



ROBIN PATEL

CANDIDATE STATEMENT

As an ASM member for three decades, I have participated in and contributed to ASM's journals (author, reviewer, associate editor), meetings (member and vice chair/co-chair of the ICAAC and ASM Microbe planning committees) and leadership [member and chair of the Board of Directors; ASM president (2019-2020)]. I am a fellow of the American Academy of Microbiology (AAM) and am currently chairing ASM's Governance Committee and serving on ASM's Finance Committee and the AAM Subcommittee on Elections. My goal in running for the position of Secretary is to continue to give back to ASM by providing leadership, mentorship, oversight, and direction to the Society, assisting the President, and serving as a member of the Executive Committee of the Board of Directors. I value responsiveness and transparency in leadership. ASM has a unique position among microbiology societies and one that must be nurtured to best support its members in a changing world.

ASM-RELATED ACTIVITIES

- Governance Committee, Chair, 2022-2023
- American Academy of Microbiology - Sub-Committee on Elections, Member, 2021-2025
- ASM Council of Past Presidents, Member, 2020 - 2030
- ASM Finance Committee, 2020-2023
- Nominating Committee, Chair, 2020-2021
- ASM President, 2019-2020
- Governance Committee, Chair, 2019-2020
- Appointments Committee, Chair, 2018-2019
- Meetings Board, Member, 2017-2018
- Microbe Program Committee, Member 2016-2018
- American Academy of Microbiology Fellow, elected 2012
- Editor, *Journal of Clinical Microbiology*, 2009-2019

Curriculum Vitae and Bibliography

Robin Patel, MD

Personal Information

Place of Birth: Winnipeg, Canada
Citizenship: United States of America, Canada
Work Address: 200 First St SW
Rochester, MN 55905-0001
507-538-0579
Email Address: patel.rob@mayo.edu

Present Academic Rank and Position

Director - Infectious Disease Research Laboratory, Mayo Foundation for Medical Education and Research, Rochester, Minnesota 2000 - Present
Full Faculty Privileges in Biochemistry & Molecular Biology - Mayo Clinic Graduate School of Biomedical Sciences, Mayo Clinic College of Medicine and Science 01/29/2003 - Present
Professor of Medicine - Mayo Clinic College of Medicine and Science 07/01/2006 - Present
Professor of Microbiology - Mayo Clinic College of Medicine and Science 02/01/2008 - Present
Consultant - Division of Clinical Microbiology, Department of Laboratory Medicine and Pathology, Mayo Clinic, Rochester, Minnesota 02/18/2009 - Present
Consultant (Joint Appointment) - Division of Infectious Diseases, Department of Internal Medicine, Mayo Clinic, Rochester, Minnesota 04/02/2009 - Present
Named Professor - , Rochester, Minnesota 01/01/2017 - Present
Vice Chair for Education - Department of Laboratory Medicine and Pathology, Mayo Clinic, Rochester, Minnesota 07/08/2020 - Present

Education

Princeton University - BA, Chemistry 1982 - 1985
McGill University - MDCM 1985 - 1989
Mayo Graduate School of Medicine, Mayo Clinic College of Medicine - Resident, Internal Medicine 1989 - 1992
Internal Medicine, Programs in Rochester, Mayo School of Graduate Medical Education, Mayo Clinic College of Medicine, Rochester, Minnesota - Resident 07/01/1989 - 06/26/1992
Mayo Graduate School of Medicine, Mayo Clinic College of Medicine - Fellow, Infectious Diseases 1992 - 1995
Infectious Disease, Programs in Rochester, Mayo School of Graduate Medical Education, Mayo Clinic College of Medicine, Rochester, Minnesota - Resident 06/27/1992 - 06/30/1995
Mayo Graduate School of Medicine, Mayo Clinic College of Medicine - Fellow, Clinical Microbiology 1995 - 1996
Clinical Microbiology-MD, Programs in Rochester, Mayo School of Graduate Medical Education, Mayo Clinic College of Medicine, Rochester, Minnesota - Resident 07/01/1995 - 06/28/1996

Additional Education

DLMP Value Creation Collaborative class - Mayo Bronze Quality Fellows Project 09/2012
DLMP Value Creation Collaborative class - Mayo Silver Quality Fellows Project 09/2012

Certification

Board Certifications

American Board of Internal Medicine (ABIM)

Internal Medicine	1992 - 2002
Infectious Disease - 141496	1994 - Present

American Board of Medical Microbiology

Medical Microbiology/Public Health Microbiology	1997 - Present
---	----------------

American Board of Pathology

Clinical Pathology/Medical Microbiology	1997 - Present
---	----------------

College Professionnelle des Medecins du Quebec

Internal Medicine	1993 - Present
Medical Microbiology and Infectious Diseases	1996 - Present

Medical Council of Canada

LMCC	1989 - Present
------	----------------

National Board of Medical Examiners (NBME)

Part I	1987 - Present
Part II	1989 - Present
Part III	1990 - Present

Royal College of Physicians and Surgeons, Canada

Fellow Internal Medicine	1993 - Present
Certificate of Special Competence: Infectious Diseases	1994 - Present
Fellow Medical Microbiology	1996 - Present

Licensure

Minnesota	33617 (Medical)	1990 - Present
-----------	-----------------	----------------

Honors and Awards

Avon Scholarship - Awarding Organization	01/1981 - 01/1985
John B Lynch Scholarship - Princeton University	01/1982 - 01/1985
Princeton Alumni Association of Canada Scholarship - Awarding Organization	01/1982 - 01/1985
Sister Mary MacCormack Scholarship - Awarding Organization	01/1982
Pierrefonds Scholarship - Awarding Organization	01/1983
Faculty Scholar - McGill University	01/1985 - 01/1989
Greville Smith Scholarship - McGill University	01/1985 - 01/1989
Magna Cum laude - Princeton University	01/1985
Mosby Scholarship Book Award - Mosby Publishing Co.	01/1988
Mr. and Mrs. J. A. Besner Prize - McGill University	01/1988
Commonwealth Medical Elective Bursary - Medical Elective, Kenya	01/1989
Elizabeth Ann Munro Gordon Prize - McGill University	01/1989
Newell W. Philpott Prize - McGill University	01/1989
Osler Medical Aid Foundation Bursary - Medical Elective, Kenya	01/1989
Residency Program -Outstanding Achievement Award - Mayo Graduate School	01/1992

of Medicine, Mayo Clinic College of Medicine

Joseph E. Geraci Award for Infectious Diseases Outstanding Achievement Award - Mayo Graduate School of Medicine, Mayo Clinic College of Medicine	01/1995
William H.J. Summerskill Award in Subspecialty Trainee Research - Mayo Graduate School of Medicine, Mayo Clinic College of Medicine	01/1995
Outstanding Poster Presentation at the Internal Medicine Research Activities Forum - Mayo Clinic	01/1998
Fellow - American College of Physicians-American Society of Internal Medicine	01/2002 - Present
Department of Medicine Laureate Award - Mayo Clinic College of Medicine and Science	01/2003
Faculty Service Award - Mayo Medical School, Mayo Clinic College of Medicine	01/2008
Outstanding Woman in Medicine - Mayo Chapters of AMSA & AMWA	02/2008
ICHS Council Award - International Immunocompromised Host Society, Hungary	06/2010
Fellow - American Academy of Microbiology - American Society for Microbiology	01/2012 - Present
Fellow - American Academy of Microbiology	02/2012 - Present
American Society for Microbiology BD Award for Research in Clinical Microbiology - American Society for Microbiology	01/2015 - Present
International Society of Chemotherapy Honorary Membership - International Society of Chemotherapy	01/2015 - Present
Mayo Medical School Distinguished Service Award - Mayo Medical School, Mayo Clinic College of Medicine	01/2015 - Present
BD Award for Research in Clinical Microbiology - 115th Meeting of the American Society for Microbiology	05/2015
International Society of Chemotherapy Honorary Membership - International Society of Chemotherapy, Scotland, United Kingdom	09/2015
ISAC-Fellow (FISAC) - International Society of Antimicrobial Chemotherapy	11/2019 - Present
Maxwell Finland Award Lecturer - Infectious Diseases Society of America, Washington, District of Columbia	2019 - Present

Previous Professional Positions and Major Appointments

Instructor of Medicine - Mayo Clinic College of Medicine and Science	04/01/1993 - 07/01/1996
Senior Associate Consultant - Division of Infectious Diseases, Department of Internal Medicine, Mayo Clinic, Rochester, Minnesota	06/29/1996 - 03/29/2000
Assistant Professor of Medicine - Mayo Clinic College of Medicine and Science	07/01/1996 - 07/01/2000
Master's Faculty Privileges of Orthopedic Surgery - Mayo Clinic Graduate School of Biomedical Sciences, Mayo Clinic College of Medicine and Science	12/15/1999 - 03/04/2015
Director - Molecular Microbiology Laboratory, Mayo Foundation for Medical Education and Research, Rochester, Minnesota	2000 - 2001
Chair, Infectious Diseases Research - Division of Infectious Diseases, Department of Internal Medicine, Mayo Clinic, Rochester, Minnesota	2000 - 02/17/2009
Consultant (Joint Appointment) - Division of Clinical Microbiology, Department of Laboratory Medicine and Pathology, Mayo Clinic, Rochester, Minnesota	03/30/2000 - 02/17/2009
Consultant - Division of Infectious Diseases, Department of Internal Medicine, Mayo Clinic, Rochester, Minnesota	03/30/2000 - 02/17/2009
Associate Professor of Medicine - Mayo Clinic College of Medicine and Science	07/01/2000 - 06/30/2006
Associate Professor of Microbiology - Mayo Clinic College of Medicine and	04/01/2001 - 01/31/2008

Science

Program Director for the Clinical Microbiology-MD Fellowship program - Mayo Foundation for Medical Education and Research, Rochester, Minnesota 07/2007 - 12/2012

Chair - Division of Clinical Microbiology, Department of Laboratory Medicine and Pathology, Mayo Clinic, Rochester, Minnesota 12/22/2010 - 05/07/2020

Professional Memberships and Societies**Professional Memberships and Services**

American Board of Pathology	
Committee Member	01/2015 - Present
Committee Member	01/2018 - Present
American College of Physicians	
Member	01/1990 - Present
Fellow	01/2002 - Present
American Medical Association	
Member	01/1990 - Present
American Society for Microbiology	
Member	01/1992 - Present
Committee Member	01/2010 - 12/31/2013
Committee Member	01/2015 - 12/31/2018
Meeting Planning Chair	01/2016 - 06/11/2018
Board Member	01/2017 - 12/31/2018
President	07/2019 - 06/30/2020
American Society for Microbiology - Eli Lilly and Company- Elanco Research Award	
Committee Member	07/2014
American Society for Microbiology	
BD Award for Research in Clinical Microbiology Nominations Committee	
Member	07/2010 - 07/2013
Board Review Committee	
Committee Member	2014
Interscience Conference on Antimicrobial Agents and Chemotherapy, Program Planning Committee	
Member	01/2002 - 01/2007
Vice Chair	2012 - 2015
American Society of Microbiology	
Board of Directors	2017 - 2018
Cadazolid	
Data Monitoring Safety Board	01/2014 - 12/31/2017
Clinical and Laboratory Standards Institute, AST Subcommittee	
Reviewer	06/2011 - 12/2011
Advisor	01/2012 - 12/31/2014
Advisor	01/2018 - Present
Clinical and Laboratory Standards Institute	
AST Subcommittee	
Voting Member	2015 - 2017
Infectious Diseases Society of America	
Member	01/1993 - Present

Annual Meeting Planning Committee	
Member	2010 - 2013
Publications Committee	
Member	01/2004 - 01/2006
McGill University	
McGill Medical Students Society	
Member	09/1985 - 05/1989
McGill Medicine Blood Drive	
Treasurer	1986
National Board of Medical Examiners	
USMLE Step 1 Microbiology, Test Material Development Committee	
Chair	2014 - Present
National Institutes of Health	
Council Member	01/2018 - 01/2021
Review Panel Member	02/2018 - Present
National Institute of Arthritis and Musculoskeletal and Skin Diseases	
Review Panel Member	04/2015
Phi Beta Kappa Honor Society	
Member	1985 - Present
Princeton University	
Alumni Interviewer	1986 - Present
Research Space and Equipment Subcommittee	
Member	10/2014 - 10/2019
Royal College of Physicians and Surgeons of Canada	
Member	1993 - 01/01/2018
Sigma Xi, The Scientific Research Society	
Member	1985 - Present
USMLE Interdisciplinary Review Committee	
Member	2014 - Present
USMLE Microbiology and Immunology Test Material Development Committee	
Member	2009 - 12/31/2013
Chair	2014 - 12/31/2017

Study Sections

National Institutes of Health	
2012/10 ZRG1 IMST-S (12) B Small Business: Basic and Integrative Bioengineering	
Reviewer	2012
Centers of Excellence for Translational Research (RFA-AI-12-044 grant application reviewer)	
Grant Reviewer	2013
Drug Discovery and Mechanisms of Antimicrobial Resistance	
Reviewer	2012
IMST-12 SBIR study section	
Reviewer	2012
NIH special emphasis panel, RFP NIH-NIAID-DMID-98-24, Network on antimicrobial resistance to <i>Staphylococcus aureus</i>	
Reviewer	01/1998 - 01/1999
NIH Study Section ZRG-1 IDM - Q (10)	

Member	2003 - 2010
Small Business Grant for the ZRG1 MOSS K(11) SEP	
Reviewer	07/2014
Special Emphasis Panel/Scientific Review Group 2014/01 ZA11 LR-M (J1)	
Reviewer	09/2013

Journal Responsibilities

Journal Editorial Responsibilities

Antimicrobial Agents and Chemotherapy	
Editorial Board Member	2001 - 2010
Clinical Infectious Diseases	
Associate Editor	01/01/2016 - Present
Clinical Microbiology Reviews	
Editorial Board Member	2002 - Present
Current Opinion in Organ Transplantation	
Section Editor	2003
Journal of Clinical Microbiology	
Editorial Board Member	1999 - 2008
Associate Editor	07/2009 - 01/01/2019
Liver Transplantation and Surgery	
Editorial Board Member	2000 - 2010

Education Interests and Accomplishments

Curriculum and Course Development

Microbiology Course	2001 - Present
Director	
Mayo Clinic Alix School of Medicine	
Rochester, Minnesota	

Teaching

Infections in the Immunocompromised Host	1996 - Present
Mayo Medical School	
Rochester, Minnesota	
Bacterial and mycobacterial infections in transplant patients	1996
Infectious Diseases Fellows Core Curriculum	
Rochester, Minnesota	
Internal Medicine Residency Lectures	1996 - 2004
Mayo Graduate School of Medical Education	
Rochester, Minnesota	
Cestodes	1996 - 2009
Mayo Medical School	
Rochester, Minnesota	
Trematodes	1996 - 2009
Mayo Medical School	
Rochester, Minnesota	
Nematodes	1996 - 2009
Mayo Medical School	
Rochester, Minnesota	
Intestinal Protozoa	1996 - 2009
Mayo Medical School	
Rochester, Minnesota	
VRE	1997

Infectious Diseases Fellows Core Curriculum Rochester, Minnesota	
Infections in the Immunocompromised Host Internal Medicine Residents Rochester, Minnesota	1998
Human Immunodeficiency Virus Infection Infectious Diseases Fellows Rochester, Minnesota	1998
VRE Internal Medicine Residents (TIPS Conference) Rochester, Minnesota	1998
VRE Infectious Diseases Fellows Core Curriculum Rochester, Minnesota	1999
Opportunistic infections in AIDS Internal Medicine Residents Rochester, Minnesota	02/1999
Molecular Microbiology/Clinical Microbiology Core Curriculum Mayo Graduate School of Medical Education Rochester, Minnesota	2000 - 2001
Molecular Microbiology Infectious Diseases Fellows Core Curriculum Rochester, Minnesota	2002
Infections in Transplant Patients Infectious Diseases Fellows Core Curriculum Rochester, Minnesota	2003
Vancomycin-Resistant Enterococci Internal Medicine Residents (noon lecture) Rochester, Minnesota	2003
Bacteriology: Introduction Mayo Medical School Rochester, Minnesota	2004 - Present
Bacteriology: Bacterial Genetics Mayo Medical School Rochester, Minnesota	2004 - Present
Bacteriology: Normal Flora and Host-Bacterial Relationships Mayo Medical School Rochester, Minnesota	2004 - Present
Bacteriology: Gram-Positive Cocci Mayo Medical School Rochester, Minnesota	2004 - Present
Bacteriology: Gram-Positive Bacilli Mayo Medical School Rochester, Minnesota	2004 - Present
Bacteriology: Gram-Negative Cocci Mayo Medical School Rochester, Minnesota	2004 - Present
Bacteriology: Gram-Negative Bacilli I Enterobacteriaceae Mayo Medical School Rochester, Minnesota	2004 - Present
Bacteriology: Gram-Negative Bacilli II Mayo Medical School Rochester, Minnesota	2004 - Present

Bacteriology: Anaerobic Bacteria Mayo Medical School Rochester, Minnesota	2004 - Present
Bacteriology: Antibacterial Antimicrobics I Mayo Medical School Rochester, Minnesota	2004 - Present
Bacteriology: Antibacterial Antimicrobics II Mayo Medical School Rochester, Minnesota	2004 - Present
Bacterial Genetics - Molecular Genetics Core Course Mayo Graduate School Rochester, Minnesota	2004 - Present
Bacteriology - M. pneumoniae, U. urealyticum, C. trachomatis, C. pasittaci, C. pneumoniae, Rickettsiae, C. burnetti, Ehrlichiosis Mayo Medical School Rochester, Minnesota	2004 - Present
Bacterial Genetics Molecular Genetics Core Course Lecture Rochester, Minnesota	2004
Infectious Complications Related to Transplant Liver, Kidney and Pancreas Transplant Nurses Rochester, Minnesota	2004
Transplant ID Gastroenterology Fellows Rochester, Minnesota	2004
Infections in the Immunocompromised Host Internal Medicine Residents (noon lecture) Rochester, Minnesota	2004
Infections in Transplant Recipients Infectious Diseases Fellows Core Curriculum Rochester, Minnesota	2005
Zoonoses Mayo Medical School Rochester, Minnesota	2005
Clinical Research Training Program - Protocol Development Course Mayo Graduate School of Medicine Rochester, Minnesota	2005 - 2006
Cardiovascular Infections Mayo Medical School Rochester, Minnesota	2006 - 2007
Central Nervous System Infections Mayo Medical School Rochester, Minnesota	2006 - 2007
Lower Respiratory Tract Infections Mayo Medical School Rochester, Minnesota	2006 - 2007
Intra-abdominal Infections Mayo Medical School Rochester, Minnesota	2006 - 2007
Urinary Tract Infections Cystitis, Pyelonephritis, Prostatitis Mayo Medical School Rochester, Minnesota	2006 - 2007
Therapy for Tuberculosis	2008 - Present

Mayo Medical School Rochester, Minnesota	
Infectious Diseases Journal Club: ICAAC/IDSA Literature Review Mayo Clinic Rochester, Minnesota	10/2008
Pharmacobiology of Infection Mayo Graduate School Rochester, Minnesota	2009 - Present
Core Curriculum Lectures on Bacteriology ID Fellows	2011 - Present
Antifungal Drugs Mayo Medical School	2011 - Present
Antiviral Agents Mayo Medical School	2011 - Present
Prokaryotic Genetics Mayo Graduate School	2013
Your Role on the Patient Care Team Medical Laboratory Science Program	2014 - Present
Anaerobes of Clinical Significance Medical Laboratory Science Program	2014 - Present
Antimicrobial Susceptibility Testing Medical Laboratory Science Program	2014 - Present
MALDI-TOF for the Diagnosis of Infectious Disease Medical Laboratory Science Program	2015
Pharmacobiology of Infection Mayo Graduate School Rochester, Minnesota	02/2015
Prokaryotic Genetics Mayo Graduate School	02/2015

Mentorship

Brown, Melanie (Medical Student) Description: Research project: <i>Staphylococcus aureus</i> quinolone resistance Current Status: Outcome:	01/1994 - 01/1998
Florez, Monica (Medical Student) Description: Research project: Effect of intravenous immunoglobulin on the pathogenesis of <i>Streptococcus pyogenes</i> necrotizing fasciitis Current Status: Outcome:	01/1994 - 01/1998
Huddleston, Paul (Masters Student) Description: Orthopedic Surgery resident Research project: Effect of quinolones on experimental fracture healing Current Status: Surgeon, Department of Orthopedics, Mayo Clinic College of Medicine, Rochester, MN Outcome:	01/1994 - 01/2000
Sia, Irene (Fellow) Description: Research project: Cytomegalovirus in solid organ transplant recipients Current Status: Consultant, Division of Infectious Diseases, Mayo Clinic College of Medicine, Rochester, MN Outcome:	01/1996 - 01/1999
Prpa, Branko (Masters Student) Description: Orthopedic Surgery resident Research project: Effect of quinolones on	01/1996 - 01/2001

experimental fracture healing

Current Status:

Outcome:

Reid, Karlene (Fellow)

01/1997 - 01/2000

Description: Research project: *Enterococcus gallinarum* and *Enterococcus casseliflavus* infection

Current Status: Consultant, Texas Tech University Health Sciences Center, Odessa, TX

Outcome:

Abu-Nader, Rima (Fellow)

01/1998 - 01/2000

Description: Research project: Cytomegalovirus in solid organ transplant recipients

Current Status:

Outcome:

Johnston, Patrick (Fellow)

01/1998 - 01/2001

Description: Research Project: Vancomycin-resistant enterococci in PBSCT recipients

Current Status: Consultant, Division of Hematology, Mayo Clinic College of Medicine, Rochester, MN

Outcome:

Perry, Archie (Masters Student)

01/1998 - 01/2003

Description: Research Project: Levofloxacin inhibition of experimental fracture-healing. Antimicrobial release kinetics from polymethylmethacrylate in a novel continuous flow chamber. In vitro Matrix III vancomycin and amikacin release kinetics

Current Status: Orthopedics at Desert Orthopaedic Center, Las Vegas, NV

Outcome:

O'Sullivan, Cathal (Fellow)

01/1999 - 01/2000

Description: Research project: Herpes encephalitis and meningitis

Current Status:

Outcome:

Wolk, Donna

01/1999 - 01/2000

Description: Research project: Molecular microbiology diagnostics

Current Status: Geissinger Medical Laboratories

Outcome:

Bell, Constance (Fellow)

01/1999 - 01/2001

Description: Research Project: Ehrlichiosis

Current Status: LTC, US Army Medical Service Corps, Great Lakes, IL

Outcome:

Razonable, Raymund (Fellow)

01/1999 - 01/2002

Description: Research project: Infections in solid organ transplant recipients

Current Status: Consultant, Division of Infectious Diseases, Mayo Clinic College of Medicine, Rochester, MN

Outcome:

Roeder, Brent (Internal Medicine Resident)

01/1999 - 01/2002

Description: Research project: Liver abscess (case report)

Current Status:

Outcome:

Alyaseen, Samer (Fellow)

01/2000 - 01/2002

Description: Research project: Antimicrobial resistance in *Pseudomonas aeruginosa*

Current Status: Hospital Consultant, Konawa, OK

Outcome:

Fanning, Cara (Fellow)

01/2000 - 01/2003

Description: Research project: Intravascular catheter sealant

Current Status:

Outcome:

Issa, Nicolas (Fellow) Description: Research project: Activity of ceftobiprole against Gram-negative bacteria Current Status: Consultant, St. Vincent's Hospital, Jacksonville, FL Outcome:	01/2000 - 01/2003
Herrero, Inmaculada Description: Reevaluation of Streptococcus bovis endocarditis cases from 1975 to 1985 by 16S ribosomal DNA sequence analysis. Nosocomial spread of linezolid-resistant vancomycin-resistant Enterococcus faecium. Identification of a putative transposase homologous to a Bacillus halodurans transposase upstream of the vancomycin-resistance gene cluster in Paenibacillus popilliae ATCC 14706. Current Status: DVM, PhD Department of Animal Pathology I, School of Veterinary Medicine, Madrid, Spain. Outcome:	01/2000 - 12/2003
Rajagopalan, Govind Description: - In vitro and in vivo evaluation of linezolid in the treatment of Staphylococcus aureus-induced pneumonia using HLA-DR3 transgenic mice - Hla-dr3 transgenic mice expressing nur77-gfp reveal early and robust activation of t cells by superantigens during staphylococcus aureus pneumonia - Intranasal exposure to bacterial superantigens induces airway inflammation in HLA class II transgenic mice - Intranasal exposure to staphylococcal enterotoxin B elicits an acute systemic inflammatory response - Intranasal exposure to staphylococcal enterotoxin B elicits an acute systemic inflammatory response - Acute systemic immune activation following conjunctival exposure to staphylococcal enterotoxin B. Infect - Acute systemic immune activation following vaginal exposure to staphylococcal enterotoxin B--implications for menstrual shock. Current Status: Virginia College of Medicine Outcome:	01/2000 - 12/2005
Havlova, Eva (Special Project Associate) Description: Current Status: Outcome:	07/2000 - 10/2000
Senitko, Martin (Research Trainee) Description: Research project: Experimental animal candidiasis Current Status: Outcome:	12/2000 - 05/2003
Khaliq, Yasmin (Special Project Associate) Description: Research project: Quinolone resistance in viridans group streptococci Current Status: Outcome:	01/2001
Assi, Maha Description: Mycobacterium gordonae pulmonary disease associated with a continuous positive airway pressure device Current Status: Outcome:	01/2001 - 12/2001
Haleem, Abdul (Fellow) Description: Research project: Effect of gentamicin on experimental fracture healing Current Status: Outcome:	01/2001 - 01/2003
Prabhu, Rajesh (Fellow) Description: Research project: Quinolone resistance in viridans group streptococci Current Status: Physician, Duluth Clinic, Duluth, MN Outcome:	01/2001 - 01/2004
Trampuz, Andrej Description: A prospective comparative study of culture of joint fluid, periprosthetic	01/2001 - 12/2004

tissue and explant ultrasonicate for the diagnosis of total knee arthroplasty infection. A new method for comparison of biofilm removal procedures from surfaces. Comparison of scraping, sonication and vortexing for removal of Staphylococcus epidermidis biofilms from polycarbonate coupons. Removal of 3-day-old Staphylococcus epidermidis biofilm from stainless steel and polymethylmethacrylate coupons.

