committee of the Antibacterial Resistance Leadership Group (ARLG). Priorities and Progress in Gram-Positive Bacterial Infection Research by the Antibacterial Resistance Leadership Group. *Clinical Infectious Diseases*. 2023; 77(S4):S295–304.
61. Harris, A. D., Soulia, M., and **Pettigrew, M.M.** for the Antibacterial Resistance Leadership Group. The Next Generation: Mentoring and Diversity in the Antibacterial Resistance Leadership Group. *Clinical Infectious Diseases*. 2023; 7(S4):S331–5.
62. Chambers, H. F., Evans, S.R., Patel, R., Cross, H. R., Harris, A., Doi, Y., Boucher, H. van Duin, D., Tsalik, E., Holland, T., **Pettigrew, M.M.**, Tamma, P., Souli, M. and Fowler, V.G. Antibacterial Resistance Leadership Group 2.0 – Back to Business. *Clinical Infectious Diseases*. 2021; 73:730-9.
63. **Pettigrew, M.M.**, Tanner, W., and Harris, A.D. The lung microbiome and pneumonia. *Journal of Infectious Diseases*. 2021; 223: S241-45.
64. Barenkamp, S., Chonmaitree, T., Hakansson, A.P., Heikkinen, T., King, S.J., Nokso-Koivisto, J., Novonty, L.A., Patel, J.A., **Pettigrew, M.M.**, and Swords, W.E. Recent advances in otitis media. State of the art review: Panel 5 Microbiology. *Otolaryngology-Head and Neck Surgery*. 2017; 156 S63–S75.
65. **Pettigrew, M.M.**, Alderson, M., Barenkamp, S., Bakaletz, L., Hakansson, A.P., Mason, K.M., Nokso-Koivisto, J., Patel, J.A., Pelton, S.I., Selak, S., and Murphy, T.M. Recent advances in otitis media. State of the art review: Panel 6 Vaccines. *Otolaryngology-Head and Neck Surgery*. 2017; 156(4S) S76–S87.
66. Niccolai, L.M. and **Pettigrew, M.M.** Suboptimal HPV vaccine uptake: do cognitive biases play a role? *Pediatrics*. 2016; 138: e20161537. (*Featured in New England Journal of Medicine Journal Watch, September 15, 2016.*)
67. **Pettigrew, M.M.**, Johnson, J.K., and Harris, A.D. The human microbiota: novel targets for hospital acquired infections and antibiotic resistance. *Annals of Epidemiology*. 2016; 26:342-7.
68. **Pettigrew, M.M.**, Forman, H.P., Pistell, A.F., and Nembhard, I.M. Innovating in health care management education: Development of an accelerated MBA/MPH degree program at Yale. *American Journal of Public Health*. 2015; 105: S68-S72.
69. Chao, Y., Marks, L.R., **Pettigrew, M.M.**, and Hakansson, A.P. *Streptococcus pneumoniae* biofilm formation and dispersion during colonization and disease. *Frontiers in Cellular and Infection Microbiology*. 2015; 4:A194, doi: 10.3389/fcimb.2014.00194.

70. Chambers, H. F., Bartlett, J. G., Bonomo, R. A., Cosgrove, S., Cross, H., Daum, R.S., Evans, S.R., Kreiswirth, B.N., Lautenbach, E., Patel, R., **Pettigrew, M.M.**, Rodvoid, K., Spelling, B., and Fowler, V.G. Antibacterial resistance leadership group: Open for business. *Clinical Infectious Diseases*. 2014; 58:1571-6.
71. Pelton, S.I., **Pettigrew, M.M.**, Barenkamp, S., Godfroid, F., Grijalva, C.G., Leach, A., Patel, J.A., Murphy, T. F., and Selak, S. Recent advances in otitis media. State of the art review: Panel 6 Vaccines. *Otolaryngology-Head and Neck Surgery*. 2013; 148: E90-101.
72. Murphy, T. F., Chonmaitree, T., Barenkamp, S., Kyd, J., Nokso-Koivisto, J., Patel, J.A., Heikkinen, T., Yamanaka, Y., Ogra, P., Swords, W.E., Sih, T., and **Pettigrew, M.M.** Recent advances in otitis media. State of the art review panel 5: Microbiology and immunology. *Otolaryngology-Head and Neck Surgery*. 2013; 148 E64–89.
73. Thomas, J.C. and **Pettigrew, M.M.** Multilocus sequence typing and pulsed field gel electrophoresis of otitis media causing pathogens. *Methods in Molecular Biology*. 2009; 493:179-90.
74. Bakaletz, L.O., Pelton, S. I., Klein, J.O., Barenkamp, S. J., Denoel, P., Green, B., Gu, X-X., Heikkinen, T., Hotomi, M., Karma, P., Kurono, Y., Kyd, J. M., Murphy, T. F., Ogra, P. L., Patel, J., **Pettigrew, M.M.**, Veenhoven, R., and Yamanaka, N. Vaccine panel: Recent advances in otitis media. Report of the Ninth Research Conference. 2007; 94-119.
75. **Pettigrew, M.M.** A diverse array of microbial genomes. *Trends in Biotechnology*. 2004; 22:491-493.
76. McCoy, S. and **Pettigrew, M.M.** Molecular epidemiology of *Streptococcus pneumoniae* mediated otitis media. *Frontiers in Bioscience* 2003; 8: E87-93.
77. **Pettigrew, M.M.** and O'Neill, S.L., Control of vector-borne disease by the genetic manipulation of insect populations: technological requirements and research priorities. *Australian Journal of Entomology*. 1997; 36:309-317.

Conference Proceedings

1. Accelerating the Development and Uptake of Rapid Diagnostics to Address Antibiotic Resistance: Proceedings of a Workshop. Washington, D.C., The National Academies Press. 2023.

Educational Materials

1. Colombe, S. and **Pettigrew, M.M.** Infectious diseases and risk communication: Yale School of Public Health and Ebola quarantine. 2016. Case #YSPH-16-0001.

Op-Eds

1. [There's a Simple Way to Stop the Spread of Antibiotic-resistant Bacteria](#). The Washington Post. October 2, 2014. Melinda Pettigrew.
2. [You Probably Have Herpes, so Stop Laughing About It](#). The Pacific Standard. February 13, 2015. Melinda Pettigrew.