Current Status: MD Infectious Diseases; Principle Investigator at Charite Medical University, Berlin, Germany.

Outcome:

Rotger-Cerda, Margalida

01/2002 - 12/2003

Description: Mupirocin efficacy for and emergence of resistance after treatment of experimental murine methicillin resistant Staphylococcus aureus nasal colonization. Phenotypic and genotypic mupirocin resistance in staphylococci associated with prosthetic joint infection. In vitro activity and emergence of resistance to mupirocin, and alkyl ester 128774-23A and 128774-23B in Staphylococcus aureus.

Current Status: PhD Pharmacogenetics; Centre Hospitalier Universitaire Vaudois, Lausanne, Switzerland.

Outcome:

Rotger Cerda, Margalida (Research Trainee)

09/2002 - 04/2003

Description: Research project: Mupirocin resistance in staphylococci

Current Status: Institut de Microbiologie, Lausanne, Switzerland

Outcome:

Hall, Emily

01/2003 - Present

Description: High rate of aminoglycoside resistance amongst Staphylococci causing prosthetic joint infection.

Current Status: COO at Unified Physician Management, Boca Raton, FL

Outcome:

Christiansen, DC

01/2003 - 12/2003

Description: Mycobacterium celatum, an emerging pathogen and cause of false positive amplified Mycobacterium tuberculosis direct test

Current Status:

Outcome:

Anguita-Alonso, Paloma

01/2003 - 12/2005

Description: In vitro activity of garenoxacin against viridans group streptococci. High rate of aminoglycoside resistance amongst Staphylococci causing prosthetic joint infection. A comparative study of antimicrobial release kinetics from polymethylmethacrylate.

Current Status: MD from University of Madrid; Head of Medical Affairs and AI, Transplant and ONCO at Public Hospital, Madrid, Spain.

Outcome:

Shuford, Jennifer

01/2003 - 12/2005

Description: Determination of in vitro and in vivo activity of caspofungin against Candida albicans biofilms. Lack of association of Staphylococcus aureus type A beta-lactamase with treatment failure of cefazolin combined with antimicrobial spacer placement in prosthetic joint infection.

Current Status: Infectious Disease Medical Officer at Texas Department of State Health Services, Austin, TX.

Outcome:

Frank, Kristi

01/2003 - 12/2007

Description: -IcaA is not a useful diagnostic marker for prosthetic joint infection -In vitro effects of antimicrobial agents on planktonic and biofilm forms of Staphylococcus lugdunensis clinical isolates. -Activity of sodium metabisulfite against planktonic and biofilm Staphylococcus species -Poly-N-acetylglucosamine is not a major component of the extracellular matrix in biofilms formed by icaADBC-positive Staphylococcus lugdunensis isolates. -From clinical microbiology to infection pathogenesis: how daring to be different works for Staphylococcus lugdunensis. - Intravenously administered pharmaceuticals impact biofilm formation and detachment of Staphylococcus lugdunensis and other staphylococci. -

Staphylococcus lugdunensis - Not the Average Coagulase-Negative Staphylococcus Species - Evaluation of the Enterococcus faecalis Biofilm-Associated Virulence Factors AhrC and Eep in Rat Foreign Body Osteomyelitis and In Vitro Biofilm-Associated Antimicrobial Resistance

Current Status: Assistant Professor in the Department of Microbiology and Immunology at Uniformed Services University of the Health Sciences (USU); Bethesda, MD

Outcome:

Zirakzadeh, Ali (AGIM Fellow)

01/2004 - 01/2006

Description: Research project: Vancomycin-resistant enterococci in PBSCT recipients

Current Status:

Outcome:

Ulan, Daniel (Infectious Diseases Fellow)

06/2004 - 12/2006

Description: Research Project: Travel-associated infections in transplant recipients

Current Status:

Outcome:

Binnicker, Matthew

07/2004 - 06/2006

Description: Identification of an influenza A H1N1/2009 virus with mutations in the matrix gene causing a negative result by a commercial molecular assay

Current Status: Mayo Clinic, Rochester

Outcome:

Eid, Albert

01/2006 - 12/2006

Description: Parvovirus B19 infection after transplantation: a review of 98 cases

Current Status:

Outcome:

Heijink, Andras

01/2006 - 12/2006

Description: Local antibiotic delivery with OsteoSel, DBX and Collagraft

Current Status:

Outcome:

Grys, Thomas (Fellow)

01/2006 - 01/2008

Description: Shiga toxin PCR

Current Status: Consultant, Division of Laboratory Medicine and Pathology, Mayo Clinic Arizona

Outcome:

Fernandez-Sampedro, Marta

01/2006 - 12/2008

Description: Biofilms and spinal instrumentation. CRP and ESR and orthopedic implant infection. Species of Propionibacterium and types associated with orthopedic implant infection.

Current Status: MD Infectious Diseases; Hospital Marqués de Valdecilla, Santander, Spain.

Outcome:

del Pozo, Jose

01/2006 - 12/2009

Description: - The challenge of treating biofilm-associated bacterial infections - Effect of electrical current on the activities of antimicrobial agents against Pseudomonas aeruginosa, Staphylococcus aureus and Staphylococcus epidermidis biofilms

Current Status:

Outcome:

Khare, Reeti

01/2007 - Present

Description: Molecular characterization of Staphylococcus lugdunensis.

Current Status: PhD from Mayo Clinic College of Medicine, Rochester, MN; Assistant Director of Infectious Disease Diagnostics at North Shore-LIJ Health System, New Hyde Park, NY.

Outcome:

Arness, Tara

01/2007 - 12/2007

Description: Varicella zoster virus-associated disease in adult kidney transplant recipients: incidence and risk-factor analysis Current Status: Outcome:	01/2007 - 12/2007
Kijpittayarit-Arthurs, Supha Description: Clinical features and outcomes of delayed-onset primary cytomegalovirus disease in cardiac transplant recipients. Current Status: Outcome:	01/2007 - 12/2007
Mook-Kanamori, Barry Description: Daptomycin in experimental murine pneumococcal meningitis Current Status: Outcome:	01/2007 - 12/2007
van de Beek, Diederik Description: - Meningococcal Meningitis With Brainstem Infarction - Central nervous system infections in heart transplant recipients Current Status: Outcome:	01/2007 - 12/2007
Verdoorn, Brandon Description: Effect of telephone notification of positive Clostridium difficile test results on the time to the ordering of antimicrobial therapy Current Status: Outcome:	01/2007 - 12/2007
Kang, Cheol-In Description: Evaluation of micafungin against candidal biofilms in experimental intravascular catheter infection. Current Status: MD Infectious Diseases; Assistant Professor, Samsung Medical Center, Seoul, Republic of Korea Outcome:	01/2007 - 12/2009
Babady, Ngolela Description: Percent positive rate of Lyme real-time polymerase chain reaction in blood, cerebrospinal fluid, synovial fluid and tissue Current Status: Outcome:	07/2007 - 06/2009
Robberts, Frans Description: Unreliable extended-spectrum beta-lactamase detection in the presence of plasmid-mediated AmpC in Escherichia coli clinical isolates Current Status: University of Johannesburg Outcome:	07/2007 - 06/2009
Aichinger, Elizabeth Description: Nonutility of repeat laboratory testing for detection of Clostridium difficile by use of PCR or enzyme immunoassay Current Status: Outcome:	01/2008 - 12/2008
Uslan, Daniel Description: International travel and exposure risks in solid-organ transplant recipients Current Status: Outcome:	01/2008 - 12/2008
Euba, Gorane (Research Fellow) Description: Research Project: Experimental osteomyelitis Current Status: Outcome:	01/2008 - 01/2009
Karre, Teresa Description: A renal transplant patient with psoas fluid collection Current Status: Nebraska Methodist Hospital	07/2008 - 07/2009

Outcome: Enthaler, Nina (Visiting Medical Student) Description: Cefoxitin combination therapy for MRSA Current Status: Outcome:	01/2009 - 01/2010
Outcome: Graml, Claudia (Visiting Medical Student) Description: Cefoxitin combination therapy for MRSA, continued Current Status: Outcome:	01/2009 - 01/2010
Outcome: Marta, Georgina Fernandez (Visiting Medical Student) Description: Cefoxitin combination therapy for MRSA, continued Current Status: Outcome:	01/2009 - 01/2010
Outcome: Shelton-Dodge, Kelsey Description: Clinical significance and antimicrobial susceptibilities of <i>Aerococcus sanguinicola</i> and <i>Aerococcus urinae</i> Current Status: Outcome:	01/2009 - 12/2011
Outcome: Vergidis, Pascalis Description: Microbiology of elbow implant infection. Biofilms and <i>Enterococcus faecalis</i> biology. Evaluation of gene disruption mutants of <i>Enterococcus faecalis</i> in a rat model of foreign body osteomyelitis. Current Status: Assistant Professor of Medicine Infectious Diseases, Manchester, UK. Outcome:	01/2009 - 12/2012
Outcome: Gomez Urena, Eric Description: Use of 16S rRNA gene targeted PCR of sonicate fluid for the microbiologic diagnosis of PJI. Current Status: Infectious Diseases, MCHS - Mankato Outcome:	07/2009 - 06/2010
Outcome: Saffert, Ryan Description: Comparison of Bruker Biotyper matrix-assisted laser desorption ionization-time of flight mass spectrometer to BD Phoenix automated microbiology system for identification of gram-negative bacilli Current Status: Beckman Coulter Outcome:	07/2009 - 12/2011
Outcome: Shan, Neel Description: Laboratory and clinical characteristics of <i>Staphylococcus lugdunensis</i> prosthetic joint infections Current Status: Outcome:	01/2010 - 12/2010
Outcome: Cazanave, Charles Description: Molecular detection of biofilms on hip and knee implants. Current Status: MD Infectious Diseases; Universite Segalen Bordeaux, Bordeaux, France. Outcome:	01/2010 - 12/2011
Outcome: Piper, Ashley (Summer Student) Description: Electricidal effect studies Current Status: Outcome:	01/2010 - 01/2012
Outcome: Maduka-Ezeh, Awele Description: Small colony variants of <i>Staphylococcus</i> species and prosthetic joint infection. Current Status: State Medical Director Division of Public Health, Delaware State Department of Health and Social Services, Dover, DE. Outcome:	01/2010 - 12/2012

Alatoom, Adnan Description: Comparison of direct colony method versus extraction method for identification of gram-positive cocci by use of Bruker Biotyper matrix-assisted laser desorption ionization-time of flight mass spectrometry Current Status: Outcome:	01/2010 - 01/2011
Theel, Elitza Description: Formic acid-based direct, on-plate testing of yeast and Corynebacterium species by Bruker Biotyper matrix-assisted laser desorption ionization-time of flight mass spectrometry Current Status: Mayo Clinic, Rochester Outcome:	07/2010 - 06/2012
Winstead, Amy (Summer Student) Description: Electricidal effect studies Current Status: Outcome:	01/2011
Nagpal, Avish Description: Microbiology and pathogenesis of cardiovascular implantable electronic device infections. Clinical and Laboratory Characteristics of Small Colony Variants of Coagulase Negative Staphylococci (CoNS) Associated with Cardiovascular Implantable Electronic Device (CIED) Infections. Current Status: MD Infectious Diseases from Mayo Clinic College of Medicine, Rochester, MN; Infectious Diseases at Sanford Medical Center, Fargo, ND. Outcome:	01/2011 - 12/2013
Schmitt, Brian Description: Real-time PCR detection of Mycoplasma pneumonia in respiratory specimens Current Status: University of Indiana Medical School Outcome:	07/2011 - 06/2012
Melendez Lecca, Dante Description: Multiplex real-time PCR of synovial fluid in the diagnosis of prosthetic joint infection of knee implants. Detection of prosthetic joint infection using polymerase chain reaction-electrospray ionization mass spectrometry on synovial fluid. Current Status: MD Infectious Diseases from Mayo Clinic College of Medicine, Rochester, MN; Infectious Diseases Specialist at University of Oklahoma Health Sciences Center, Oklahoma City, OK. Outcome:	01/2012 - Present
Eastlack, Robert Description: Infection not associated with use of human musculoskeletal tissue allografts Current Status: Outcome:	01/2012 - 12/2012
Chung, Jin-Won Description: Superantigen profiling of Staphylococcus aureus infective endocarditis isolates. Current Status: MD Infectious Diseases; Chung-Ang University College of Medicine, Seoul, Republic of Korea. Outcome:	01/2012 - 12/2013
Seong-Yeol, Ryu Description: Low sensitivity of periprosthetic tissue PCR for prosthetic knee infection diagnosis. Current Status: MD Infectious Diseases; Keimyung University Medical Center, Daegu, Republic of Korea. Outcome:	01/2012 - 12/2013
Theofiles, Alexander	01/2012 - 12/2013

Description: Pertussis outbreak, southeastern Minnesota

Current Status: Mayo Clinic, Rochester

Outcome:

Perterson-Brinkman, Cassandra

01/2012 - 12/2014

Description: Evaluation of gene disruption mutants of *Enterococcus faecalis* in a rat model of foreign body osteomyelitis.

Current Status:

Outcome:

Tande, Aaron

01/2012 - 12/2014

Description: Staphylococcal small colony variants in prosthetic joint infection.

Expression of phenol soluble modulins in clinically isolated *Staphylococcus epidermidis* small colony variants.

Current Status: MD Infectious Diseases from Mayo Clinic College of Medicine, Rochester, MN; Assistant Professor of Medicine, Infectious Diseases Consultant, Mayo Clinic College of Medicine, Rochester, MN.

Outcome:

Tyner, Harmony

01/2012 - 12/2014

Description: Auxotrophy and biofilm formation in *Staphylococcus aureus* small colony variant isolates from prosthetic joint infections. Bacterial presence and histopathology in an experimental animal model of chronic *Propionibacterium acnes* foreign body infection

Current Status: MD Infectious Diseases from Mayo Clinic College of Medicine, Rochester, MN; Infectious Disease Specialist at St. Luke's Infectious Disease Associates, Duluth, MN.

Outcome:

Sadarangani, Sapna

01/2012 - 06/2015

Description: Metronidazole- and carbapenem-resistant bacteroides thetalotaomicron isolated in Rochester, Minnesota in 2014

Current Status:

Outcome:

Banerjee, Ritu

01/2013 - 12/2013

Description: Combinations of cefoxin plus other beta-lactams are synergistic in vitro against community associated methicillin-resistant *Staphylococcus aureus*

Current Status: Vanderbilt University Medical Center

Outcome:

Leekha, Surbhi

01/2013 - 12/2013

Description: Viral detection using a multiplex polymerase chain reaction-based assay in outpatients with upper respiratory infection

Current Status:

Outcome:

Kim, Choon

01/2013 - 12/2014

Description: Superantigens in *Staphylococcus aureus* isolated from prosthetic joint infection.

Current Status: MD Infectious Diseases; Veterans Health Service Medical Center, Seoul, Republic of Korea.

Outcome:

Peel, Trisha

01/2013 - 12/2014

Description: Diagnosis of prosthetic joint infection by culturing peri-prosthetic tissue specimens in blood culture bottles.

Current Status: MD Infectious Diseases; University of Melbourne Medical Center, Melbourne, Australia.

Outcome:

Vasoo, Shawn

01/2013 - 12/2014

Description: Rapid multiplex PCR (BioFire) and MALDI-TOF mass spectrometry of biofilms dislodged from explanted arthroplasties for the diagnosis of prosthetic joint infection.

Current Status: MD Infectious Diseases from Mayo Clinic College of Medicine,

Rochester, MN; Tan Tock Seng Hospital, Singapore.

Outcome:

Jeraldo, Patricio

01/2013 - 03/2015

Description: Draft genome sequences of nine Pseudomonas aeruginosa strains, including eight clinical isolates

Current Status: Mayo Clinic, Rochester

Outcome:

Sampath, Rahul

07/2013 - 06/2016

Description: Cardiothoracic Transplant Recipient Mycoplasma hominis: An Uncommon Infection with Probable Donor Transmission

Current Status: ID Specialist, Carolinas HealthCare System - Blue Ridge

Outcome:

Johnson, James

01/2014 - 12/2014

Description: Prevalence of rectal colonization with multidrug-resistant Enterobacteriaceae among international patients hospitalized at Mayo Clinic, Rochester, Minnesota

Current Status: Veterans Affairs Medical Center and University of Minnesota, Minneapolis, Minnesota

Outcome:

Fernandez, Javier

01/2014 - 12/2016

Description: In vitro activity of dalbavancin against biofilms of Staphylococci isolated from prosthetic joint infections.

Current Status: MD Infectious Diseases; Infectious Diseases at Asturias Central West University Hospital, Oviedo, Spain.

Outcome:

Park, Kwung-Hwa

01/2014 - 12/2016

Description: In vitro activity of ceftaroline against Staphylococci from prosthetic joint infection. Antimicrobial-loaded bone cement does not negatively influence sonicate fluid positivity for the diagnosis of prosthetic joint infection. In vivo activity of tedizolid against methicillin-resistant Staphylococcus aureus and methicillin-resistant Staphylococcus epidermidis foreign body chronic osteomyelitis. SAB.

Current Status: MD Infectious Diseases; Department of Infectious Diseases, Chonnam National University Medical School, Gwangju, Republic of Korea.

Outcome:

Silva-Del Toro, Stephanie

01/2014 - 12/2016

Description: In vitro activity of tedizolid against linezolid non-susceptible Staphylococci and Enterococci.

Current Status: Immunology PhD Candidate at University of Iowa Graduate School, Iowa City, IA.

Outcome:

Thoendel, Matt

01/2014 - 12/2016

Description: Metagenomic analysis of arthroplasty failure.

Current Status: MD, Infectious Diseases Fellowship, Mayo Clinic College of Medicine, Rochester, MN.

Outcome:

Bhatti, Micah

07/2014 - 06/2015

Description: Eight-year review of Bordetella pertussis testing reveals seasonal pattern in the United States

Current Status: MD Anderson, Houston, TX

Outcome:

Karalius, Vytas

07/2014 - 12/2017

Description: Bordetella parapertussis outbreak in Southeastern Minnesota and the United States, 2014

Current Status:

Outcome:

Houdek, Matthew

01/2015 - 12/2015

Description: Elution of high dose Amphotericin B deoxycholate from polymethylmethacrylate	
Current Status:	
Outcome:	
Mushtaq, Ammara	01/2015 - 12/2016
Description: Differential antimicrobial susceptibility of <i>Granulicatella adiacens</i> and <i>Abiotrophia defectiva</i> .	
Current Status: Medical Student, Wayne State, Detroit, MI.	
Outcome:	
Wang, Xiaohui	01/2015 - 12/2016
Description: <i>Ureaplasma urealyticum</i> and <i>Ureaplasma parvum</i> cause hyperammonemia in an experimental immunocompromised murine model.	
Current Status: MD Infectious Diseases; Center of Infectious Diseases, West China Hospital, Sichuan University, Chengdu, Sichuan, China.	
Outcome:	
Voegele, Paul	01/2015 - 12/2018
Description: Antibiofilm activity of electrical current in a catheter model	
Current Status:	
Outcome:	
Velez Perez, Antonio	06/2015 - 08/2015
Description: In vitro activity of ceftolozane/tazobactam against clinical isolates of <i>Pseudomonas aeruginosa</i> in the planktonic and biofilm states	
Current Status:	
Outcome:	
Chen, Derrick	07/2015 - 06/2016
Description: Phenotypic and Molecular Antimicrobial Susceptibility of <i>Helicobacter pylori</i>	
Current Status: University of WI - Madison	
Outcome:	
Liesman, Rachael	07/2015 - 06/2017
Description: Laboratory Diagnosis of Infective Endocarditis	
Current Status: University of Kansas Medical Center	
Outcome:	
Hasassri, M. Earth	01/2016 - 12/2016
Description: An Immunocompromised Child with Bloodstream Infection Caused by Two <i>Escherichia coli</i> Strains, One Harboring NDM-5 and the Other Harboring OXA-48-Like Carbapenemase	
Current Status:	
Outcome:	
Perry, Joshua	01/2016 - 12/2016
Description: To beard or not to beard? Bacterial shedding among surgeons	
Current Status:	
Outcome:	
Reynolds, Margaret	01/2016 - 12/2016
Description: Selected antimicrobial activity of topical ophthalmic anesthetics	
Current Status:	
Outcome:	
Rivera, Christina	01/2016 - 12/2016
Description: Impact of Cefepime Susceptible-Dose-Dependent MIC for Enterobacteriaceae on Reporting and Prescribing	
Current Status:	
Outcome:	
Ruiz-Ruigomez, Maria	01/2016 - 12/2016
Description: Direct electrical current reduces bacterial and yeast biofilm formation	
Current Status: Contrato Rio Hortega en Instituto de Salud Carlos III Instituto de Salud Carlos III Universidad de Granada Madrid, Madrid, Spain	

Outcome:

Norgan, Andrew 01/2016 - 06/2019

Description: Carbapenem- and Colistin-resistant Enterobacter cloacae from Detal, Colorado, in 2015

Current Status:

Outcome:

Ramanan, Poornima 04/2016 - 03/2017

Description: Discrepancies Between Microbial Detection and Identification using the Blood Culture Identification (BCID) FilmArray Panel Assay and Standard Subculture of Positive Blood Culture Bottles

Current Status:

Outcome:

Wi, Yu Mi 01/2017 - Present

Description: Metagenomic analysis of antimicrobial susceptibilities in arthroplasty failure.

Current Status: MD Infectious Diseases; Department of Infectious Diseases, Samsung Changwon Hospital, Sungkyunkwan University, Changwon, Republic of Korea.

Outcome:

Homme, Jason 01/2017 - 12/2017

Description: Duration of Group A Streptococcus PCR positivity following antibiotic treatment of pharyngitis

Current Status: Mayo Clinic, Rochester

Outcome:

Norambuena, German 01/2017 - 12/2017

Description: Antibacterial and Biocompatible Titanium-Copper Oxide Coating May Be a Potential Strategy to Reduce Periprosthetic Infection: An In Vitro Study

Current Status:

Outcome:

Neudorfer, Katharina 06/2017 - 08/2017

Description: Dalbavancin is active in vitro against biofilms formed by dalbavancin-susceptible enterococci

Current Status:

Outcome:

Yan, Qun 09/2017 - 08/2018

Description: Evaluation of Non-Tissue Culture- versus Tissue Culture-Treated Microplates for Oritavancin Susceptibility Testing

Current Status:

Outcome:

Academic Career Development

Faculty 15: Metacognition and Making it Stick 06/2017 - Present

DLMP Educators Forum / Clinical Microbiology Enterprise Meeting
Rochester, Minnesota

Faculty 15: Poll Everywhere 04/2018

Clinical Microbiology Division Meeting
Rochester, Minnesota

DLMP Faculty 15 - Kaltura How-To 11/19/2018

Clinical Microbiology Enterprise Meeting
Rochester, Minnesota

Making a Difference in Infectious Diseases - Day 3 05/2019

SCMA (South Carolina Medical Association)

Making a Difference in Infectious Diseases - Day 4 05/2019

SCMA (South Carolina Medical Association)

Faculty 15: Wellbeing through Mayo Clinic College of Medicine & Science - Student 05/19/2021

Services
DLMP GME Education Committee
Rochester, Minnesota

Institutional/Departmental Administrative Responsibilities, Committee Memberships and Other Activities

Mayo Clinic

Department of Education Administration

Mayo Clinic College of Medicine

Mayo Medical School

Basic Science Theme Committee

Leader

2007 - Present

Curriculum Advisory Committee

Member

2009 - Present

Education Committee

Member

2002 - 2006

Microbiology/Block VI

Leader

2001 - Present

Scientific Foundation of Medical Practice Curriculum Committee

Member

2001 - 2006

Student Promotion Committee

Member

2007 - 2010

Mayo Clinic Committees

Compliance and Enterprise Risk Management Committee

Research Compliance Subcommittee

Member

2002

Conflict of Interest Review Board - Mayo Clinic

Member

2008 - Present

Diversity Committee

Member

1994 - 1995

Mayo Clinic Task Forces/Work Groups

Hospital Point of Care Task Force

Clinical Working Group

Member

1993 - 1995

Steering Group

Member

1993 - 1995

Intensive Care Unit Flow Sheet Task Force

Coordinating Committee

Member

1991

Physicians Hospital Admission Form Task Force

Coordinating Committee

Member

1991 - 1992

Mayo Clinic in Rochester

Department of Internal Medicine

Division of Infectious Diseases

Research Committee

Member

1996 - Present

Chair

2000 - 2006

Transplantation Infectious Diseases	
Group Leader	1996 - 2000
Member	1996 - 2006
Internal Medicine Research Advisory Group	
Member	2001 - 2006
Internal Medicine Resident Graduate Education Committee	
Member	1989 - 1992
Social Chair	1991 - 1992
Vice Chair	1991 - 1992
Office for the Advancement of Research	
Member	2001 - 2004
Women in Internal Medicine	
Advisory Committee	
Member	1989 - 1994
Department of Laboratory Medicine and Pathology	
DLMP Clinical Practice Committee	
Member	2010
Research Committee	
Member	2001
Department of Pediatric and Adolescent Medicine	
Division of Pediatric Infectious Diseases	
Search Committee	
Member	1999
Infusion Therapy Center	
Infusion Therapy Advisory Board	
Member	2000 - 2001
Mayo Clinic Rochester Committees	
Committee on General Medical Training	
Member	1991 - 1992
Infection Control Committee	
Member	1994 - 1995
Mayo Clinic Research Committee	
Member	1994 - 1995
Mayo Clinic Rochester Societies	
Infection and Immunity Club	
Member	1996 - Present
Coordinator	1996 - 2000

Presentations Extramural

National or International

Comparison of Recovery Rates of Clostridium difficile from Stool Using Chromogenic Agar versus a Classic Culture Method ASM Microbe 2016	06/2016
Enterococcus faecalis Biofilms Reveal Conservation of the Extracellular Matrix Morphology between Multiple In Vitro and In Vivo Animal Model Systems ASM Microbe 2016	06/2016
A tale of two cities - clinical and molecular correlates of Escherichia coli bacteremia in Rochester, Minnesota and Singapore ECCMID 2017	04/2017

Vienna, Austria	
Ability of bla _{NDM} to disseminate worldwide into extensively drug-resistant bacterial hosts poses a major challenge to infection control and treatment: a global multi-centered whole-genome sequencing analysis ECCMID 2017 Vienna, Austria	04/2017
Explaining differences in resistance rates ECCMID 2017 Vienna, Austria	04/2017
New options for diagnosis and treatment of bone and joint infections ECCMID 2017 Vienna, Austria	04/2017
Promise and peril: rapid molecular diagnostics (RMDs) and clinical decision-making in infectious diseases ECCMID 2017 Vienna, Austria	04/2017
Novel pneumonia diagnostics: view from the clinical microbiology laboratory ATS 2017 Washington, DC	05/2017
Sonication vs. Tissue Cultures for the Diagnosis of Prosthetic Joint Infection Mayo Clinic Infectious Diseases Subspecialties Update Napa, California	06/2017
New Clinical Microbiology Diagnostics ASM 2017 - Planetary Health Hobart, Tasmania, Australia	07/2017
Prosthetic Joint Infection ASM 2017 - Planetary Health Hobart, Tasmania, Australia	07/2017
Diagnosis of Prosthetic Joint Infection Peter Dougherty Institute for Infection and Immunity Melbourne, Australia	07/2017
Diagnosis of Prosthetic Joint Infection Visiting Speaker - Fiona Stanley Hospital Perth, Australia	07/2017
NGS for infectious disease diagnosis and surveillance 11th International Symposium on Antimicrobial Agents and Resistance 3rd International Interscience Conference on Infection and Chemotherapy Busan, Korea	09/2017
Rapid diagnostics for infectious diseases: a solution to combat antimicrobial resistance 11th International Symposium on Antimicrobial Agents and Resistance 3rd International Interscience Conference on Infection and Chemotherapy Busan, Korea	09/2017
Clinical metagenomics in bone and joint infections How the next-generation sequencing of bone and joint infection samples can support or even replace conventional methods Second International Conference on Clinical Metagenomics (ICCMg) Campus Biotech, Geneva	10/2017
Invited	
Cytomegalovirus infection and disease in liver transplant Montreal General Hospital Montreal, Quebec, Canada	1995
The relevance of CMV viremia	1995

Controversies in Transplant Infection Tucson, Arizona	
Interpretation of microbiology tests for infection control practitioners APIC Shreveport, Louisiana	1996
Nontuberculous mycobacterial infections in solid organ transplant recipients. Presented as part of a workshop on nontuberculous mycobacterial infections 36th Interscience Conference on Antimicrobial Agents and Chemotherapy New Orleans, Louisiana	1996
Clinical diagnosis of mycobacterial infections in the solid organ transplant patient, case studies Presented as part of a workshop on nontuberculous mycobacterial infections 37th Interscience Conference on Antimicrobial Agents and Chemotherapy Toronto, Ontario, Canada	1997
Diagnostico de las infecciones oportunistas en VIH XII reunion ordinaria de la sociedad gallega de medicina interna Vigo, Spain	1997
Preemptive therapy for CMV infection in solid organ transplant recipients Thirteenth Annual Clinical Virology Symposium and Annual Meeting Pan American Society for Clinical Virology Clearwater Beach, Florida	1997
Vancomycin-resistant enterococci The Sir Motimer B. Davis-Jewish General Hospital Montreal, Quebec, Canada	1997
Clinical aspects of mycobacterial infections: How the laboratory and physician may interact as we approach the millennium Presented as part of a workshop - Clinical and laboratory diagnosis of mycobacterial infections: How the laboratory and physician may interact as we approach the millennium 38th Interscience Conference on Antimicrobial Agents and Chemotherapy San Diego, California	1998
Clinical aspects of mycobacterial infections: Clinical and laboratory perspectives Presented as part of a workshop - Mycobacterial disease 1999: Clinical and laboratory perspectives 39th Interscience Conference on Antimicrobial Agents and Chemotherapy San Francisco, California	1999
Glycopeptide-resistant enterococci: Clinical perspectives The 2nd International Symposium on Antimicrobial Resistance. Challenges of Drug Resistance in the Next Millennium Seoul, South Korea	1999
New antimicrobials for glycopeptide-resistant infections The 2nd International Symposium on Antimicrobial Resistance. Challenges of Drug Resistance in the Next Millennium Seoul, South Korea	1999
Vancomycin-resistant enterococci Waukesha Memorial Hospital 1999 All-Staff Conference Grand Rounds Waukesha, Wisconsin	1999
Cytomegalovirus in the immunosuppressed (liver) patient Viral Liver Disease: The Complete Spectrum Lake Buena Vista, Florida	2000
Enterococcal-type glycopeptide resistance genes in non-enterococcal organisms Infectious Diseases Grand Rounds. Northwestern University Chicago, Illinois	2000
Infections in solid organ transplant recipients	2000

Northwestern University Medical Grand Rounds Chicago, Illinois	
Mycobacterial disease 2000: Clinical and laboratory perspectives 7th Western Pacific Congress of Chemotherapy and Infectious Diseases Hong Kong	2000
Other viral infections in the immunosuppressed (liver) patient Viral Liver Disease: The Complete Spectrum Lake Buena Vista, Florida	2000
The Mayo Clinic transplant infectious diseases service Northwestern University Chicago, Illinois	2000
Vancomycin-resistant enterococci: Infectious challenges in solid organ and bone marrow transplant recipients 40th Interscience Conference on Antimicrobial Agents and Chemotherapy Toronto, Ontario, Canada	2000
VRE endocarditis, epidemiology, clinical presentation and management Valvular Heart Disease: New Strategies for the 3rd Millenium Conference Rochester, Minnesota	2000
DNA and RNA sequencing of HIV and HCV in the clinical microbiology lab. 2001: A laboratory odyssey Boxborough, Massachusetts	2001
Mechanisms of glycopeptide resistance in GRE 3rd International Symposium on Antimicrobial Agents and Resistance Seoul, South Korea	2001
Negotiating lab labyrinths: Prime time molecular microbiology questions and demystifying the antibiotic susceptibility report Meet-the-Professor 39th Annual Meeting of the Infectious Diseases Society of America San Francisco, California	2001
Sequence identification of aerobic and anaerobic bacteria The Eastern Pennsylvania Branch of the American Society for Microbiology and the National Laboratory Training Network: Clinical Microbiology Update 2001 Philadelphia, Pennsylvania	2001
Streptogramin and other investigational agents for the treatment of resistant Gram- positive infections 3rd International Symposium on Antimicrobial Agents and Resistance Seoul, South Korea	2001
Vancomycin-resistant enterococci in organ transplant. Infection in organ transplantation National Institute of Transplantation & St. Vincent Medical Center Santa Monica, California	2001
"What lies beneath" in the gastrointestinal tract Hematology Oncology lecture University of Michigan	2002
Clinical features of nontuberculous mycobacterial infections in transplant recipients Presented at an interactive symposium "Clinical mycobacteriology: Clinical and laboratory aspects of the nontuberculous mycobacteria" American Society for Microbiology 102nd General Meeting Salt Lake City, Utah	2002
Clinical impacts of VRE infection in at-risk patients 12th European Congress of Clinical Microbiology and Infectious Diseases Milan, Italy	2002
Glycopeptide resistance in enterococci and quinolone resistance in <i>Streptococcus pneumoniae</i>	2002

American Academy of Allergy, Asthma and Immunology New York, New York	
Illustrative case studies: Bacterial endocarditis. Optimal antibiotic treatment: How long? New antibiotics Valvular Heart Disease: New Strategies for the Third Millenium Rochester, Minnesota	2002
New issues with bacterial infections in solid organ transplant recipients 40th Annual Meeting of the Infectious Diseases Society of America Chicago, Illinois	2002
VRE - From biopesticides to nosocomial spread of a linezolid-resistant strain Infectious Diseases Grand Rounds, University of Michigan	2002
How to detect hidden microorganisms Swiss Society for Microbiology, Swiss Society for Infectious Diseases, Swiss Society of Tropical Medicine and Parasitology Joint Annual Meeting Basel, Switzerland	2003
ID Update literature review session 43rd Annual Interscience Conference on Antimicrobial Agents and Chemotherapy Chicago, Illinois	2003
Novel approaches to prosthetic joint infection diagnosis Technical Advisory Conference Montana State University Bozeman, Montana	2003
VRE - What lies beneath in the GI tract Basilea Corporation Basel, Switzerland	2003
Advances in the microbiological diagnosis of biofilm-associated infections. 14th European Congress of Clinical Microbiology and Infectious Diseases Prague, Czech Republic	2004
Bacterial endocarditis: Case studies & panel. New antibiotics. Valvular heart disease: New strategies - non-invasive interventional & surgical approaches Rochester, Minnesota	2004
Biofilms and resistance. Association of Bone and Joint Surgeons, Carl T. Brighton Annual Workshop, Musculoskeletal Infection Tampa, Florida	2004
ID Update literature review session 44th Annual Interscience Conference on Antimicrobial Agents and Chemotherapy Washington, District of Columbia	2004
Infections in solid organ transplant patients Round table 13th International Symposium on Infections in the Immunocompromised Host Granada, Spain	2004
Vancomycin resistant enterococci and genes: Is there a non-human source? The 104th General Meeting of the American Society for Microbiology New Orleans, Louisiana	2004
Antibiotic use in animals: Implications for human health 5th International Symposium on Antimicrobial Agents and Resistance Seoul, South Korea	2005
Biofilms and Orthopaedic Implants Center for Biofilm Engineering; Montana State University Bozeman, Montana	2005
Epidemiology and mechanisms of glycopeptide resistance in enterococci	2005

5th International Symposium on Antimicrobial Agents and Resistance Seoul, South Korea	
ID Update Literature Review Session 45th Annual Interscience Conference on Antimicrobial Agents and Chemotherapy Washington, District of Columbia	2005
Infections caused by VRE - Interactive session 5th International Symposium on Antimicrobial Agents and Resistance Seoul, South Korea	2005
New diagnostic techniques in the clinical microbiology laboratory 15th Annual Musculoskeletal Infection Society Meeting Snowmass Village, Colorado	2005
ID Update Literature Review Session 46th Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC) San Francisco, California	2006
Infeccion por Citomegalovirus en el Paciente Trasplantado First Transversal Congress Vina del mar, Chile	2006
MRSA and VRE in Transplantation. World Transplant Congress Boston, Massachusetts	2006
Polioma Virus First Transversal Congress Vina del mar, Chile	2006
Resistencia bacteriana Antimicrobiana y Trasplante First Transversal Congress Vina del mar, Chile	2006
What Do Physicians Want from the Clinical Virology Laboratory? Twenty-Second Annual Clinical Virology Symposium Clearwater, Florida	2006
Serious Hospital Infections: A Gram-Positive Update St. Joseph Hospital Bangor, Maine	2007
Staphylococcal Enterotoxin B Translational Immunovirology Biodefense Lecture Series Rochester, Minnesota	02/2007
Microbial typing - A weapon against resistance? ISAAR 2007 Singapore, Singapore	03/2007
Resistance mechanisms of VRE ISAAR 2007 Singapore, Singapore	03/2007
Adenovirus tratar o vigilar? Symposium of Infections in Immunocompromised Hosts Chile	04/2007
Conferencia "Citomegalovirus en Trasplantados" Symposium of Infections in Immunocompromised Hosts Chile	04/2007
Virus Epstein-Barr y riesgo de Sindromes linfoproliferativos post-transplante Symposium of Infections in Immunocompromised Hosts Chile	04/2007
ID Update Literature Review Session 47th Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC)	09/2007
Prosthetic Joint Infection: Diagnosis and Management	

47th Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC)	09/2007
Viral Infections	06/2008
15th International Symposium on Infections in the Immunocompromised Host Thessaloniki, Greece	
Update on the Microbiologic Diagnosis of Prosthetic Joint Infection Musculoskeletal Infection Society 18th Annual Meeting Lake Tahoe, California	08/2008
Clinical Challenges in Managing Osteomyelitis: Tough Questions Your Students May Ask You 48th Annual ICAAC/IDSA 46th Annual Meeting Washington, District of Columbia	10/2008
Evidence-Based Monitoring for Viral Infections in Transplant Recipients: Who, When, What Specimen, What Assay? 48th Annual ICAAC/IDSA 46th Annual Meeting Washington, District of Columbia	10/2008
ID Update Literature Review Session 48th Annual ICAAC/IDSA 46th Annual Meeting Washington, District of Columbia	10/2008
New protein synthesis inhibitors (oxazolidinones and ketolides) ISAAR 2009 Bangkok, Thailand	03/2009
New strategies for managing biofilm-associated bacterial infections and antibiotic resistance ISAAR 2009 Bangkok, Thailand	03/2009
Interactive Symposium - ID Quiz 49th ICAAC San Francisco, California	09/2009
Symposium - Biofilms and Healthcare-Associated Infections: from Bench to Bedside 49th ICAAC San Francisco, California	09/2009
Update from the Clinical Microbiology Laboratory Osteomyelitis and Segmental Bone Defects Baltimore, Maryland	09/2009
Diagnosis of Prosthetic Joint Infection Infection 2009 - University of Birmingham United Kingdom	11/2009
Pathogenicity factors and clinical importance of <i>Staphylococcus lugdunensis</i> Infection 2009 - University of Birmingham Birmingham, United Kingdom	11/2009
Antimicrobial Resistance ASCLS-NY & NF-CLMA 2010 Spring Seminar Cheektowaga, New York	06/2010
Meet-The-Expert Sessions - Viral Infections 16th International Symposium on Infections in the Immunocompromised Host Hungary	06/2010
The role of non-molecular methods for bacterial identification in addressing antimicrobial resistance - Matrix-assisted laser desorption ionization-time of flight mass spectrometry FDA Workshop - Antibacterial Resistance and Diagnostic Device and Drug Development Research for Bacterial Diseases; Public Workshop Silver Spring, Maryland	07/2010
Sequencing-Based & Mass Spectrometric Bacterial Identification in Clinical	

Microbiology Next Generation Dx Summit Washington, District of Columbia	08/2010
Interactive ID Fellows Session - Diagnositc Testing in the Bacteriology Laboratory 2010 'What the ID Fellow Should Know' ICAAC Boston, Massachusetts	09/2010
Interactive Symposium - ID Quiz ICAAC Boston, Massachusetts	09/2010
Pathogenesis, Epidemiology and Diagnosis of Prosthetic Joint Infection SWACM 2010 San Antonio, Texas	09/2010
Diagnosis and Treatment: Interactive Cases in Transplant Infectious Diseases IDSA 48th Annual Meeting Canada	10/2010
Matrix-Assisted Laser Desorption Ionization-Time-of-Flight (MALDI-TOF): Revolutionizing the Clinical Microbiology Laboratory? IDSA 48th Annual Meeting Canada	10/2010
Microbial Indentification in the Clinical Microbiology Laboratory Using Matrix- Assisted Laser Desorption Ionization Time of Flight (MALDI TOF) Mass Spectrometry ASM Teleconference	02/2011
<i>Staphylococcus lugdunensis</i> ASID 2011 Darlinghurst, Australia	03/2011
Prosthetic joint infection diagnosis ASID 2011 Darlinghurst, Australia	03/2011
Vancomycin-resistant enterococci (VRE) ASID 2011 Darlinghurst, Australia	03/2011
New antibiotics mainly against resistant Gram-positives ISAAR 2011 South Korea	04/2011
Treatment of infection by MDR Gram-positive: MDR pneumococci, MRSA, VRE infections ISAAR 2011 South Korea	04/2011
What's New in the Bacteriology Lab? New Technology, New Bugs, New Breakpoints American Transplant Congress (ATC) Philadelphia, Pennsylvania	04/2011
Can We Replace Cultures with Molecular Methods in the Diagnosis of Orthopaedic Infections? Chronic Orthopaedic Infections Pittsburgh, Pennsylvania	05/2011
MALDI-TOF MS for Bacterial Identification (Workshop) ASM 2011 New Orleans, Louisiana	05/2011
Microbiology Literature Review 2011 ASM 2011 New Orleans, Louisiana	05/2011

Optimized Culture Methods, Including Sonication and Special Culture Conditions Chronic Orthopaedic Infections Pittsburgh, Pennsylvania	05/2011
Mass Spectrometry for Bacterial Identification Hot Topic, Mayo Medical Laboratories	08/2011
Bacterial and Yeast Identification in the Clinical Microbiology Laboratory Using Matrix-Assisted Laser Desorption Ionization Time of Flight Mass Spectrometry Third Annual Next Generation Dx Summit Washington, District of Columbia	08/24/2011
Interactive Symposium - ID Quiz 55th ICAAC Chicago, Illinois	09/2011
Prosthetic Joint Infection in 2011 55th ICAAC Chicago, Illinois	09/2011
Antibiotic Susceptibility Testing Update Disease Management Strategies Program, Mayo Medical Laboratories	11/2011
What's New in Microbiology: Rapid Molecular Diagnostics and Stewardship FASS 2011 Miami Beach, Florida	12/2011
Bacterial and Yeast Identification in the Clinical Microbiology Laboratory by Matrix- Assisted Laser Desorption Ionization Time of Flight Mass Spectrometry Mass Spectrometry: Applications to the Clinical Laboratory San Diego, California	01/2012
The Path Forward with Biofilms: Should CLSI try to develop biofilm-related standard methods? CLSI Biofilm Symposium	01/2012
Detection of Mixed Clinical Samples by 16S rDNA Sequencing ASM General Meeting 2012 San Francisco, California	06/2012
MALDI-TOF MS for Bacterial Identification: Literature Review ASM General Meeting 2012 San Francisco, California	06/2012
MALDI-TOF MS for Bacterial Identification: Live Demonstration ASM General Meeting 2012 San Francisco, California	06/2012
MALDI-TOF MS for Bacterial Identification: User Experience & Workflow in a Diagnostic Microbial Laboratory ASM General Meeting 2012 San Francisco, California	06/2012
Microbiology Literature Review 2012 ASM General Meeting 2012 San Francisco, California	06/2012
Microbiology MALDI-TOF and Case Conference ACLPS 47th Annual Meeting Milwaukee, Wisconsin	06/2012
Matrix-Assisted Laser Desorption Ionization Time of Flight Mass Spectrometry in the Clinical Microbiology Laboratory in 2012 4th Annual Next Generation Dx Summit Washington, District of Columbia	08/2012
New Clinical Microbiology Diagnostics: What is (or Could be) in Your Lab? ICAAC 2012 San Francisco, California	09/2012

Advances in Clinical Microbiology Laboratory Testing 13th Asia-Pacific Congress of Clinical Microbiology and Infection Beijing	10/2012
Bacterial Identification in the Clinical Microbiology Laboratory by Matrix-Assisted Laser Desorption Ionization Time of Flight Mass Spectrometry 19th Annual E.G. Scott Microbiology Symposium Newark, Delaware	10/2012
Laboratory Diagnosis of Infectious Diseases IDWeek San Diego, California	10/2012
Metallo-beta-lactamases: A Last Frontiers for Beta-lactams? Beijing	10/2012
Oral Abstract Session - Diagnostic Microbiology IDWeek San Diego, California	10/2012
Case: Prosthetic joint infection ISAAR 2013 Kuala Lumpur, Malaysia	03/2013
Case: VRE sepsis ISAAR 2013 Kuala Lumpur, Malaysia	03/2013
Transformative Proteomics in the Clinical Microbiology Laboratory: MALDI-TOF Mass Spectrometry ISAAR 2013 Kuala Lumpur, Malaysia	03/2013
Matrix Assisted laser Desorption Ionization-Time of Flight Mass Spectrometry in Clinical Microbiology Gadsden-Holbrook Symposium in Clinical Pathology Kiawah Island, South Carolina	04/2013
Introduction to Matrix Assisted Laser Desorption Ionization Time-of Flight Mass Spectrometry in Clinical Microbiology (Workshop) American Society for Microbiology 113th General Meeting Denver, Colorado	05/2013
The Use of MALDI TOF Technologies for the Identificatio of Gram Positive Rods American Society for Microbiology 113th General Meeting Denver, Colorado	05/2013
Emerging Technologies and the Impact on Healthcare Outcome - Chair's Opening Remarks Next Generation Dx Summit Washington, District of Columbia	08/2013
Use of Matrix-Assisted Laser Desorption Ionization Time of Flight Mass Spectrometry in Clinical Microbiology Next Generation Dx Summit Washington, District of Columbia	08/2013
Clinical and Laboratory Characteristics of Small Colony Variants of Coagulase Negative Staphylococci (CoNS) Associated with Cardiovascular Implantable Electronic Device (CIED) Infections ICAAC 2013/53rd ICAAC Denver, Colorado	09/2013
Pertussis Outbreak, Southeastern Minnesota ICAAC 2013/53rd ICAAC Denver, Colorado	09/2013
Two Years of Surveillance for Susceptibility and Epidemiology of Clostridium difficile Associated Diarrheal Isolates	09/2013

ICAAC 2013/53rd ICAAC Denver, Colorado	
Update on MALDI-TOF MS ICAAC 2013/53rd ICAAC Denver, Colorado	09/2013
What is New on Sepsis? ICAAC 2013/53rd ICAAC Denver, Colorado	09/2013
Lab Diagnostics ID Week San Francisco, California	10/2013
Technology Revolution in Clinical Microbiology - MALDI TOF Mass Spectrometry National Microbiology Laboratory Winnipeg, Manitoba, Canada	02/21/2014
Choice Guided by Rapid Tests - Antimicrobial Strategies 34th International Symposium on Intensive Care and Emergency Medicine Brussels, Belgium	03/18/2014 - 03/21/2014
Emerging Trends and Techniques In Molecular Diagnostics: The case for direct testing 34th International Symposium on Intensive Care and Emergency Medicine Brussels, Belgium	03/18/2014 - 03/21/2014
New Diagnostic Tests in Clinical Microbiology 34th International Symposium on Intensive Care and Emergency Medicine Brussels, Belgium	03/18/2014 - 03/21/2014
The Role of Microbiology Diagnostics in Patient Safety Patient Safety Forum Riyadh, Saudi Arabia	04/2014
Making sense of our relationships with mucosal commensals and pathogens European Congress of Clinical Microbiology and Infectious Diseases Barcelona, Spain	05/2014
MALDI-TOF: Challenges and solutions in identification of bacteria from isolated colonies European Congress of Clinical Microbiology and Infectious Diseases Barcelona, Spain	05/2014
Matrix Assisted Laser Desorption Ionization Time-of-Flight Mass Spectrometry in Clinical Microbiology ASM 2014 Boston, Massachusetts	05/2014
My Story Initiative for Maximizing Student Development Rochester, Minnesota	07/2014
Prosthetic Joint Infection Update Montana Biofilm Science and Technology Meeting Bozeman, Montana	07/2014
Chairperson's Remarks Next Generation Dx Summit - Molecular Diagnostics for Infectious Disease Washington, District of Columbia	08/2014
Matrix-Assisted Laser Desorption Ionization Time of Flight Mass Spectrometry in Patient Care Next Generation Dx Summit- Molecular Diagnostics for Infectious Disease Washington, District of Columbia	08/2014
Microbiology: What You Need to Know Infectious Disease Review Course	08/2014

Washington, District of Columbia	
Best Practices in The Diagnosis of Blood Stream Infections International Symposium on Clinical Microbiology Joao Pessoa, Brazil	10/2014
The Future and Trends in Clinical Microbiology International Symposium on Clinical Microbiology Joao Pessoa, Brazil	10/2014
New Diagnostic Tests Emerging Infections in Clinical Practice and Public Health Minneapolis, Minnesota	11/2014
Prosthetic Joint Infection Stanford University Pathology Grand Rounds Stanford, California	12/2014
Disclosing Agents for the Intraoperative Identification of Occult Biofilms on Orthopedic Implants 2015 AAOS Annual Meeting Las Vegas, Nevada	03/2015
Device-related infection 25th ECCMID Copenhagen, Denmark	04/2015
Prosthetic joint infection 10th International Symposium on Antimicrobial Agents and Resistance Incheon, Korea	05/2015
Proteomics in clinical laboratory, MALDI-TOF mass spectrometry 10th International Symposium on Antimicrobial Agents and Resistance Incheon, Korea	05/2015
Rapid Diagnostics in Clinical Practice Mayo Clinic Infectious Diseases Subspecialties Update Amelia Island, Florida	05/2015
Board Review Session Infectious Disease Board Review Course Tysons Corner, Virginia	08/2015
Microbiology: What you Need to Know Infectious Disease Board Review Course Tysons Corner, Virginia	08/2015
Bones and Bolts - Osteomyelitis and Orthopedic Device Infectious Diseases - Diagnosis and Role of the Clinical Microbiology Laboratory ID Week 2015 San Diego, California	10/2015
MALDI-TOF Mass Spectrometry for Bacterial Identification 2015 Northeast Laboratory Conference Portland, Maine	10/2015
Molecular Detection of Sepsis-Causing Pathogens Directly from Whole blood ID Week 2015 San Diego, California	10/2015
New Delhi Metallo-B-Lactamase Producing Escherichia coli Bloodstream Infection in a 16-Year-Old Girl Undergoing Chemotherapy for Leukemia 2015 American Academy of Pediatrics National Conference & Exhibition Washington DC	10/2015
The Need for Rapid Diagnostics to Address Antimicrobial Resistance US Department of Health & Human Services, NIH, Biomedical Advanced Research and Development Authority - Public Consultation on Antimicrobial Resistance Rapid, Point-of-Care Diagnostic Test Challenge	10/2015

San Diego, California	
New diagnostic approaches for medical devices - associated biofilm-mediated infections EPAASM 45th Annual Symposium: Clinical and Diagnostic Approaches to Pathogens that are Difficult to Cultivate Philadelphia, Pennsylvania	11/2015
Current status of syndromic diagnosis by multiplex PCR XXXII Chilean Congress of Infectious Diseases Vina del mar, Chile	12/2015
Device-related Infection XXXII Chilean Congress of Infectious Diseases Vina del mar, Chile	12/2015
Use of PCR for quick resistant gene detection XXXII Chilean Congress of Infectious Diseases Vina del mar, Chile	12/2015
ECCMID 2016 Abstract Reviewer ECCMID 2016 Istanbul, Turkey	04/2016
Diagnostic Challenges in Prosthetic Infection Mini-Symposium - Controversies in Prosthetic Joint Infections San Diego, California	10/2017
MALD-TOF Mass Spectrometry ESCMID Course "Diagnostic Microbiology: MALDI-TOF, Bacterial Genomics, Metagenomics, Automatin, and Molecular Microbiology Lausanne, Switzerland	09/2018
Management of Chronic Bone and Joint Infections ECCMID Amsterdam, Holland, Netherlands	04/2019
Phage therapy's coming of age: Progress Towards the Application of Bacteriophages in the Treatment of Infectious Diseases ASM-ESCMID joint symposium ECCMID Amsterdam, Holland, Netherlands	04/2019
Innovative Diagnostics Moderator Infectious Disease Society of America Washington, District of Columbia	10/2019
Oral	
From Bedside to Bench American Society for Microbiology - 115th General Meeting New Orleans, Louisiana	06/2015
New Approaches to the diagnosis of Prosthetic Joint Infection Pathology Grand Rounds-University of Utah Utah	03/2017
Assessing Phagolysosomal Escape of <i>Staphylococcus Epidermidis</i> RP62A in Intracellularly Infected Human Fibroblasts ID Week	10/2017
Direct Detection and Identification of Prosthetic Joint Pathogens in Synovial Fluid (SF) by Metagenomic Shotgun Sequencing ID Week	10/2017
Epidemiologic Trends in <i>Clostridium Difficile</i> isolate Ribotypes in United States from 2010-2014 ID Week	10/2017

Colistin Susceptibility Testing of Enterobacteriaceae by Agar Dilution (AD), Broth Microdilution (BMD) and Polymyxin NP ID Week	10/2017
In vitro Activity of Esomeprazole Against Ureaplasma ID Week	10/2017
Controversies in Prosthetic Joint Infections ID Week	10/2017
Interesting and Unusual Case Presentations of Public Health Importance Panel	11/2017 - 11/2018
Emerging Infections in Clinical Practice & Public Health: Emerging and Re-emerging Infectious Diseases	
The Role of Antibiotic Stewardship in Clinical Microbiology ASM Corporate Council Meeting Washington, District of Columbia	12/2017 - 12/2018
Assessment of New Rapid Diagnostic Platforms for the Diagnosis of Antimicrobial Resistance International Symposium on Antimicrobial Resistance-Universidad El Bosque Bogotá, Colombia	03/2018
The Role of the Microbiology Laboratory in the 21st Century International Symposium on Antimicrobial Resistance-Universidad El Bosque Bogotá, Colombia	03/2018
Prosthetic Joint Infections - From Biofilms to Intracellular Persistence to Metagenomics Harvard Infectious Diseases Consortium - Department of Microbiology and Immunobiology at Harvard Medical School Boston, Massachusetts	04/2018
Diving into the Deep - New Approaches to Viral Detection ECCMID-Madrid 2018 Madrid, Spain	04/2018
Rapid Antimicrobial Susceptibility Testing - State of the Art ECCMID-Madrid 2018 Madrid, Spain	04/2018
The Infected Prosthetic Joint ECCMID-Madrid 2018 Madrid, Spain	04/2018
A New E-POC-h for the Lab: Changing Paradigms for Microbiology CACMID Annual Conference 2018 Vancouver, Canada	05/2018
Diagnosis of Prosthetic Joint Infection I.D. Lecture Transplant Infectious Diseases Visiting Professorship-Northwestern University Feinberg School of Medicine Chicago, Illinois	05/2018
The Diagnostics Revolution in Clinical Microbiology Transplant Infectious Diseases Visiting Professorship-Northwestern University Feinberg School of Medicine Chicago, Illinois	05/2018
The Microbiology Laboratory in the Age of Rapid Diagnostics American Thoracic Society International Conference San Diego, California	05/2018
Fireside Chat with Robin Patel, ASM Microbe Co-Chair and ASM Board of Directors 2019 ASM Microbe Atlanta, Georgia	06/2018

Diagnosis of Periprosthetic Infections Symposium on Infections in the Immunocompromised Host Athens, Greece	06/2018
MALDI-TOF Symposium on Infections in the Immunocompromised Host Athens, Greece	06/2018
Biomarker- and culture-based PJI Diagnosis 3rd China Periprosthetic Joint Infection Conference/15th Fujian Orthopaedics Association Conference Fuzhou, China	08/2018
Molecular Diagnostics for PJI 3rd China Periprosthetic Joint Infection Conference/15th Fujian Orthopaedics Association Conference Fuzhou, China	08/2018
Multidisciplinary Case Discussion 3rd China Periprosthetic Joint Infection Conference/15th Fujian Orthopaedics Association Conference Fuzhou, China	08/2018
Syndromicpanel-based Testing in Clinical Microbiology Brazilian Committee on Antimicrobial Susceptibility Testing Sao Paulo, Brazil	08/2018
MDR Bacteria in Transplantation: New Drugs, Resistance Mechanisms and Tests Transplant Infectious Diseases Symposium-Peter Gilgan Centre for Research and Learning Toronto, Ontario, Canada	08/2018
MDR Bacteria in Transplantation: New Drugs, Resistance Mechanisms, and Tests Transplant Infectious Diseases Symposium	08/2018
Microbiology: What You Need to Know for the Exam 2018 IDBR (Infectious Disease Board of Review) Tyson's Corner, Virginia	08/2018
Board Review Session II 2018 IDBR (Infectious Disease Board Review) Tyson's Corner, Virginia	08/2018
"Prosthetic Joint Infection - from BioFilms to Metagenomics?" 2018 M. Glenn Koenig Department of Medicine Grand Rounds Lecture Nashville, Tennessee	10/2018
The Clinical Microbiology Laboratory of the 21st Century 2nd Annual Texas Medical Center Antimicrobial Resistance Research and Stewardship Conference Houston, Texas	01/2019
Metagenomics & Microbiome Mayo Clinic Infectious Diseases Practice Updates Kamuela, Hawaii	02/2019
Whole Genome Sequencing and Shotgun Metagenomics Mayo Clinic Infectious Diseases Practice Updates Kamuela, Hawaii	02/2019
How to use Point-of-Care tests in microbiology: European versus USA Experiences ECCMID Amsterdam, Holland, Netherlands	04/2019
Point-of-Care Diagnostic Testing, The Next Step for ASPs? 22nd Annual MAD-ID Meeting Orlando, Florida	05/2019
New Tests and Technologies for the Microbiology Steward	05/2019

22nd Annual MAD-ID Meeting Orlando, Florida	
Diagnosis of PJI Xiangya Hospital Changsha, Hunan, China	05/2019
Innovation in Clinical Microbial Diagnosis Technology China-USA Expert Forum: Clinical Microbiology and Infectious Diseases China, Changsha, Hunan	05/2019
Microbiology: What You Need to Know for the Exam I IDBR Tysons Corner, Virginia	08/2019
Microbiology: What You Need to Know for the Exam II IDBR Tysons Corner, Virginia	08/2019
Diagnostic Clinical Cases Panel ACCME IDWeek	10/03/2019
Prosthetic Joint Infection: Bedside to Bench, Bath Sonication and Beyond Honorific Maxwell Finland Named Lecture Infectious Disease Society of America Washington, District of Columbia	10/2019
Medical biofilms: Insights from the First Two Decades of the Millennium Biofilm Technologies: Pathways to Product Development	02/2020
Poster	
Two Years of Surveillance for the Susceptibility and Epidemiology of Clostridium difficile Associated Diarrheal Isolates ICAAC 2013/53rd ICAAC Denver, Colorado	09/2013
Comparative study of Propionibacterium Acnes Growth in BACTEC Bottles versus Thioglycollate Broth ASM 2014 Boston, Massachusetts	05/2014
Disappearance of Rifampin Resistant Methicillin-Resistant Staphylococcus aureus (MRSA): Implications for Treatment Strategies in Foreign Body Osteomyelitis ASM 2014 Boston, Massachusetts	05/2014
Evaluation of Polymerase Chain Reaction (PCR) Panel on Synovial Fluid for Microbiologic Diagnosis of Prosthetic Joint Infection (PJI) ASM 2014 Boston, Massachusetts	05/2014
Human Desulfovibrio Infections: Clinical Spectrum and Antimicrobial Susceptibility ASM 2014 Boston, Massachusetts	05/2014
In Vitro Treatment of Corynebacterium Biofilms Using Direct Electrical Current ASM 2014 Boston, Massachusetts	05/2014
Lack of Clinical Value in Reporting of Antimicrobial Susceptibilities on Single Blood Cultures Positive for Coagulase-Negative Staphylococci (CNS) or Micrococcus Species ASM 2014 Boston, Massachusetts	05/2014
Multiplex Detection of Gastrointestinal Pathogens: An Evaluation of the FilmArray GI and Luminex xTag GPP Panels	05/2014

ASM 2014 Boston, Massachusetts	
Prevalence of the Hyaluronidase Gene and Expression of Hyaluronidase in Clinical Isolates of <i>Propionibacterium acnes</i>	05/2014
ASM 2014 Boston, Massachusetts	
Reflexive Culture: A Strategy for Laboratories Adopting Molecular Testing for Enteric Pathogens	05/2014
ASM 2014 Boston, Massachusetts	
Seasonal Changes in <i>Bordetella pertussis</i> PCR Positivity - Implications for Assay Quality Control and Potential as a Clinically Useful Epidemiology Tool	05/2014
ASM 2014 Boston, Massachusetts	
Superantigens in <i>Staphylococcus aureus</i> Isolated from Prosthetic Joint Infection	05/2014
ASM 2014 Boston, Massachusetts	
Tissue Inoculation Into Blood Culture Bottles for the Diagnosis of Prosthetic Joint Infection: A Prospective Cohort Study	05/2014
ASM 2014 Boston, Massachusetts	
Ceftriaxone Susceptibility of Oxacillin Susceptible <i>Staphylococcus aureus</i> (OSSA) Isolates from Patients with Prosthetic Joint Infection (PJI)	09/2014
ICAAC 2014 Washington, District of Columbia	
Evaluation of Checkpoints Check-MDR Ct103 PCR-Microarray Kit for Detection and Classification of ESBL, AMPC and Carbapenemase Genes	09/2014
ICAAC 2014 Washington, District of Columbia	
Evaluation of FilmArray Blood Culture (BCID) Panel on Biofilms Dislodged from Explanted Arthroplasties for Prosthetic Joint Infection Diagnosis	09/2014
ICAAC 2014 Washington, District of Columbia	
Identification of <i>Streptococcus bovis</i> Species Group (SBSG) Isolates - Bruker MALDI Biotyper (MALDI-ToF MS) versus Phenotypic and Gene Sequencing Methods	09/2014
ICAAC 2014 Washington, District of Columbia	
In Vitro Activity of Surotomycin Tested against 885 Isolates of <i>Clostridium difficile</i> Collected as Part of a National Surveillance Program 2011-2012	09/2014
ICAAC 2014 Washington, District of Columbia	
In Vivo Prophylactic Effect of Direct Electric Current on <i>Staphylococcus ssp</i> , <i>E. coli</i> and <i>Pseudomonas aeruginosa</i> Biofilm Formation	09/2014
ICAAC 2014 Washington, District of Columbia	
Metronidazole- and Carbapenem-Resistant <i>Bacteroides thetaiotaomicron</i> , Rochester, MN 2014	09/2014
ICAAC 2014 Washington, District of Columbia	
Prevention of the Electricidal Effect with Antioxidants	09/2014
ICAAC 2014 Washington, District of Columbia	
<i>Propionibacterium acnes</i> in Combined Culture with <i>Staphylococcus aureus</i> and <i>Staphylococcus epidermidis</i> Produces Biofilms of Increased Density and Longevity,	09/2014

Compared to Organism Alone, Under Anaerobic Condition In Vivo ICAAC 2014 Washington, District of Columbia	
Randomized Trial of Blood Culture Pathogen Identification Using the FilmArray Blood Culture ID Panel (BCID) versus Standard Culture Techniques: Impact on Microbial Use and Outcomes ICAAC 2014 Washington, District of Columbia	09/2014
In vitro Activity of Ceftolozane/tazobactam Against Clinical Isolates of Pseudomonas aeruginosa in the Planktonic and Biofilm States 7th American Society for Microbiology Conference on Biofilms Chicago, Illinois	10/2015
Informing Antibiotic Treatment Decisions: Evaluating Rapid Molecular Diagnostics (RMDs) to Identify Susceptibility and Resistance to Carbapenems against Acinetobacter spp. PRIMERS-III ID Week 2015 San Diego, California	10/2015
Molecular and Nucleic Acid Testing Diagnostics ID Week 2015 San Diego, California	10/2015
Molecular Detection of Sepsis-Causing Pathogens Directly from Whole Blood Specimens ID Week 2015 San Diego, California	10/2015
Investigation of Potential Misdiagnosis of Corynebacteria as Mycobacteria Based on Acid Fast Stains in Surgical Pathology Specimens 2016 United States & Canadian Academy of Pathology Annual Meeting Seattle, Washington	03/2016
Regional	
What's new in the clinical bacteriology laboratory? Department of Pediatric and Adolescent Medicine Grand Rounds	02/2016
Whole Genome Sequencing Emerging Infections in Clinical Practice and Public Health	11/2016
Invited	
Vancomycin-resistant enterococci Minnesota Microbiology Association Minneapolis, Minnesota	1996
Antimicrobial resistance in the ICU Critical Care: A Team Approach Rochester, Minnesota	1998
Emerging "new" viruses Nobel Conference Course - Virus: The Human Connection, Rochester Community and Technical College Rochester, Minnesota	1998
Infections in the immunocompromised host Mercy Hospital Grand Rounds Mason City, Iowa	1998
VRE and MRSA as related to transplant and dialysis patients Fall Membership Recruitment Southeastern ANNA Meeting Rochester, Minnesota	1998
Common infectious diseases in nursing homes: A panel discussion Sixteenth Annual Minnesota Geriatric Care Conference Rochester, Minnesota	1999

Vancomycin-resistant enterococci Rochester Chapter of the American Association of Critical Care Nurses 22nd Annual Education Symposium-The Changing Face of Critical Care Rochester, Minnesota	1999
VRE & MRSA 1999 Southeast Minnesota ANNA Spring Conference - What is our Future? Rochester, Minnesota	1999
VRE Laboratory Society Rochester, Minnesota	2001
VRE: What lies beneath in the GI tract Focus on GI innovations Minnesota Regional Society of Gastroenterology Nurses and Associates Plymouth, Minnesota	2001
Research Vignette Medical Grand Rounds Rochester, Minnesota	2002
Antimicrobial resistance update Outreach Lecture Rochester, Minnesota	2005
What's New in the Clinical Microbiology Laboratory? 11th Annual CME Conference Emerging Infections in Clinical Practice and Emerging Health Threats Minneapolis, Minnesota	2005
Antimicrobial Resistance Update Olmsted Medical Group Grand Rounds Rochester, Minnesota	2006
Get Outta Here! "Caring for Nephrology Patients with VRE and MRSA" American Nephrology Nurses' Association's Spring Conference, "Nephrology Nursing: A League of Our Own"	05/2007
New Insights into <i>Staphylococcus lugdunensis</i> Midwest Staphylococcus Symposium St. Paul, Minnesota	05/2008
Biofilms and Orthopedic Implant Infections Coordinator-Comparative Biosciences Seminar, University of Minnesota Minneapolis, Minnesota	11/2008
What's New in Diagnostics for Orthopedic Implant Infection Musculoskeletal Research Conference Rochester, Minnesota	01/2009
New Bacterial Molecular Diagnostics North Central Chapter - IDSA	04/2009
Molecular Diagnostics in Clinical Microbiology (Bacteriology) 2009 MN Clinical Lab Collaborative Conference Rochester, Minnesota	05/2009
Diagnosis of Prosthetic Joint Infection Star of the North Fellowship Forum Brainerd, Minnesota	06/2009
Prosthetic Joint Infection Diagnosis University Medical Center at Princeton Princeton, New Jersey	10/2009
Biofilms and Joint Replacements - Pathogenesis, Epidemiology and Diagnosis of Prosthetic Joint Infection The Department of Laboratory Medicine and Pathology Grand Rounds	05/2010

Rochester, Minnesota	
Pathogenesis, Epidemiology and Diagnosis of Prosthetic Joint Infection MIMA Winter Meeting Bloomington, Minnesota	01/2011
Visiting Professor for ID Grand Rounds: Microbial Identification in the Clinical Microbiology Laboratory Using Matrix-Assisted Laser Desorption Ionization Time of Flight (MALDI TOF) Mass Spectrometry Duke University	02/2011
What Else Can I Do With an MD? 2011 SNMA Region II Conference Schedule	10/2011
Bacterial and Yeast Identification in the Clinical Microbiology Laboratory by Matrix- Assisted Laser Desorption Ionization Time of Flight Mass Spectrometry DLMP Research & Development Forum Presentation	01/2012
Bacterial Identification in the Clinical Microbiology Laboratory by Matrix-Assisted Laser Desorption Ionization Time of Flight Mass Spectrometry 9th Annual Midwest Infectious Diseases Fellows Forum Minneapolis, Minnesota	04/2012
Blood Culture Update Phlebotomy 2012: Creating Excellence in Patient Care	10/2012
Antimicrobial Resistance ASCLS-SD & CLMA Siouxland Fall Collaborative Conference Sioux Falls, South Dakota	11/2014
Matrix-Assisted Laser Desorption Ionization Time-of-Flight Mass Spectrometry in Clinical Microbiology Memorial Sloan-Kettering Cancer Center, Department of Laboratory Medicine Grand Rounds New York, New York	01/2015
New Approaches to the Diagnosis of Prosthetic Joint Infection Robert J. Tomsich Pathology and Laboratory Medicine Institute at Cleveland Clinic Grand Rounds Cleveland, Ohio	05/2017
Oral	
Prokaryotic Genetics Molecular Genetics Core Course Lecture Schedule 2018 Rochester, Minnesota	01/2018
Prokaryotic Genetics Molecular Genetics Core Course Lecture Schedule 2018 Rochester, Minnesota	02/2018
Case Presentations 45th Remington Winter Course in Infectious Diseases Avon, Colorado	02/2019
Current Advances in Bacterial Diagnostics 45th Remington Winter Course in Infectious Diseases Avon, Colorado	02/2019
Next Generation Microbial Diagnostics 45th Remington Winter Course in Infectious Diseases Avon, Colorado	02/2019
Prokaryotic Genetics Molecular Genetics Core Course Lecture Rochester, Minnesota	02/2019
Prosthetic Joint Infection Plenary Lecture 54th Annual Region Meeting for American Society for Microbiology	11/2019

Randolph, Massachusetts

Unclassified

Bacterial Presence and Histopathology in an Experimental Animal Model of Chronic Propionibacterium acnes Foreign Body Infection histopathology in a Prolonged Infection Model ASM Microbe 2016	06/2016
Monitoring Viral Infections in Transplant Recipients Infectious Disease Board Review Course	08/2016
Current and Future WGS Platforms for the Diagnostic Laboratory Australian Society for Antimicrobials Melbourne, Australia	02/2016
Infective Endocarditis / Laboratory Diagnosis Australian Society for Antimicrobials Melbourne, Australia	02/2016
Point of Care Solutions for Clinical Microbiology Applications: Knowing the Answer Where Decisions are Made ECCMID 2016 Amsterdam, Denmark	04/2016
Staphylococci Small Colony Variants Mayo Clinical Infectious Diseases Subspecialties Update	05/2016
A Novel Foreign Body Osteomyelitis Model That Allows for Quantitative Cultures of the Infection Site Over Multiple Time-points ASM Microbe 2016	06/2016
A US Based National Sentinel Surveillance Study for the Susceptibility and Epidemiology of Clostridium difficile Associated Diarrheal Isolates: 2013-14 ASM Microbe 2016	06/2016
Antimicrobial Susceptibility of Clinical Ureaplasma Isolates ASM Microbe 2016 Tasmania, Australia	06/2016
Antimicrobial Susceptibility Profile of Granulicatella and Abiotrophia Species ASM Microbe 2016	06/2016
Antimicrobial-loaded Bone Cement Does Not Negatively Influence Sonicate Fluid Culture Positivity for the Diagnosis of Prosthetic Joint Infection ASM Microbe 2016	06/2016
Clinical Isolates of Helicobacter pylori Demonstrate a High Rate of Combined Resistance to Clarithromycin and Elevated Metronidazole Mics ASM Microbe 2016	06/2016
Clinical Significance of Identifying Cornebacterium Species and Other Corneform Gram-positive Bacilli in Blood Bb Maldi-Tof Mass Spectrometry - A Retrospective Chart Review ASM Microbe 2016	06/2016
Reproducibility of the Accelerate Id/Ast Blood Culture Assay at Multiple Clinical Sites ASM Microbe 2016	06/2016
Tedizolid or Tedizolid Combination Therapy with Rifampin is Effective in a Rat Model of Methicillin-Resistant Staphylococcus aureus (Mrsa) Chronic Foreign Body Osteomyelitis ASM Microbe 2016	06/2016
Antibiofilm Activity of Low-amperage Continuous and Intermittent Direct Electrical Current International Association for Food Protection	07/2016
Microbiology: Bacteria, Viruses and Fungi Infectious Disease Board Review Course	08/2016

Exploring the infections associated with biofilms on medical implants: from theory to practice 10th Sao Paulo Infections Diseases Congress São Paulo, Brazil	08/2016
Novel approaches to the diagnosis, prevention and treatment of medical device-associated infections 10th Sao Paulo Infections Diseases Congress São Paulo, Brazil	08/2016
Biofilm-Associated antimicrobial resistance World Anti-Microbial Resistance Congress	09/2016
How to prepare a manuscript: Drafting a manuscript before the study is done - Is it possible? Why do this? Workshop on Scientific Publishing for Clinical Microbiologists in China Beijing, China	09/2016
Diagnostico microbiologico de infeccao associada a implantes ortopedicos 50 Congresso Brasileiro de Patologia Clinica Rio de Janeiro, Brazil	09/2016
Novas abordagens no diagnostic, prevencao e tratamento de infeccoos associada a implantes ortopedicos 50 Congresso Brasileiro de Patologia Clinica Rio de Janeiro, Brazil	09/2016
Ulma visao geral dos metodos de diagnostic rapido em microbiologia 50 Congresso Brasileiro de Patologia Clinica Rio de Janeiro, Brazil	09/2016
Metagenomic Analysis of Arthroplasty Failure Individualizing Medicine 2016 Conference	10/2016
Diagnostic Approach and Training of Whipple's Disease ACG 2016	10/2016
Leveraging Diagnostics to Fight Public Health Threats AdvaMed 2016 Minneapolis, MN, Minnesota	10/2016
New Technologies for the Clinical Bacteriology Laboratory Gene and Linda Voiland School of Chemical Engineering and Bioengineering 2016 Fall Seminar Series; Washington State University	11/2016
Biofilm Associated Implant Infections Australian Society for Antimicrobials Melbourne, Australia	02/2017
Board Review Session 1 2017 Infectious Disease Board Review Course Mclean, Virginia	08/2017
Microbiology: What You Need to Know for The Exam 2017 Infectious Disease Board Review Course Mclean, Virginia	08/2017
AST Devices, Antibacterial Test Trial vs Clinical Practice 2017 ASM/ESCMID Conference on Drug Development to Meet the Challenge of Antimicrobial Resistance Boston, Massachusetts	09/2017

Clinical Practice, Interests, and Accomplishments

Transplant Infectious Diseases Core Group - 1996-2006; Transplant Infectious Diseases Group Leader 1996-2000.

Research Interests and Accomplishments

Antimicrobial resistance, Medical biofilms, Experimental animal models of infection, Clinical microbiology diagnostic testing

Research Grants Awarded

Active Grants

Federal

Other Significant Contributor	The Mayo Clinic IMSD: Developing scientists through disease-relevant research. Funded by National Institute of General Medical Sciences. (R25 GM 55252)	03/2018 - 02/2023
Other Significant Contributor	Post-baccalaureate Training in Biomedical Research. Funded by National Institute of General Medical Sciences. (R25 GM 75148)	05/2020 - 04/2025
Program Director / Principal Investigator	Metagenomic Analysis of Arthroplasty Failure. Funded by National Institute of Arthritis and Musculoskeletal and Skin Diseases. (R01 AR 56647)	04/2015 - 03/2023
Program Director / Principal Investigator	Novel Electrochemical Bandage for Treatment of Wound Infections. Funded by National Institute of Allergy and Infectious Diseases. (R01 AI 91594)	06/2019 - 05/2024
Program Director / Principal Investigator	Ureaplasma urealyticum- and Ureaplasma parvum-associated hyperammonemia. Funded by National Institute of Allergy and Infectious Diseases. (R21 AI 150649)	02/2020 - 01/2023

Federal sub award

Program Director / Principal Investigator	Functional genomics analysis of colonization and persistence of Enterococcus faecalis in the gastrointestinal tract. Funded by National Institute of Allergy and Infectious Diseases. (AI 122742)	02/2016 - 08/2022
Program Director / Principal Investigator	Enterococcal Sex pheromones: impact on antibiotic resistance transfer and ecology of the gastrointestinal tract. Funded by National Institute of General Medical Sciences. (GM 118079)	06/2017 - 05/2022
Program Director / Principal Investigator	Crosslinked Nanosponges for the Topical Treatment of Wound Biofilms. Funded by National Institute of Allergy and Infectious Diseases. (AI 134770)	07/2018 - 06/2022
Program Director / Principal Investigator	IND Enabling Development of CF-296, a Lysin for the Treatment of Invasive Staphylococcus Aureus (S. Aureus) Infections. Funded by U.S. Army Medical Research Acquisition Activity. (W81XWH-19-1-0139)	11/2019 - 05/2022
Program Director / Principal Investigator	Antibacterial Resistance Leadership Group (ARLG). Funded by National Institute of Allergy and Infectious Diseases. (AI 104681)	12/2019 - 11/2026
Program Director / Principal Investigator	Pseudomonas aeruginosa phages and isolates for the validation of Host Range Quick Test (HRQT). Funded by Department of Defense	01/2021 - 01/2023

Industry

Program Director / Principal Investigator	Activity of Omadacycline in Methicillin-resistant Staphylococcus aureus Osteomyelitis. Funded by Paratek Pharmaceuticals	06/2019 - 02/2020
Program Director / Principal Investigator	Amendment 2: In Vivo Activity of TNP-2092 Against Methicillin-Resistant S. Aureus Foreign Body-Associated Chronic Osteomyelitis. Funded by TenNor Therapeutics. (TNP-2092)	09/2019 - 08/2020
Program Director / Principal Investigator	Amendment 1: Rapid Diagnostic Supporting Antimicrobial Stewardship in Patients with Pneumonia - A Quality Improvement Theragnostic Stewardship Project. Funded by Biofire Diagnostics. (RASP)	09/2020 - 10/2022
Program Director / Principal Investigator	Activity of Lysins Exebacase and CF-296 using Humanized Dosages in Rat Methicillin-resistant Staphylococcus aureus Osteomyelitis. Funded by ContraFect	02/2022 - 01/2023

Completed Grants**Federal**

Principal Investigator	Human Retrovirus-5 and Arthritis. Funded by National Institutes of Health. (R03 AR 47009)	09/2000 - 08/2003
Principal Investigator	The molecular culture. Funded by National Institutes of Health. (R41 AI 62101)	07/2004 - 06/2005
Principal Investigator	Rapid Bacterial Detection System - Preliminary Evaluation. Funded by National Heart, Lung, and Blood Institute. (R41 HL 79854)	09/2004 - 09/2005
Principal Investigator	Enhancement of antimicrobics by electrical current. Funded by National Institute of Allergy and Infectious Diseases. (R21 AI 61407)	04/2006 - 09/2008
Program Director / Principal Investigator	Molecular Detection of Biofilms on Hip and Knee Implants (1st Revision). Funded by National Institute of Arthritis and Musculoskeletal and Skin Diseases. (R01 AR 56647)	07/2009 - 03/2015
Program Director / Principal Investigator	The Electricidal Effect, a Novel Anti-Biofilm Strategy. Funded by National Institute of Allergy and Infectious Diseases. (R01 AI 91594)	05/2011 - 04/2018
Program Director / Principal Investigator	Development of a Clinical Relevant Optical Analyte Library. Funded by Department of Defense	04/2015 - 02/2016
Program Director / Principal Investigator	Disappearance of rifampin resistance in MRSA foreign body osteomyelitis. Funded by National Institute of Allergy and Infectious Diseases. (R21 AI 125870)	06/2016 - 05/2019
Co-Investigator	Musculoskeletal Research Training Program. Funded by National Institute of Arthritis and Musculoskeletal and Skin Diseases. (T32 AR 56950)	05/2009 - 04/2014
Co-Investigator	HLA class II transgenic mouse models for S. aureus infections and superantigens . Funded by National Institute of Allergy and Infectious Diseases. (R01 AI 68741)	05/2012 - 07/2017
Co-Investigator	Novel Combination Therapy for Staphylococcus aureus Pneumonia. Funded by National Institute of Allergy and Infectious	07/2012 - 12/2014

Diseases. (R21 AI 101172)

Federal sub award

Program Director / Principal Investigator	Detection of Biofilm Bacteria using GloBac. Funded by National Institute of Arthritis and Musculoskeletal and Skin Diseases. (AR 52944)	10/2008 - 08/2010
Program Director / Principal Investigator	Biofilms and Enterococcus faecalis biology. Funded by National Institute of Allergy and Infectious Diseases. (AI 58134)	07/2010 - 11/2015
Program Director / Principal Investigator	Antibacterial Resistance Leadership Group (ARLG). Funded by National Institute of Allergy and Infectious Diseases. (AI 104681)	06/2013 - 11/2019
Program Director / Principal Investigator	Novel Biotechnology for Rapid, Point-of-Care Diagnosis of Bacterial Infection. Funded by Minnesota Partnership for Biotechnology and Medical Genomics	06/2015 - 05/2016
Program Director / Principal Investigator	Antibiotics targeting siderophore receptors. Funded by National Institute of Allergy and Infectious Diseases. (AI 121602)	02/2016 - 01/2018
Program Director / Principal Investigator	Engineered Bacteriophage as a Platform to Deliver Nucleic Acid Based Therapeutics to Bacteria to Disperse Biofilms in Implant-Associated Infections such as Prosthetic Joint Infections. Funded by National Institute of Allergy and Infectious Diseases. (AI 126978)	07/2016 - 06/2017
Program Director / Principal Investigator	Antibacterial Clay Effects on Pathogenic Biofilms. Funded by National Science Foundation	04/2017 - 03/2020
Program Director / Principal Investigator	Rapid identification and Phenotypic susceptibility testing for Gram negative bacteremia . Funded by National Institute of Allergy and Infectious Diseases. (AI 104681)	09/2017 - 11/2019
Program Director / Principal Investigator	Activity of Lysin CF-301 in Methicillin-Resistant Staphylococcus aureus Osteomyelitis. Funded by U.S. Army Medical Research Acquisition Activity. (W81XWH-16-1-0245)	01/2018 - 09/2019
Co-Investigator	PET agents for in vivo imaging of bacterial infections. Funded by Minnesota Partnership for Biotechnology and Medical Genomics. (MNP #17.38)	01/2018 - 01/2021

Foundation

Principal Investigator	HIV/AIDS Training Program at Memorial Sloan-Kettering Cancer Center. Funded by Infectious Diseases Society of America	03/1995
Principal Investigator	Polymerase Chain Reaction Detection of Bacterial Infection in Total Knee Arthroplasty. Funded by Arthritis Foundation North Central Chapter	01/1998 - 12/1998
Principal Investigator	A Pilot Project to Study the Association of Human Retrovirus-5 and Rheumatoid Arthritis. Funded by Arthritis Foundation North Central Chapter	01/1999 - 12/1999
Principal Investigator	Percutaneous Catheter Sealants and Infection Prevention. Funded by 3M/Mayo Strategic Alliance. (3M #34B)	11/1999 - 10/2001

Principal Investigator	Human Retrovirus-5 and Arthritis. Funded by Arthritis Foundation North Central Chapter	04/2000 - 03/2001
Principal Investigator	Human Retrovirus-5 and Arthritis. Funded by Orthopaedic Research and Education Foundation	07/2000 - 06/2001
Principal Investigator	Bio-Resistant Surfaces and Bacteria. Funded by 3M/Mayo Strategic Alliance	01/2002 - 12/2002
Principal Investigator	Evaluation of FAME formulations in a staphylococcus aureus nasal decolonization model. Funded by 3M/Mayo Strategic Alliance	05/2002 - 04/2003
Principal Investigator	Gatifloxacin or Garenoxacin Treatment of Viridans Streptococcal Experimental Endocarditis.. Funded by Orthopaedic Research and Education Foundation	01/2003 - 12/2004
Principal Investigator	Novel Approaches to Prosthetic Joint Infection Diagnosis. Funded by Orthopaedic Research and Education Foundation. (OREF #13)	07/2003 - 06/2006
Principal Investigator	Improved Diagnostics for Infected Shoulder Arthroplasties. Funded by American Shoulder and Elbow Surgeons	01/2005 - 12/2005
Principal Investigator	Biofilms and spinal instrumentation. Funded by Scoliosis Research Society	07/2005 - 06/2007
Program Director / Principal Investigator	Zygomycosis in organ transplant recipients: a case-controlled study to assess risk-factors and outcome. Funded by Veterans Research Foundation of Pittsburgh	07/2006 - 06/2009
Principal Investigator	Propionibacterium Infection of Shoulder Arthroplasties. Funded by Arthritis Foundation North Central Chapter	01/2007 - 12/2008
Co-Investigator	HMR 3647 Treatment of Haemophilus Influenzae Experimental Pneumonia. Funded by Roussel UCLAF. (Steckelberg 1)	08/1997 - 10/2000

Industry

Principal Investigator	Nonsteroidal Anti-inflammatory Agents and Group A Streptococcal Necrotizing Fasciitis. Funded by McNeil Consumer Products Co.	04/1996
Principal Investigator	Linezolid Treatment of Staphylococcus Aureus Experimental Osteomyelitis. Funded by Pharmacia & Upjohn	01/1999 - 06/1999
Principal Investigator	Performance Assessment of 3M Experimental Catheter Sealants. Funded by 3M	07/1999 - 06/2000
Principal Investigator	Phase II Clinical Trial to Evaluate the Safety and Effectiveness onf an Enterocolonic Formulation of Bovine Anti-Clostridium Difficile Toxins A and B Milk Immunoglobulin (DiffGam) on Reducing the Severity of C. Defficile Associated Diarrhea. Funded by ImmuCell. (ImmuCell 1)	07/1999 - 06/2000
Principal Investigator	Multicenter, Randomized Study to Compare the Safety and Efficacy of Oral Levofloxacin Vs. Parenteral Ceftriasxone and Amikacin With the Potential of Conversion to Oral Ciprofloxacin and Amoxicillin/Clavulanate in the Treatment of Subjects w. Funded by Ortho-McNeil Pharmaceutical. (MCNEIL 16)	09/1999 - 08/2000
Principal Investigator	Timing of Relapse of Clostridium difficile Diarrhea. Funded by ImmuCell. (IMMUCELL 2)	09/1999 - 09/2000
Principal Investigator	Treatment of Staphylococcus aureus Experimental Osteomyelitis Using Amikacin/Vancomycin Incorporated into Matrix III. Funded by Buford Biomedical. (BUFORD 1)	01/2000 - 12/2001
Principal Investigator	Treatment of Staphylococcus Aureus Experimental Osteomyelitis using Amikacin/Vancomcyin Incorporated into Buford Biomedical's Matrix III. Funded by Buford Biomedical	02/2000 - 09/2000
Principal	Treatment of Penicillin-Resistant, Macrolide-Resistant	06/2000 - 05/2003

Investigator	Pneumococcal Experimental Pneumonia, ABT-773. Funded by Abbott Laboratories. (ABBOTT #80)	
Principal Investigator	A Phase III, Randomized, Parallel, Placebo-Controlled, Double-Blind, Multicenter Efficacy and Safety Study of Ramoplanin and Placebo in Neutropenic Oncology Patients Identified as Asymptomatic Carriers of Vancomycin-Resistant Enterococcus. Funded by IntraBiotics Pharmaceuticals, Inc.. (INTRABIOTICS #1)	08/2000 - 07/2003
Principal Investigator	Des-Gatifloxacin Treatment of Psuedomonas aeruginosa Experimental Pneumonia. Funded by Bristol-Myers Squibb Pharmaceutical. (BRISTOL #49)	02/2001 - 12/2007
Principal Investigator	HCV Qualitative (TMA) Analyte Specific Reagents. Funded by Bayer. (BAYER #30)	01/2002 - 12/2002
Principal Investigator	In Vitro Activity of Daptomycin Against Antimicrobial Resistant Gram Positive Cocci. Funded by CUBIST Pharmaceuticals, Inc. (CUBIST #2)	01/2002 - 12/2003
Principal Investigator	Gatifloxacin or Des-Gatifloxacin Treatment of Viridans Streptococcal Experimental Endocarditis.. Funded by Bristol-Myers Squibb Pharmaceutical. (BRISTOL #53; 1A4624)	02/2002 - 01/2005
Principal Investigator	BAL 9141 / 5788 Treatment of Experimental Pneumonia. Funded by Basilea Pharmaceutical, Inc.. (BASILEA #1; 1A4480)	04/2002 - 03/2005
Principal Investigator	Polyethylene Glycol Succinate/Albumin Beads as an Antimicrobial Delivery System in the Treatment of Staphylococcus Aureus Experimental Osteomyelitis. Funded by 3M Company. (3M #44; 1A4610)	08/2002 - 07/2005
Principal Investigator	Daptomycin Release Kinetics from Polymethylmethacrylate in a Novel Continuous Flow Chamber with Confirmation of Antimicrobial Bioactivity after Release.. Funded by Cubist	06/2003 - 05/2004
Principal Investigator	In vitro activity of daptomycin against biofilm associated methicillin resistant Staphylococcus aureus or coagulase negative staphylococci. Funded by CUBIST Pharmaceuticals, Inc. (CUBIST #4;1A5201)	05/2004 - 04/2006
Principal Investigator	In vivo study of antifungal agents against Candida albicans biofilms. Funded by Pfizer Inc.. (PFIZER #89)	05/2004 - 04/2006
Principal Investigator	In Vitro Activity of Daptomycin Against Viridans Group Streptococci Associated with Endocarditis. Funded by CUBIST Pharmaceuticals, Inc. (CUBIST #6; 1A5370)	05/2004 - 08/2006
Principal Investigator	Daptomycin loaded PMMA in the treatment of experimental osteomyelitis. Funded by CUBIST Pharmaceuticals, Inc. (CUBIST #5; 1A5369)	07/2004 - 11/2008
Principal Investigator	In vitro study of antifungal agents against Candida albicans biofilms. Funded by Pfizer Inc.. (PFIZER #120; 1A5482)	09/2004 - 08/2006
Principal Investigator	DEVELOPMENT CONTRIBUTION: Confocal scanning microscopy. Funded by BARD Medical. (RRL01J)	08/2005 - 09/2005
Principal Investigator	Evaluation of Three Arpida Formulations in An Experimental Staphylococcus Aureus Skin Infection Model (IACUC A37205). Funded by Arpida Ltd.. (ARPIDA #1; 1A5876)	10/2005 - 12/2008
Program Director / Principal Investigator	Evaluation of Three Arpida Formulations In An Experimental Staphlococcus Aureus Nasal Decolonization Model (IACUC A37105). Funded by Arpida Ltd.. (ARPIDA #2; 1A5877)	10/2005 - 01/2010
Principal Investigator	In Vitro Activity of Ceftobiprole Against Staphylococci Associated with Endocarditis. Funded by Johnson and Johnson. (JOHNSON #32 1A5878)	11/2005 - 01/2010

Principal Investigator	In Vitro Activity of Ceftobiprole Against Staphylococci Associated with Bone and Joint Infection. Funded by Johnson and Johnson. (JOHNSON #31 1A5874)	01/2006 - 06/2009
Principal Investigator	In Vitro Activity of the MIST Device Against Bacteria. Funded by Celleration. (CELLERATION #1; 1A6029)	06/2006 - 10/2007
Principal Investigator	GA8850L3 In vitro Activity of Anidulafungin against Candida albicans Biofilms. Funded by Pfizer Inc.. (PFIZER #139, 1A6370)	04/2007 - 03/2008
Program Director / Principal Investigator	Pfizer Tracking # GA8850YA "Anidulafungin and Voriconazole Release from PMMA". Funded by Pfizer Inc.	04/2007 - 03/2009
Principal Investigator	Daptomycin in Experimental Pneumococcal Meningitis. Funded by CUBIST Pharmaceuticals, Inc. (CUBIST #7, 1A6382)	05/2007 - 10/2009
Program Director / Principal Investigator	ANIDULAFUNGIN IN EXPERIMENTAL CANDIDAL MENINGITIS. Funded by Pfizer Inc.	09/2007 - 09/2008
Program Director / Principal Investigator	Bacteria Spikes for Rapid Bacterial Detection. Funded by Sub C. Inc.	10/2007 - 09/2008
Program Director / Principal Investigator	Comparative In vitro Activity of Echinocandins against Candida albicans Biofilms. Funded by Pfizer Inc.	01/2008 - 05/2008
Program Director / Principal Investigator	Bacterial Detection of Transfusion Medicine Platelet 510K Protocol. Funded by Zybac LLC	06/2008 - 08/2008
Program Director / Principal Investigator	In Vitro Activity of the Arobella Acoustic Curette Against Planktonic and Biofilm Bacteria. Funded by Arobella Medical	08/2008 - 10/2008
Program Director / Principal Investigator	LINEZOLID TREATMENT OF EXPERIMENTAL FOREIGN BODY OSTEOMYELITIS. Funded by Pfizer Inc.	09/2008 - 09/2009
Program Director / Principal Investigator	Determination of Microbial Colonization Rates on Closed Suction Catheters after Intensive Care Unit Use. Funded by BARD Medical	10/2008 - 12/2008
Program Director / Principal Investigator	In vitro Activity of Bone-Targeted Vancomycin Against Methicillin-Resistant Staphylococcus aureus. Funded by Pradama	06/2009 - 08/2009
Program Director / Principal Investigator	POCARED DIAGNOSTICS LTD FIELD STUDY PROTOCOL. Funded by Pocared Diagnostics LTD	08/2009 - 09/2009
Program Director / Principal Investigator	Combination treatment of experimental foreign body infection. Funded by Pfizer Inc.. (Pfizer Tracking #WS434245)	09/2009 - 08/2010
Program	Pharmacokinetics of BT2-peg2-vancomycin. Funded by Pradama	12/2009 - 03/2010

Director / Principal Investigator		
Program Director / Principal Investigator	Bacterial Detection of Transfusion Medicine Platelet 510K . Funded by Sub C. Inc.	02/2010
Program Director / Principal Investigator	in vitro Antimicrobial Susceptibility of Shoulder Implant-Associated Bacteria . Funded by Tornier, Inc.	07/2010 - 08/2010
Program Director / Principal Investigator	Telavancin in experimental pneumococcal pneumonia. Funded by Astellas Pharma US, Inc.. (Protocol # TELA-9F04)	07/2010 - 03/2011
Program Director / Principal Investigator	Activity of tigecycline alone or in combination with rifampin against methicillin-resistant Staphylococcus aureus biofilms. Funded by Pfizer Pharmaceuticals. (Pfizer Tracking# WS921631)	10/2010 - 06/2011
Program Director / Principal Investigator	Bone-targeted vancomycin for treatment of methicillin-resistant Staphylococcus aureus osteomyelitis. Funded by Pradama	04/2011 - 09/2011
Program Director / Principal Investigator	Amendment #1 - Replacement POCARED DIAGNOSTICS LTD FIELD STUDY PROTOCOL. Funded by Pocared Diagnostics LTD	05/2011 - 02/2012
Program Director / Principal Investigator	Amendment #2 - Replacement POCARED DIAGNOSTICS LTD FIELD STUDY PROTOCOL. Funded by Pocared Diagnostics LTD	02/2013 - 06/2013
Program Director / Principal Investigator	3M in vitro susceptibility testing study - VISA and mupirocin non- susceptible Staphylococcus aureus. Funded by 3M Company	05/2013
Program Director / Principal Investigator	In Vitro Activity of Tedizolid Against Linezolid Non-Susceptible Staphylococci and Enterococci. Funded by CUBIST Pharmaceuticals, Inc. (IIR-000429)	08/2014 - 02/2015
Program Director / Principal Investigator	In Vitro Activity of Ceftaroline Against Staphylococci from Prosthetic Joint Infection. Funded by ACTAVIS. (Actavis Study Number TEF-IT-47)	09/2014 - 02/2015
Program Director / Principal Investigator	In Vivo Activity of Tedizolid against Methicillin-resistant Staphylococcus aureus and Methicillin-resistant Staphylococcus epidermidis Foreign Body Chronic Osteomyelitis. Funded by CUBIST Pharmaceuticals, Inc	12/2014 - 05/2015
Program Director / Principal Investigator	Amendment #1 (Contract End Date Extentsion) HBMS Peptide for the Prevention and Treatment of Biofilms of Staphylococci Associated with Prosthetic Joint Infection. Funded by Hutchinson Technology	12/2014 - 07/2015
Program Director / Principal Investigator	In Vitro Activity of Tedizolid Against Biofilms Formed by Prosthetic Joint Infection Staphylococci. Funded by CUBIST Pharmaceuticals, Inc	02/2015 - 06/2015

Program Director / Principal Investigator	In Vitro Activity of Ceftolozane/Tazobactam Against Pseudomonas aeruginosa Biofilms. Funded by CUBIST Pharmaceuticals, Inc	03/2015 - 08/2015
Program Director / Principal Investigator	In vitro activity of imipenem-relebactam and ceftolozane-tazobactam against drug resistant Gram-negative bacilli. Funded by Merck & Co., Inc.. (53547)	08/2015 - 05/2016
Program Director / Principal Investigator	Activity of Dalbavancin Against Biofilms Caused by Prosthetic Joint Infection Staphylococci. Funded by ACTAVIS	10/2015 - 03/2016
Program Director / Principal Investigator	In Vitro Compressive Strength Testing of Oritavancin Loaded Polymethylmethacrylate (PMMA) Beads. Funded by The Medicines Company	10/2015 - 04/2016
Program Director / Principal Investigator	In Vitro Release Kinetics of Oritavancin from Polymethylmethacrylate (PMMA) Beads. Funded by The Medicines Company	10/2015 - 04/2016
Program Director / Principal Investigator	In Vitro Activity of Dalbavancin by Prosthetic Joint Infection Enterococci. Funded by Allergan	06/2016 - 12/2016
Program Director / Principal Investigator	In Vitro Activity of Ceftazidime-avibactam Against Pseudomonas aeruginosa. Funded by Allergan	07/2016 - 12/2016
Program Director / Principal Investigator	Activity of Ceftolozane/Tazobactam Against Carbapenem-Resistant Pseudomonas Aeruginosa. Funded by Merck & Co., Inc.. (57195)	06/2017 - 11/2017
Program Director / Principal Investigator	Activity of Omadacycline in Methicillin-Resistant Staphylococcus aureus Osteomyelitis. Funded by Paratek Pharmaceuticals	04/2018 - 11/2018
Program Director / Principal Investigator	Amendment 2: Antimicrobial Susceptibility of Gram-negative Bacilli to Imipenem-relebactam. Funded by Merck Sharp & Dohme. (58442)	09/2018 - 07/2020
Program Director / Principal Investigator	In Vitro Activity of TNP-2092 against Prosthetic Joint Infection-associated Staphylococci. Funded by TenNor Therapeutics	12/2018 - 05/2019
Program Director / Principal Investigator	In Vitro Activity of Cefiderocol, a Siderophore Cephalosporin, Against Gram-Negative Bacilli. Funded by Shionogi, Inc.. (S-649266-EF-358-N)	02/2019 - 10/2019
Program Director / Principal Investigator	Activity of Lysin CF-296 in Methicillin-resistant S. aureus Osteomyelitis. Funded by ContraFect	06/2019 - 02/2020
Program Director / Principal Investigator	In Vitro Activity of Eravacycline Against Staphylococcal Biofilms Isolated from Prosthetic Joint Infection. Funded by Tetrphase Pharmaceuticals	01/2020 - 06/2020

Investigator		
Program Director / Principal Investigator	Hylomate for the Prevention of Biofilms of Bacteria Associated with CIED Infection. Funded by Hylomorph, Ltd.	01/2020 - 09/2020
Co-Investigator	Trovafloxacin Treatment of Methicillin-Susceptible S. aureus Experimental Endocarditis. Funded by Pfizer Inc.. (Pfizer 46)	04/1996 - 12/2000
Co-Investigator	Levofloxacin Treatment of Penicillin Resistant, Erythromycin Resistant Pneumococcal Experimental Pneumonitis. Funded by R. W. Johnson Pharmaceutical Research Institute. (Johnson 20)	04/1996 - 06/2001
Co-Investigator	The Effect of Trovafloxacin (CP99,219) on Infected Fracture Healing. Funded by Pfizer Inc.. (Pfizer 43)	04/1996 - 12/2001
Co-Investigator	Trovafloxacin Treatment of Viridans Streptococcal Experimental Endocarditis. Funded by Pfizer Inc.. (Pfizer 47)	04/1996 - 06/2003
Co-Investigator	In Vitro and In Vivo Emergence of Resistance of Staphylococcus aureus to Ciprofloxacin or Levofloxacin. Funded by R. W. Johnson Pharmaceutical Research Institute. (Johnson 19)	07/1996 - 06/2002
Co-Investigator	Synercid Treatment of Macrolide Susceptible and Macrolide Resistant, Methicillin-Resistant Staphylococcus aureus Experimental Osteomyelitis. Funded by Rhone-Poulenc Rorer. (Rhone 6)	09/1996 - 12/1997
Co-Investigator	In Vitro and In Vivo Emergence of Resistance of Staphylococcus aureus to Ciprofloxacin or BAY 12-8039. Funded by Bayer. (Bayer 12)	01/1997 - 06/2002
Co-Investigator	In Vitro and In Vivo Emergence of Resistance of Staphylococcus Aureus To Ciprofloxacin or Trovafloxacin. Funded by Pfizer Inc.. (PFIZER 60)	04/1998 - 12/2001
Co-Principal Investigator	Linezolid Treatment of Staphylococcus aureus Experimental Osteomyelitis. Funded by Pharmacia & Upjohn, Inc.. (Pharmacia 22)	07/1998 - 10/1999
Co-Principal Investigator	Vigilance II Study: The Use of Genotyping in HIV-1 Therapy. Funded by Visible Genetics, Inc.. (GENETICS #7)	09/2000 - 08/2002
Co-Investigator	Matrix III as an Antimicrobial Delivery System in the Treatment of Staphylococcus aureus Experimental Osteomyelitis. Funded by Buford Biomedical. (BUFORD #2)	12/2000 - 01/2003
Co-Investigator	A Randomized, Double-Blind, Double-Dummy study to assess the efficacy and safety of Prophylactic use of Maribavir versus oral ganciclovir for the prevention of Cytomegalovirus Disease in Recipients of Orthotopic Liver Transplants (1263-301). Funded by ViroPharma Incorporated. (1263-301)	10/2007 - 09/2009
Co-Investigator	TRMC-Bio: Molecular Profiling of Gut Microbiome, Microbiome Metabolome, Serum Chemistry, and Metabolism-Associated SNPs in Elite Athletes. Funded by Thorne Research. (TRMC-Bio)	08/2016 - 02/2018
Consultant	Linezolid inhibition of toxin production in vitro and in vivo. Funded by Pfizer Inc.. (Pfizer Tracking #WS474253)	10/2009 - 10/2010
Consultant	TRIAL OF DRAIN ANTISEPSIS AFTER TISSUE EXPANDER BREAST RECONSTRUCTION. Funded by ETHICON, Inc.	03/2011 - 03/2014

Mayo Clinic

Principal Investigator	Sequence Variability of vanC-1 Genes in Enterococci and Further Characterization of the vanC-1 Gene in Enterococcus faecium and Enterococcus Faecalis. Funded by Mayo CR20 Funding	07/1997 - 06/1999
Principal	The vanC-1 Gene: Transferability & Clinical Significance. Funded	01/1998 - 12/1998

Investigator	by Other Mayo	
Principal Investigator	Novel Approaches to Prosthetic Joint Infection Diagnosis. Funded by Mayo CR20 Funding	10/2003 - 09/2005
Principal Investigator	Microbial Biofilms and Breast Implant Failure. Funded by CR Programs	11/2007 - 10/2009
Program Director / Principal Investigator	Penicillin and ceftriaxone susceptibility of <i>Granulicatella</i> and <i>Abiotrophia</i> species. Funded by SGP - Small Grants Program < \$10K	03/2016 - 03/2018
Program Director / Principal Investigator	Cardiovascular Implantable Electronic Device Infection – Molecular Approach to Diagnosis . Funded by CCaTS-CBD Pilot Awards for Team Science	01/2018 - 12/2018
Program Director / Principal Investigator	Leveraging Geochemical Processes to Combat Drug-resistant Bacteria. Funded by ASU collaborative fund	01/2020 - 06/2021
Co-Investigator	The Effect of Trovafloxacin on Experimental Infected Fracture Healing. Funded by CR Programs	11/1998 - 10/2000
Co-Investigator	Dental and Other Invasive Procedures and the Risk of Prosthetic Joint Infection: A Case-Control Study. Funded by Mayo CR20 Funding	01/2002 - 12/2004
Co-Investigator	Tuberculosis Transmission in a High Prevalence Country: Analysis by Conventional Epidemiological Methods and DNA Fingerprinting. Funded by Mayo CR20 Funding	01/2002 - 12/2004
Co-Investigator	Influence of HLA DR3 and Allergic Sensitization on Immune Responses to Intact <i>Pneumococcus</i> in a Transgenic mouse model. Funded by Scholarly Opportunity Award	12/2009 - 11/2011
Co-Investigator	Cardiovascular implantable electronic device (CIED) infections: Sonication of explanted devices to enhance microbial detection and characterization of virulence factors (SGP). Funded by Infectious Diseases	10/2011 - 10/2013
Co-Investigator	Polymerase Chain Reaction Detection of Microorganisms in Heart Valve Tissue. Funded by SGP - Small Grants Program <\$10K	10/2011 - 10/2013
Co-Program Director / Principal Investigator	Ceftriaxone Susceptibility Among a Contemporary Collection of Oxacillin Susceptible <i>Staphylococcus aureus</i> Isolates from Patients with Prosthetic Joint Infection. Funded by SGP - Small Grants Program <\$10K	05/2014 - 05/2016
Co-Program Director / Principal Investigator	Development of a novel strategy for Gram negative bacteremia identification, rapid antimicrobial susceptibility testing, and result reporting with enhanced clinical decision support. Funded by Mayo Clinic Children's Research Center Pediatric Team Science Award	08/2015 - 07/2017
Co-Investigator	Novel Microsphere Delivery Spray for Treatment of Deep Spinal Wound Infection in Children. Funded by Development - Benefactor Funded Career Development Award	05/2016 - 04/2019
Co-Program Director / Principal Investigator	Whole genome sequencing of vancomycin nonsusceptible <i>Streptococcus anginosus</i> . Funded by SGP - Small Grants Program <\$10K	04/2018 - 04/2020
Co-Program Director / Principal Investigator	Phage Therapy Program. Funded by CCaTS Office of Translation to Practice – Advance the Practice Research Award	01/2020 - 12/2020

Investigator

Co-Program
Director /
Principal
Investigator

Bacteriophage Therapy Program at Mayo Clinic. Funded by
Transform the Practice

01/2020 - 12/2021

Other

Principal
Investigator

A Retrospective Multicenter Surveillance of Cryptococcus in Solid
Organ and Bone Marrow Transplant Recipients. Funded by
University of Alabama at Birmingham. (ALABAMA #3; 2E0902)

03/2002 - 11/2005

Bibliography

Peer-reviewed Articles

1. **Patel R**, Hughes RW Jr. An unusual case of myxedema megacolon with features of ischemic and pseudomembranous colitis. *Mayo Clin Proc.* 1992 Apr; 67 (4):369-72 PMID: 1548953 DOI: 10.1016/s0025-6196(12)61554-7
2. **Patel R**, Cockerill FR, Porayko MK, Keating MR. Antibiotics may predispose to lactobacillemia in liver transplant patients. *Int J Antimicrob Agents.* 1993; 3 (3):215-9 PMID: 18611563 DOI: 10.1016/0924-8579(93)90015-w
3. **Patel R**, Keating MR, Cockerill FR 3rd, Steckelberg JM. Bacteremia due to *Enterococcus avium*. *Clin Infect Dis.* 1993 Dec; 17 (6):1006-11 PMID: 8110922 DOI: 10.1093/clinids/17.6.1006
4. **Patel R**, Terrell CL. Photo quiz. *Clin Infect Dis.* 1994 Jan; 18:13.
5. **Patel R**, Cockerill FR, Porayko MK, Osmon DR, Ilstrup DM, Keating MR. Lactobacillemia in liver transplant patients. *Clin Infect Dis.* 1994 Feb; 18 (2):207-12 PMID: 8161628 DOI: 10.1093/clinids/18.2.207
6. Adlakha A, Yale SH, **Patel R**, Edson RS, Schultz HJ, Stanson AW. *Haemophilus influenzae* serotype f: an unusual cause of a mycotic aneurysm in an adult. *Mayo Clin Proc.* 1994 May; 69 (5):467-8 PMID: 8170199 DOI: 10.1016/s0025-6196(12)61644-9
7. **Patel R**, Smith TF, Espy M, Wiesner RH, Krom RA, Portela D, Paya CV. Detection of cytomegalovirus DNA in sera of liver transplant recipients. *J Clin Microbiol.* 1994 Jun; 32 (6):1431-4 PMID: 8077384 PMCID: 264014 DOI: 10.1128/jcm.32.6.1431-1434.1994
8. **Patel R**, Roberts GD, Keating MR, Paya CV. Infections due to nontuberculous mycobacteria in kidney, heart, and liver transplant recipients. *Clin Infect Dis.* 1994 Aug; 19 (2):263-73 PMID: 7986898 DOI: 10.1093/clinids/19.2.263
9. Espy MJ, **Patel R**, Paya CV, Smith TF. Comparison of three methods for extraction of viral nucleic acids from blood cultures. *J Clin Microbiol.* 1995 Jan; 33 (1):41-4 PMID: 7699063 PMCID: 227876 DOI: 10.1128/jcm.33.1.41-44.1995
10. **Patel R**, Smith TF, Espy M, Portela D, Wiesner RH, Krom RA, Paya CV. A prospective comparison of molecular diagnostic techniques for the early detection of cytomegalovirus in liver transplant recipients. *J Infect Dis.* 1995 Apr; 171 (4):1010-4 PMID: 7706778 DOI: 10.1093/infdis/171.4.1010
11. Portela D, **Patel R**, Larson-Keller JJ, Ilstrup DM, Wiesner RH, Steers JL, Krom RA, Paya CV. OKT3 treatment for allograft rejection is a risk factor for cytomegalovirus disease in liver transplantation. *J Infect Dis.* 1995 Apr; 171 (4):1014-8 PMID: 7706779 DOI: 10.1093/infdis/171.4.1014
12. **Patel R**, Roberts GD, Kelly DG, Walker RC. Central venous catheter infection due to *Ustilago* species. *Clin Infect Dis.* 1995 Oct; 21 (4):1043-4 PMID: 8645803 DOI: 10.1093/clinids/21.4.1043
13. **Patel R**, Klein DW, Espy MJ, Harmsen WS, Ilstrup DM, Paya CV, Smith TF. Optimization of detection of cytomegalovirus viremia in transplantation recipients by shell vial assay. *J Clin Microbiol.* 1995 Nov; 33 (11):2984-6 PMID: 8576358 PMCID: 228619 DOI: 10.1128/jcm.33.11.2984-2986.1995
14. **Patel R**, Wiesner RH, Paya CV. Prophylaxis and treatment of cytomegalovirus infection after solid organ transplantation. *Clinical Immunotherapeutics.* 1996 Jan; 5(1):13-29.
15. Badley AD, **Patel R**, Portela DF, Harmsen WS, Smith TF, Ilstrup DM, Steers JL, Wiesner RH, Paya CV. Prognostic significance and risk factors of untreated cytomegalovirus viremia in liver transplant recipients. *J Infect Dis.* 1996 Feb; 173 (2):446-9 PMID: 8568308 DOI: 10.1093/infdis/173.2.446
16. **Patel R**, Badley AD, Larson-Keller J, Harmsen WS, Ilstrup DM, Wiesner RH, Steers JL, Krom RA, Portela D, Cockerill FR, Paya CV. Relevance and risk factors of enterococcal bacteremia following liver transplantation. *Transplantation.* 1996 Apr 27; 61 (8):1192-7 PMID: 8610417 DOI: 10.1097/00007890-199604270-00013
17. **Patel R**, Osmon DR, Steckelberg JM, Dekutoski MB, Wilson WR. Vertebral osteomyelitis due to *Shigella boydii*. *Clin Infect Dis.* 1996 May; 22 (5):863-4 PMID: 8722953 DOI: 10.1093/clinids/22.5.863
18. **Patel R**, Snyderman DR, Rubin RH, Ho M, Pescovitz M, Martin M, Paya CV. Cytomegalovirus prophylaxis in solid organ transplant recipients. *Transplantation.* 1996 May 15; 61 (9):1279-89 PMID: 8629285 DOI: 10.1097/00007890-199605150-00001
19. Badley AD, Portela DF, **Patel R**, Kyle RA, Habermann TM, Strickler JG, Ilstrup DM, Wiesner RH, de Groen P, de Groen P, Walker RC, Paya CV. Development of monoclonal gammopathy precedes the development of Epstein-Barr virus-induced posttransplant lymphoproliferative disorder. *Liver Transpl Surg.* 1996 Sep; 2 (5):375-82 PMID: 9346679 DOI: 10.1002/lt.500020508

20. **Patel R**, Portela D, Badley AD, Harmsen WS, Larson-Keller JJ, Ilstrup DM, Keating MR, Wiesner RH, Krom RA, Paya CV. Risk factors of invasive Candida and non-Candida fungal infections after liver transplantation. *Transplantation*. 1996 Oct 15; 62 (7):926-34 PMID: 8878386 DOI: 10.1097/00007890-199610150-00010
21. **Patel R**, Paya CV. Cytomegalovirus infection and disease in liver transplantation recipients. *Herpes*. 1997; 4:15-9.
22. **Patel R**, Paya CV. Infections in solid-organ transplant recipients. *Clin Microbiol Rev*. 1997 Jan; 10 (1):86-124 PMID: 8993860 PMCID: 172945 DOI: 10.1128/CMR.10.1.86
23. **Patel R**, Uhl JR, Kohner P, Hopkins MK, Cockerill FR 3rd. Multiplex PCR detection of vanA, vanB, vanC-1, and vanC-2/3 genes in enterococci. *J Clin Microbiol*. 1997 Mar; 35 (3):703-7 PMID: 9041416 PMCID: 229654 DOI: 10.1128/jcm.35.3.703-707.1997
24. Badley AD, Seaberg EC, Porayko MK, Wiesner RH, Keating MR, Wilhelm MP, Walker RC, **Patel R**, Marshall WF, DeBernardi M, Zetterman R, Steers JL, Paya CV. Prophylaxis of cytomegalovirus infection in liver transplantation: a randomized trial comparing a combination of ganciclovir and acyclovir to acyclovir. *NIDDK Liver Transplantation Database. Transplantation*. 1997 Jul 15; 64 (1):66-73 PMID: 9233703 DOI: 10.1097/00007890-199707150-00013
25. Rouse MS, Steckelberg JM, Brandt CM, **Patel R**, Miro JM, Wilson WR. Efficacy of azithromycin or clarithromycin for prophylaxis of viridans group streptococcus experimental endocarditis. *Antimicrob Agents Chemother*. 1997 Aug; 41 (8):1673-6 PMID: 9257739 PMCID: 163983 DOI: 10.1128/AAC.41.8.1673
26. Dockrell DH, Prada J, Jones MF, **Patel R**, Badley AD, Harmsen WS, Ilstrup DM, Wiesner RH, Krom RA, Smith TF, Paya CV. Seroconversion to human herpesvirus 6 following liver transplantation is a marker of cytomegalovirus disease. *J Infect Dis*. 1997 Nov; 176 (5):1135-40 PMID: 9359710 DOI: 10.1086/514104
27. Kohner PC, **Patel R**, Uhl JR, Garin KM, Hopkins MK, Wegener LT, Cockerill FR 3rd. Comparison of agar dilution, broth microdilution, E-test, disk diffusion, and automated Vitek methods for testing susceptibilities of *Enterococcus* spp. to vancomycin. *J Clin Microbiol*. 1997 Dec; 35 (12):3258-63 PMID: 9399530 PMCID: 230158 DOI: 10.1128/jcm.35.12.3258-3263.1997
28. **Patel R**, Paya CV. Cytomegalovirus infection and disease in solid organ transplant recipients. *Transplant Infections*. 1998; 229-244.
29. **Patel R**, Uhl JR, Kohner P, Hopkins MK, Steckelberg JM, Kline B, Cockerill FR 3rd. DNA sequence variation within vanA, vanB, vanC-1, and vanC-2/3 genes of clinical *Enterococcus* isolates. *Antimicrob Agents Chemother*. 1998 Jan; 42 (1):202-5 PMID: 9449290 PMCID: 105485 DOI: 10.1128/AAC.42.1.202
30. **Patel R**, Rouse MS, Piper KE, Cockerill FR 3rd, Steckelberg JM. In vitro activity of LY333328 against vancomycin-resistant enterococci, methicillin-resistant *Staphylococcus aureus*, and penicillin-resistant *Streptococcus pneumoniae*. *Diagn Microbiol Infect Dis*. 1998 Feb; 30 (2):89-92 PMID: 9554174 DOI: 10.1016/s0732-8893(97)00207-1
31. * Rippere K, **Patel R**, Uhl JR, Piper KE, Steckelberg JM, Kline BC, Cockerill FR 3rd, Yousten AA. DNA sequence resembling vanA and vanB in the vancomycin-resistant biopesticide *Bacillus popilliae*. *J Infect Dis*. 1998 Aug; 178 (2):584-8 PMID: 9697750 DOI: 10.1086/517480
32. Falagas ME, Paya C, Ruthazer R, Badley A, **Patel R**, Wiesner R, Griffith J, Freeman R, Rohrer R, Werner BG, Snyderman DR. Significance of cytomegalovirus for long-term survival after orthotopic liver transplantation: a prospective derivation and validation cohort analysis. *Transplantation*. 1998 Oct 27; 66(8):1020-8. PMID: 9808486
33. **Patel R**, Piper KE, Rouse MS, Steckelberg JM, Uhl JR, Kohner P, Hopkins MK, Cockerill FR 3rd, Kline BC. Determination of 16S rRNA sequences of enterococci and application to species identification of nonmotile *Enterococcus gallinarum* isolates. *J Clin Microbiol*. 1998 Nov; 36 (11):3399-407 PMID: 9774606 PMCID: 105342 DOI: 10.1128/JCM.36.11.3399-3407.1998
34. **Patel R**. Antifungal agents. Part I. Amphotericin B preparations and flucytosine. *Mayo Clin Proc*. 1998 Dec; 73 (12):1205-25. PMID: 9868423 DOI: 10.4065/73.12.1205
35. **Patel R**. Vancomycin-resistant enterococci in solid organ transplantation. *Current opinion in organ transplantation*. 1999; 4:271-80.
36. Piper KE, Rouse MS, Steckelberg JM, Wilson WR, **Patel R**. Ketolide treatment of *Haemophilus influenzae* experimental pneumonia. *Antimicrob Agents Chemother*. 1999 Mar; 43 (3):708-10 PMID: 10049297 PMCID: 89190 DOI: 10.1128/AAC.43.3.708
37. **Patel R**, Rouse MS, Piper KE, Steckelberg JM. In vitro activity of linezolid against vancomycin-resistant enterococci, methicillin-resistant *Staphylococcus aureus* and penicillin-resistant *Streptococcus pneumoniae*.

- Diagn Microbiol Infect Dis. 1999 Jun; 34 (2):119-22 PMID: 10354862 DOI: 10.1016/s0732-8893(99)00016-4
38. **Patel R**, Newell JO, Procop GW, Persing DH. Use of polymerase chain reaction for citrate synthase gene to diagnose Bartonella quintana endocarditis. Am J Clin Pathol. 1999 Jul; 112 (1):36-40 PMID: 10396283 DOI: 10.1093/ajcp/112.1.36
 39. **Patel R**. Disseminated toxoplasmosis after liver transplantation. Clin Infect Dis. 1999 Sep; 29(3):705-6. PMID: 10530486
 40. **Patel R**, Rouse MS, Florez MV, Piper KE, Cockerill FR, Wilson WR, Steckelberg JM. Lack of benefit of intravenous immune globulin in a murine model of group A streptococcal necrotizing fasciitis. J Infect Dis. 2000 Jan; 181(1):230-4. PMID: 10608771 DOI: 10.1086/315198
 41. **Patel R**, Uhl JR, Cockerill FR. Multiplex polymerase chain reaction detection of vanA, vanB, vanC-1, and vanC-2/3 genes in Enterococci. Methods in Molecular Medicine. 2000; (48):3-11. PMID: 0
 42. * Sia IG, **Patel R**. New strategies for prevention and therapy of cytomegalovirus infection and disease in solid-organ transplant recipients. Clin Microbiol Rev. 2000 Jan; 13 (1):83-121, table of contents PMID: 10627493 PMCID: 88935 DOI: 10.1128/CMR.13.1.83
 43. Huddleston PM, Steckelberg JM, Hanssen AD, Rouse MS, Bolander ME, **Patel R**. Ciprofloxacin inhibition of experimental fracture healing. J Bone Joint Surg Am. 2000 Feb; 82 (2):161-73 PMID: 10682725 DOI: 10.2106/00004623-200002000-00002
 44. **Patel R**. Amphotericin B colloidal dispersion. Expert Opin Pharmacother. 2000 Mar; 1 (3):475-88 PMID: 11249532 DOI: 10.1517/14656566.1.3.475
 45. * Abu-Nader R, **Patel R**. Current management strategies for the treatment and prevention of cytomegalovirus infection in solid organ transplant recipients. BioDrugs. 2000 Mar; 13 (3):159-75 PMID: 18034522 DOI: 10.2165/00063030-200013030-00002
 46. **Patel R**, Piper K, Cockerill FR 3rd, Steckelberg JM, Yousten AA. The biopesticide Paenibacillus popilliae has a vancomycin resistance gene cluster homologous to the enterococcal VanA vancomycin resistance gene cluster. Antimicrob Agents Chemother. 2000 Mar; 44 (3):705-9 PMID: 10681342 PMCID: 89750 DOI: 10.1128/AAC.44.3.705-709.2000
 47. **Patel R**. Vancomycin-resistant enterococci in liver transplant recipients. Liver Transpl. 2000 Mar; 6(2):247-9. PMID: 10719031 DOI: 10.1002/lt.500060207
 48. **Patel R**. Enterococcal-type glycopeptide resistance genes in non-enterococcal organisms. FEMS Microbiol Lett. 2000 Apr 1; 185 (1):1-7 PMID: 10731599 DOI: 10.1111/j.1574-6968.2000.tb09032.x
 49. **Patel R**. Prophylactic fluconazole in liver transplant recipients: a randomized, double-blind, placebo-controlled trial. Liver Transpl. 2000 May; 6(3):376-9. PMID: 10827245 DOI: 10.1002/lt.500060327
 50. Piper KE, Rouse MS, Ronningen KL, Steckelberg JM, Wilson WR, **Patel R**. Trovafloxacin treatment of viridans group Streptococcus experimental endocarditis. Antimicrob Agents Chemother. 2000 Sep; 44 (9):2554-6 PMID: 10952616 PMCID: 90106 DOI: 10.1128/AAC.44.9.2554-2556.2000
 51. **Patel R**, Grogg KL, Edwards WD, Wright AJ, Schwenk NM. Death from inappropriate therapy for Lyme disease. Clin Infect Dis. 2000 Oct; 31: (4)1107-9. PMID: 11049799 DOI: 10.1086/318138
 52. * Harrison H, **Patel R**, Yousten AA. Paenibacillus associated with milky disease in Central and South American scarabs. J Invertebr Pathol. 2000 Oct; 76(3):169-75. PMID: 11023744 DOI: 10.1006/jipa.2000.4969
 53. **Patel R**, Piper KE, Rouse MS, Uhl JR, Cockerill FR 3rd, Steckelberg JM. Frequency of isolation of Staphylococcus lugdunensis among staphylococcal isolates causing endocarditis: a 20-year experience. J Clin Microbiol. 2000 Nov; 38 (11):4262-3 PMID: 11060105 PMCID: 87578 DOI: 10.1128/JCM.38.11.4262-4263.2000
 54. **Patel R**, Rouse MS, Piper KE, Steckelberg JM. In vitro activity of GAR-936 against vancomycin-resistant enterococci, methicillin-resistant Staphylococcus aureus and penicillin-resistant Streptococcus pneumoniae. Diagn Microbiol Infect Dis. 2000 Nov; 38 (3):177-9 PMID: 11109018 DOI: 10.1016/s0732-8893(00)00193-0
 55. **Patel R**, Piper KE, Rouse MS, Steckelberg JM. Linezolid therapy of Staphylococcus aureus experimental osteomyelitis. Antimicrob Agents Chemother. 2000 Dec; 44 (12):3438-40 PMID: 11083654 PMCID: 90219 DOI: 10.1128/AAC.44.12.3438-3440.2000
 56. **Patel R**, Uhl JR, Cockerill FR 3rd. Multiplex Polymerase Chain Reaction Detection of vanA, vanB, vanC-1, and vanC-2/3 Genes in Enterococci. Methods Mol Med. 2001; 48:3-11. PMID: 21374400 DOI: 10.1385/1-59259-077-2:3
 57. **Patel R**, Allen SL, Manahan JM, Wright AJ, Krom RA, Wiesner RH, Persing DH, Cockerill FR, Thompson RL. Natural history of vancomycin-resistant enterococcal colonization in liver and kidney transplant recipients.

Liver Transpl. 2001 Jan; 7(1):27-31. PMID: 11150418 DOI: 10.1053/jlts.2001.20784

58. **Patel R**, Rouse MS, Piper KE, Steckelberg JM. Linezolid therapy of vancomycin-resistant *Enterococcus faecium* experimental endocarditis. *Antimicrob Agents Chemother*. 2001 Feb; 45 (2):621-3 PMID: 11158767 PMCID: 90339 DOI: 10.1128/AAC.45.2.621-623.2001
59. Razonable RR, **Patel R**, Wilhelm MP, Gertz MA, Litzow MR, Inwards DJ, Dearani JA, Edwards BS, McGregor CG. Fatal disseminated aspergillosis following sequential heart and stem cell transplantation for systemic amyloidosis. *Am J Transplant*. 2001 May; 1 (1):93-5 PMID: 12095046 DOI: 10.1034/j.1600-6143.2001.010117.x
60. * Reid KC, Cockerill III FR, **Patel R**. Clinical and epidemiological features of *Enterococcus casseliflavus/fluvescens* and *Enterococcus gallinarum* bacteremia: a report of 20 cases. *Clin Infect Dis*. 2001 Jun 1; 32 (11):1540-6 Epub 2001 Apr 30 PMID: 11340524 DOI: 10.1086/320542
61. Espy MJ, Rys PN, Wold AD, Uhl JR, Sloan LM, Jenkins GD, Ilstrup DM, Cockerill FR 3rd, **Patel R**, Rosenblatt JE, Smith TF. Detection of herpes simplex virus DNA in genital and dermal specimens by LightCycler PCR after extraction using the IsoQuick, MagNA Pure, and BioRobot 9604 methods. *J Clin Microbiol*. 2001 Jun; 39 (6):2233-6 PMID: 11376062 PMCID: 88116 DOI: 10.1128/JCM.39.6.2233-2236.2001
62. * Roeder BE, **Patel R**. 29-year-old man with fever, malaise, and abdominal pain. *Mayo Clin Proc*. 2001 Aug; 76(8):841-4. PMID: 11499825 DOI: 10.1016/S0025-6196(11)63230-8
63. **Patel R**. Association between nasal methicillin-resistant *Staphylococcus aureus* carriage and infection in liver transplant recipients. *Liver Transpl*. 2001 Aug; 7 (8):752-3 PMID: 11780649 DOI: 10.1053/jlts.2001.0070752
64. **Patel R**. Infections in recipients of kidney transplants. *Infect Dis Clin North Am*. 2001 Sep; 15 (3):901-52, xi PMID: 11570147 DOI: 10.1016/s0891-5520(05)70178-1
65. * Razonable RR, Lewallen DG, **Patel R**, Osmon DR. Vertebral osteomyelitis and prosthetic joint infection due to *Staphylococcus simulans*. *Mayo Clin Proc*. 2001 Oct; 76(10):1067-70. PMID: 11605694 DOI: 10.4065/76.10.1067
66. Perez EA, Vogel CL, Irwin DH, Kirshner JJ, **Patel R**. Multicenter phase II trial of weekly paclitaxel in women with metastatic breast cancer. *J Clin Oncol*. 2001 Nov 15; 19: (22)4216-23. PMID: 11709565 DOI: 10.1200/JCO.2001.19.22.4216
67. Hughes JG, Vetter EA, **Patel R**, Schleck CD, Harmsen S, Turgeant LT, Cockerill FR 3rd. Culture with BACTEC Peds Plus/F bottle compared with conventional methods for detection of bacteria in synovial fluid. *J Clin Microbiol*. 2001 Dec; 39 (12):4468-71 PMID: 11724863 PMCID: 88567 DOI: 10.1128/JCM.39.12.4468-4471.2001
68. Wolk D, Mitchell S, **Patel R**. Principles of molecular microbiology testing methods. *Infect Dis Clin North Am*. 2001 Dec; 15 (4):1157-204 PMID: 11780271 DOI: 10.1016/s0891-5520(05)70190-2
69. * Sloan LM, Hopkins MK, Mitchell PS, Vetter EA, Rosenblatt JE, Harmsen WS, Cockerill FR, **Patel R**. Multiplex LightCycler PCR assay for detection and differentiation of *Bordetella pertussis* and *Bordetella parapertussis* in nasopharyngeal specimens. *J Clin Microbiol*. 2002 Jan; 40 (1):96-100 PMID: 11773099 PMCID: 120124 DOI: 10.1128/JCM.40.1.96-100.2002
70. Germer JJ, Heimgartner PJ, Ilstrup DM, Harmsen WS, Jenkins GD, **Patel R**. Comparative evaluation of the VERSANT HCV RNA 3.0, QUANTIPLEX HCV RNA 2.0, and COBAS AMPLICOR HCV MONITOR version 2.0 Assays for quantification of hepatitis C virus RNA in serum. *J Clin Microbiol*. 2002 Feb; 40 (2):495-500 PMID: 11825962 PMCID: 153351 DOI: 10.1128/JCM.40.2.495-500.2002
71. Haile DT, Hughes J, Vetter E, Hughes J, Kohner P, Snyder R, **Patel R**, Cockerill FR 3rd. Frequency of isolation of *Staphylococcus lugdunensis* in consecutive urine cultures and relationship to urinary tract infection. *J Clin Microbiol*. 2002 Feb; 40 (2):654-6 PMID: 11825988 PMCID: 153380 DOI: 10.1128/JCM.40.2.654-656.2002
72. Mitchell PS, Sloan LM, Majewski DW, Rys PN, Heimgartner PJ, Rosenblatt JE, Cockerill FR 3rd, Smith TF, **Patel R**. Comparison of line probe assay and DNA sequencing of 5' untranslated region for genotyping hepatitis C virus: description of novel line probe patterns. *Diagn Microbiol Infect Dis*. 2002 Mar; 42 (3):175-9 PMID: 11929688 DOI: 10.1016/s0732-8893(01)00349-2
73. * Wester CW, Ariga D, Nathan C, Rice TW, Pulvirenti J, **Patel R**, Kocka F, Ortiz J, Weinstein RA. Possible overestimation of penicillin resistant *Streptococcus pneumoniae* colonization rates due to misidentification of oropharyngeal streptococci. *Diagn Microbiol Infect Dis*. 2002 Apr; 42(4):263-8. PMID: 12007444
74. Paya CV, Wilson JA, Espy MJ, Sia IG, DeBernardi MJ, Smith TF, **Patel R**, Jenkins G, Harmsen WS, Vanness DJ, Wiesner RH. Preemptive use of oral ganciclovir to prevent cytomegalovirus infection in liver transplant patients: a randomized, placebo-controlled trial. *J Infect Dis*. 2002 Apr 1; 185(7):854-60. Epub 2002 Mar 19. PMID: 11920308 DOI: 10.1086/339449
75. Razonable RR, Litzow MR, Khaliq Y, Piper KE, Rouse MS, **Patel R**. Bacteremia due to viridans group

Streptococci with diminished susceptibility to Levofloxacin among neutropenic patients receiving levofloxacin prophylaxis. Clin Infect Dis. 2002 Jun 1; 34 (11):1469-74 Epub 2002 May 07 PMID: 12015693 DOI: 10.1086/340352

76. Devarbhavi HC, Cohen AJ, **Patel R**, Wiesner RH, Dickson RC, Ishitani MB. Preliminary results: outcome of liver transplantation for hepatitis B virus varies by hepatitis B virus genotype. Liver Transpl. 2002 Jun; 8: (6)550-5. PMID: 12037787 DOI: 10.1053/jlts.2002.33483
77. * Capitini CM, Herrero IA, **Patel R**, Ishitani MB, Boyce TG. Wound infection with Neisseria weaveri and a novel subspecies of pasteurella multocida in a child who sustained a tiger bite. Clin Infect Dis. 2002 Jun 15; 34 (12):E74-6. Epub 2002 May 24. PMID: 12032914 DOI: 10.1086/340712
78. * Perry AC, Rouse MS, Khaliq Y, Piper KE, Hanssen AD, Osmon DR, Steckelberg JM, **Patel R**. Antimicrobial release kinetics from polymethylmethacrylate in a novel continuous flow chamber. Clin Orthop Relat Res. 2002 Oct; (403):49-53 PMID: 12360007 DOI: 10.1097/00003086-200210000-00009
79. * Issa NC, **Patel R**. Potential for expansion of the donor pool using liver allografts from donors with bacterial meningitis. Liver Transpl. 2002 Oct; 8(10):977-9. PMID: 12360446 DOI: 10.1053/jlts.2002.0080977
80. * Herrero IA, Rouse MS, Piper KE, Alyaseen SA, Steckelberg JM, **Patel R**. Reevaluation of Streptococcus bovis endocarditis cases from 1975 to 1985 by 16S ribosomal DNA sequence analysis. J Clin Microbiol. 2002 Oct; 40 (10):3848-50 PMID: 12354897 PMCID: 130892 DOI: 10.1128/JCM.40.10.3848-3850.2002
81. * Trampuz A, Steckelberg JM, Osmon DR, Cockerill FR, Hanssen AD, **Patel R**. Advances in the laboratory diagnosis of prosthetic joint infection. Reviews in Medical Microbiology. 2003 Jan; 14(1):1-14. PMID: 0
82. **Patel R**. Viral infections complicating solid organ transplantation. Curr Opin Organ Transplant. 2003; 8(4):259-61. PMID: 0
83. * Germer JJ, Charlton MR, Ishitani MB, Forehand CD, **Patel R**. Characterization of hepatitis B virus surface antigen and polymerase mutations in liver transplant recipients pre- and post-transplant. Am J Transplant. 2003 Jun; 3 (6):743-53 PMID: 12780567 DOI: 10.1034/j.1600-6143.2003.00149.x
84. **Patel R**. Clinical impact of vancomycin-resistant enterococci. J Antimicrob Chemother. 2003 Jun; 51 Suppl 3:iii13-21. PMID: 12801938 DOI: 10.1093/jac/dkg272
85. Germer JJ, Lins MM, Jensen ME, Harmsen WS, Ilstrup DM, Mitchell PS, Cockerill FR 3rd, **Patel R**. Evaluation of the MagNA pure LC instrument for extraction of hepatitis C virus RNA for the COBAS AMPLICOR Hepatitis C Virus Test, version 2.0. J Clin Microbiol. 2003 Aug; 41 (8):3503-8 PMID: 12904346 PMCID: 179864 DOI: 10.1128/JCM.41.8.3503-3508.2003
86. * Perry AC, Prpa B, Rouse MS, Piper KE, Hanssen AD, Steckelberg JM, **Patel R**. Levofloxacin and trovafloxacin inhibition of experimental fracture-healing. Clin Orthop Relat Res. 2003 Sep; (414)(414)95-100. PMID: 12966282 DOI: 10.1097/01.blo.0000087322.60612.14
87. * Trampuz A, Osmon DR, Hanssen AD, Steckelberg JM, **Patel R**. Molecular and antibiofilm approaches to prosthetic joint infection. Clin Orthop Relat Res. 2003 Sep; (414):69-88. PMID: 12966280 DOI: 10.1097/01.blo.0000087324.60612.93
88. * O'Sullivan CE, Aksamit AJ, Harrington JR, Harmsen WS, Mitchell PS, **Patel R**. Clinical spectrum and laboratory characteristics associated with detection of herpes simplex virus DNA in cerebrospinal fluid. Mayo Clin Proc. 2003 Nov; 78(11):1347-52. PMID: 14601693 DOI: 10.4065/78.11.1347
89. * Germer JJ, Zein NN, Metwally MA, Hoskin TL, Scott Harmsen W, Smith TF, **Patel R**. Comparison of the VERSANT HCV RNA qualitative assay (transcription-mediated amplification) and the COBAS AMPLICOR hepatitis C virus test, version 2.0, in patients undergoing interferon-ribavirin therapy. Diagn Microbiol Infect Dis. 2003 Dec; 47 (4):615-8 PMID: 14711484 DOI: 10.1016/s0732-8893(03)00149-4
90. * Issa NC, Rouse MS, Piper KE, Wilson WR, Steckelberg JM, **Patel R**. In vitro activity of BAL9141 against clinical isolates of gram-negative bacteria. Diagn Microbiol Infect Dis. 2004 Jan; 48(1):73-5. PMID: 14761726 DOI: 10.1016/j.diagmicrobio.2003.09.006
91. * Issa NC, **Patel R**. New issues in bacterial infections in solid organ transplant recipients. Infections in Medicine. 2004; 21(5):234-4. PMID: 0
92. * Prabhu RM, **Patel R**. Mucormycosis and entomophthoromycosis: a review of the clinical manifestations, diagnosis and treatment. Clin Microbiol Infect. 2004 Mar; 10 Suppl 1:31-47 PMID: 14748801 DOI: 10.1111/j.1470-9465.2004.00843.x
93. * Christiansen DC, Roberts GD, **Patel R**. Mycobacterium celatum, an emerging pathogen and cause of false positive amplified Mycobacterium tuberculosis direct test. Diagn Microbiol Infect Dis. 2004 May; 49(1):19-24.

PMID: 15135495 DOI: 10.1016/j.diagmicrobio.2003.12.006

94. * Anguita-Alonso P, **Patel R**. Molecular Methods in the Diagnosis of Endocarditis. *Curr Infect Dis Rep*. 2004 Aug; 6 (4):270-275 PMID: 15265454 DOI: 10.1007/s11908-004-0047-9
95. * Haleem AA, Rouse MS, Lewallen DG, Hanssen AD, Steckelberg JM, **Patel R**. Gentamicin and vancomycin do not impair experimental fracture healing. *Clin Orthop Relat Res*. 2004 Oct; (427):22-4 PMID: 15552131 DOI: 10.1097/01.blo.0000144477.43661.59
96. * Frank KL, Hanssen AD, **Patel R**. icaA is not a useful diagnostic marker for prosthetic joint infection. *J Clin Microbiol*. 2004 Oct; 42 (10):4846-9 PMID: 15472359 PMCID: 522308 DOI: 10.1128/JCM.42.10.4846-4849.2004
97. * Trampuz A, Hanssen AD, Osmon DR, Mandrekar J, Steckelberg JM, **Patel R**. Synovial fluid leukocyte count and differential for the diagnosis of prosthetic knee infection. *Am J Med*. 2004 Oct 15; 117 (8):556-62 PMID: 15465503 DOI: 10.1016/j.amjmed.2004.06.022
98. * Prabhu RM, Piper KE, Baddour LM, Steckelberg JM, Wilson WR, **Patel R**. Antimicrobial susceptibility patterns among viridans group streptococcal isolates from infective endocarditis patients from 1971 to 1986 and 1994 to 2002. *Antimicrob Agents Chemother*. 2004 Nov; 48 (11):4463-5 PMID: 15504884 PMCID: 525427 DOI: 10.1128/AAC.48.11.4463-4465.2004
99. * Hall EW, Rouse MS, Jacofsky DJ, Osmon DR, Hanssen AD, Steckelberg JM, **Patel R**. Release of daptomycin from polymethylmethacrylate beads in a continuous flow chamber. *Diagn Microbiol Infect Dis*. 2004 Dec; 50(4):261-5. PMID: 15582299 DOI: 10.1016/j.diagmicrobio.2004.03.004
100. * Shuford JA, **Patel R**. Antimicrobial growth promoter use in livestock-implications for human health. *Reviews in Medical Microbiology*. 2005 Jan; 16(1):17-24. PMID: 0
101. * Alyaseen SA, Piper KE, Rouse MS, Steckelberg JM, **Patel R**. Selection of cross-resistance following exposure of *Pseudomonas aeruginosa* clinical isolates to ciprofloxacin or cefepime. *Antimicrob Agents Chemother*. 2005 Jun; 49 (6):2543-5 PMID: 15917569 PMCID: 1140511 DOI: 10.1128/AAC.49.6.2543-2545.2005
102. * Fraimow H, Knob C, Herrero IA, **Patel R**. Putative VanRS-like two-component regulatory system associated with the inducible glycopeptide resistance cluster of *Paenibacillus popilliae*. *Antimicrob Agents Chemother*. 2005 Jul; 49(7):2625-33. PMID: 15980329 PMCID: 1168687 DOI: 10.1128/AAC.49.7.2625-2633.2005
103. **Patel R**. Biofilms and antimicrobial resistance. *Clin Orthop Relat Res*. 2005 Aug; (437):41-7 PMID: 16056024 DOI: 10.1097/01.blo.0000175714.68624.74
104. Piper KE, Steckelberg JM, **Patel R**. In vitro activity of daptomycin against clinical isolates of Gram-positive bacteria. *J Infect Chemother*. 2005 Aug; 11 (4):207-9 PMID: 16133715 DOI: 10.1007/s10156-005-0395-x
105. * Rouse MS, Rotger M, Piper KE, Steckelberg JM, Scholz M, Andrews J, **Patel R**. In vitro and in vivo evaluations of the activities of lauric acid monoester formulations against *Staphylococcus aureus*. *Antimicrob Agents Chemother*. 2005 Aug; 49 (8):3187-91 PMID: 16048923 PMCID: 1196268 DOI: 10.1128/AAC.49.8.3187-3191.2005
106. Hanssen AD, Osmon DR, **Patel R**. Local antibiotic delivery systems: where are we and where are we going? *Clin Orthop Relat Res*. 2005 Aug; (437):111-4 PMID: 16056035
107. * Rotger M, Trampuz A, Piper KE, Steckelberg JM, **Patel R**. Phenotypic and genotypic mupirocin resistance among *Staphylococci* causing prosthetic joint infection. *J Clin Microbiol*. 2005 Aug; 43 (8):4266-8 PMID: 16081996 PMCID: 1234000 DOI: 10.1128/JCM.43.8.4266-4268.2005
108. * Osmon DR, Hanssen AD, **Patel R**. Prosthetic joint infection: criteria for future definitions. *Clin Orthop Relat Res*. 2005 Aug; (437):89-90. PMID: 16056031
109. **Patel R**, Osmon DR, Hanssen AD. The diagnosis of prosthetic joint infection: current techniques and emerging technologies. *Clin Orthop Relat Res*. 2005 Aug; (437):55-8 PMID: 16056026 DOI: 10.1097/01.blo.0000175121.73675.fd
110. * Anguita-Alonso P, Hanssen AD, Osmon DR, Trampuz A, Steckelberg JM, **Patel R**. High rate of aminoglycoside resistance among staphylococci causing prosthetic joint infection. *Clin Orthop Relat Res*. 2005 Oct; 439:43-7 PMID: 16205136 DOI: 10.1097/01.blo.0000182394.39601.9d
111. * Anguita-Alonso P, Hanssen AD, **Patel R**. Prosthetic joint infection. *Expert Rev Anti Infect Ther*. 2005 Oct; 3 (5):797-804 PMID: 16207171 PMCID: 0 DOI: 10.1586/14787210.3.5.797
112. * Bell CA, **Patel R**. A real-time combined polymerase chain reaction assay for the rapid detection and differentiation of *Anaplasma phagocytophilum*, *Ehrlichia chaffeensis*, and *Ehrlichia ewingii*. *Diagn Microbiol Infect Dis*. 2005 Dec; 53(4):301-6. Epub 2005 Nov 02. PMID: 16263231 DOI: 10.1016/j.diagmicrobio.2005.06.019
113. * Prabhu RM, Piper KE, Litzow MR, Steckelberg JM, **Patel R**. Emergence of quinolone resistance among

viridans group streptococci isolated from the oropharynx of neutropenic peripheral blood stem cell transplant patients receiving quinolone antimicrobial prophylaxis. *Eur J Clin Microbiol Infect Dis*. 2005 Dec; 24 (12):832-8 PMID: 16331335 DOI: 10.1007/s10096-005-0037-3

114. * Zirakzadeh A, **Patel R**. Epidemiology and mechanisms of glycopeptide resistance in enterococci. *Curr Opin Infect Dis*. 2005 Dec; 18 (6):507-12 PMID: 16258324 DOI: 10.1097/01.qco.0000186849.54040.2a
115. Rouse MS, Piper KE, Jacobson M, Jacofsky DJ, Steckelberg JM, **Patel R**. Daptomycin treatment of *Staphylococcus aureus* experimental chronic osteomyelitis. *J Antimicrob Chemother*. 2006 Feb; 57(2):301-5. Epub 2005 Dec 16. PMID: 16361330 DOI: 10.1093/jac/dki435
116. * Rajagopalan G, Iijima K, Singh M, Kita H, **Patel R**, David CS. Intranasal exposure to bacterial superantigens induces airway inflammation in HLA class II transgenic mice. *Infect Immun*. 2006 Feb; 74 (2):1284-96 PMID: 16428778 PMCID: 1360368 DOI: 10.1128/IAI.74.2.1284-1296.2006
117. * Trampuz A, Piper KE, Hanssen AD, Osmon DR, Cockerill FR, Steckelberg JM, **Patel R**. Sonication of explanted prosthetic components in bags for diagnosis of prosthetic joint infection is associated with risk of contamination. *J Clin Microbiol*. 2006 Feb; 44 (2):628-31 PMID: 16455930 PMCID: 1392705 DOI: 10.1128/JCM.44.2.628-631.2006
118. Piper KE, Hanssen AD, Lewallen DG, Matteson EL, Osmon DR, Duffy MC, Hagan RA, Steckelberg JM, **Patel R**. Lack of detection of human retrovirus-5 proviral DNA in synovial tissue and blood specimens from individuals with rheumatoid arthritis or osteoarthritis. *Arthritis Rheum*. 2006 Feb 15; 55 (1):123-5 PMID: 16463423 PMCID: 1464419 DOI: 10.1002/art.21690
119. * Shuford JA, Piper KE, Hein M, Trampuz A, Steckelberg JM, **Patel R**. Lack of association of *Staphylococcus aureus* type A beta-lactamase with cefazolin combined with antimicrobial spacer placement prosthetic joint infection treatment failure. *Diagn Microbiol Infect Dis*. 2006 Mar; 54(3):189-92. Epub 2006 Feb 08. PMID: 16466894 DOI: 10.1016/j.diagmicrobio.2005.09.015
120. * Anguita-Alonso P, Rouse MS, Piper KE, Jacofsky DJ, Osmon DR, **Patel R**. Comparative study of antimicrobial release kinetics from polymethylmethacrylate. *Clin Orthop Relat Res*. 2006 Apr; 445:239-44 PMID: 16474225 PMCID: 0 DOI: 10.1097/01.blo.0000201167.90313.40
121. * Anguita-Alonso P, Rouse MS, Piper KE, Steckelberg JM, **Patel R**. Garenoxacin treatment of experimental endocarditis caused by viridans group streptococci. *Antimicrob Agents Chemother*. 2006 Apr; 50 (4):1263-7 PMID: 16569838 PMCID: 1426944 DOI: 10.1128/AAC.50.4.1263-1267.2006
122. * Zirakzadeh A, **Patel R**. Vancomycin-resistant enterococci: colonization, infection, detection, and treatment. *Mayo Clin Proc*. 2006 Apr; 81 (4):529-36 PMID: 16610573 DOI: 10.4065/81.4.529
123. * Rajagopalan G, Sen MM, Singh M, Murali NS, Nath KA, Iijima K, Kita H, Leontovich AA, Gopinathan U, **Patel R**, David CS. Intranasal exposure to staphylococcal enterotoxin B elicits an acute systemic inflammatory response. *Shock*. 2006 Jun; 25 (6):647-56 PMID: 16721274 DOI: 10.1097/01.shk.0000209565.92445.7d
124. * Eid AJ, Brown RA, **Patel R**, Razonable RR. Parvovirus B19 infection after transplantation: a review of 98 cases. *Clin Infect Dis*. 2006 Jul 1; 43 (1):40-8 Epub 2006 May 12 PMID: 16758416 DOI: 10.1086/504812
125. * Rouse MS, Hein MM, Anguita-Alonso P, Steckelberg JM, **Patel R**. Ceftobiprole medocaril (BAL5788) treatment of experimental *Haemophilus influenzae*, *Enterobacter cloacae*, and *Klebsiella pneumoniae* murine pneumonia. *Diagn Microbiol Infect Dis*. 2006 Aug; 55(4):333-6. Epub 2006 May 02. PMID: 16631339 DOI: 10.1016/j.diagmicrobio.2006.01.029
126. * Trampuz A, Piper KE, Steckelberg JM, **Patel R**. Effect of gamma irradiation on viability and DNA of *Staphylococcus epidermidis* and *Escherichia coli*. *J Med Microbiol*. 2006 Sep; 55(Pt 9):1271-5. PMID: 16914659 DOI: 10.1099/jmm.0.46488-0
127. * Shuford JA, Rouse MS, Piper KE, Steckelberg JM, **Patel R**. Evaluation of caspofungin and amphotericin B deoxycholate against *Candida albicans* biofilms in an experimental intravascular catheter infection model. *J Infect Dis*. 2006 Sep 1; 194 (5):710-3 Epub 2006 July 28 PMID: 16897672 DOI: 10.1086/506452
128. * Rajagopalan G, Smart MK, **Patel R**, David CS. Acute systemic immune activation following conjunctival exposure to staphylococcal enterotoxin B. *Infect Immun*. 2006 Oct; 74 (10):6016-9 PMID: 16988282 PMCID: 1594882 DOI: 10.1128/IAI.00671-06
129. * Heijink A, Yaszemski MJ, **Patel R**, Rouse MS, Lewallen DG, Hanssen AD. Local antibiotic delivery with OsteoSet, DBX, and Collagraft. *Clin Orthop Relat Res*. 2006 Oct; 451:29-33. PMID: 16906070 DOI: 10.1097/01.blo.0000229319.45416.81
130. * Rajagopalan G, Smart MK, Murali N, **Patel R**, David CS. Acute systemic immune activation following vaginal exposure to staphylococcal enterotoxin B--implications for menstrual shock. *J Reprod Immunol*. 2007 Feb; 73

(1):51-9. Epub 2006 Oct 27. PMID: 17070600 DOI: 10.1016/j.jri.2006.06.007

131. * Shuford JA, Piper KE, Steckelberg JM, **Patel R**. In vitro biofilm characterization and activity of antifungal agents alone and in combination against sessile and planktonic clinical *Candida albicans* isolates. *Diagn Microbiol Infect Dis*. 2007 Mar; 57 (3):277-81 Epub 2006 Dec 01 PMID: 17141454 DOI: 10.1016/j.diagmicrobio.2006.09.004
132. Frank KL, Reichert EJ, Piper KE, **Patel R**. In vitro effects of antimicrobial agents on planktonic and biofilm forms of *Staphylococcus lugdunensis* clinical isolates. *Antimicrob Agents Chemother*. 2007 Mar; 51 (3):888-95 Epub 2006 Dec 11 PMID: 17158933 PMCID: 1803120 DOI: 10.1128/AAC.01052-06
133. * Frank KL, **Patel R**. Activity of sodium metabisulfite against planktonic and biofilm *Staphylococcus* species. *Diagn Microbiol Infect Dis*. 2007 Apr; 57(4):355-9. Epub 2006 Dec 22. PMID: 17188446 DOI: 10.1016/j.diagmicrobio.2006.10.003
134. * Rouse MS, Steckelberg JM, **Patel R**. In vitro activity of ceftobiprole, daptomycin, linezolid, and vancomycin against methicillin-resistant staphylococci associated with endocarditis and bone and joint infection. *Diagn Microbiol Infect Dis*. 2007 Jul; 58(3):363-5. Epub 2007 Apr 20. PMID: 17449212 DOI: 10.1016/j.diagmicrobio.2007.02.010
135. * Anguita-Alonso P, Giacometti A, Cirioni O, Ghiselli R, Orlando F, Saba V, Scalise G, Sevo M, Tuzova M, **Patel R**, Balaban N. RNAIII-inhibiting-peptide-loaded polymethylmethacrylate prevents in vivo *Staphylococcus aureus* biofilm formation. *Antimicrob Agents Chemother*. 2007 Jul; 51 (7):2594-6 Epub 2006 Nov 20 PMID: 17116671 PMCID: 1913233 DOI: 10.1128/AAC.00580-06
136. * del Pozo JL, **Patel R**. The challenge of treating biofilm-associated bacterial infections. *Clin Pharmacol Ther*. 2007 Aug; 82 (2):204-9 Epub 2007 May 30 PMID: 17538551 DOI: 10.1038/sj.cpt.6100247
137. * Trampuz A, Piper KE, Jacobson MJ, Hanssen AD, Unni KK, Osmon DR, Mandrekar JN, Cockerill FR, Steckelberg JM, Greenleaf JF, **Patel R**. Sonication of removed hip and knee prostheses for diagnosis of infection. *N Engl J Med*. 2007 Aug 16; 357 (7):654-63 PMID: 17699815 DOI: 10.1056/NEJMoa061588
138. * Sampedro MF, **Patel R**. Infections associated with long-term prosthetic devices. *Infect Dis Clin North Am*. 2007 Sep; 21(3):785-819, x. PMID: 17826624 DOI: 10.1016/j.idc.2007.07.001
139. * van de Beek D, **Patel R**, Wijdicks EF. Meningococcal meningitis with brainstem infarction. *Arch Neurol*. 2007 Sep; 64: (9)1350-1. PMID: 17846279 DOI: 10.1001/archneur.64.9.1350
140. * Assi MA, Berg JC, Marshall WF, Wengenack NL, **Patel R**. *Mycobacterium gordonae* pulmonary disease associated with a continuous positive airway pressure device. *Transpl Infect Dis*. 2007 Sep; 9(3):249-52. Epub 2007 Jul 01. PMID: 17605753 DOI: 10.1111/j.1399-3062.2007.00202.x
141. * Kijpittayarit-Arthurs S, Eid AJ, Kremers WK, Pedersen RA, Dierkhising RA, **Patel R**, Razonable RR. Clinical features and outcomes of delayed-onset primary cytomegalovirus disease in cardiac transplant recipients. *J Heart Lung Transplant*. 2007 Oct; 26 (10):1019-24 PMID: 17919622 DOI: 10.1016/j.healun.2007.07.016
142. * Frank KL, **Patel R**. Poly-N-acetylglucosamine is not a major component of the extracellular matrix in biofilms formed by icaADBC-positive *Staphylococcus lugdunensis* isolates. *Infect Immun*. 2007 Oct; 75 (10):4728-42 Epub 2007 July 16 PMID: 17635864 PMCID: 2044555 DOI: 10.1128/IAI.00640-07
143. * Smith TF, Espy MJ, Mandrekar J, Jones MF, Cockerill FR, **Patel R**. Quantitative real-time polymerase chain reaction for evaluating DNAemia due to cytomegalovirus, Epstein-Barr virus, and BK virus in solid-organ transplant recipients. *Clin Infect Dis*. 2007 Oct 15; 45(8):1056-61. Epub 2007 Sep 12. PMID: 17879925 DOI: 10.1086/521909
144. * van de Beek D, **Patel R**, Daly RC, McGregor CG, Wijdicks EF. Central nervous system infections in heart transplant recipients. *Arch Neurol*. 2007 Dec; 64(12):1715-20. Epub 2007 Oct 08. PMID: 17923621 DOI: 10.1001/archneur.64.12.noc70065
145. * Arthurs SK, Eid AJ, Pedersen RA, Dierkhising RA, Kremers WK, **Patel R**, Razonable RR. Delayed-onset primary cytomegalovirus disease after liver transplantation. *Liver Transpl*. 2007 Dec; 13 (12):1703-9 PMID: 18044717 DOI: 10.1002/lt.21280
146. * Frank KL, Del Pozo JL, **Patel R**. From clinical microbiology to infection pathogenesis: how daring to be different works for *Staphylococcus lugdunensis*. *Clin Microbiol Rev*. 2008 Jan; 21 (1):111-33 PMID: 18202439 PMCID: 2223846 DOI: 10.1128/CMR.00036-07
147. * Frank KL, **Patel R**. Intravenously administered pharmaceuticals impact biofilm formation and detachment of *Staphylococcus lugdunensis* and other staphylococci. *Diagn Microbiol Infect Dis*. 2008 Jan; 60(1):9-16. Epub 2007 Sep 21. PMID: 17889481 DOI: 10.1016/j.diagmicrobio.2007.07.008

148. * Frank KL, **Patel R**. Staphylococcus lugdunensis - Not the Average Coagulase-Negative Staphylococcus Species. Clin Microbiol Newsl. 2008; 30(8):55-62. PMID: 0
149. * Rajagopalan G, Polich G, Sen MM, Singh M, Epstein BE, Lytle AK, Rouse MS, **Patel R**, David CS. Evaluating the role of HLA-DQ polymorphisms on immune response to bacterial superantigens using transgenic mice. Tissue Antigens. 2008 Feb; 71(2):135-45. Epub 2007 Dec 13. PMID: 18086265 DOI: 10.1111/j.1399-0039.2007.00986.x
150. * Zirakzadeh A, Gastineau DA, Mandrekar JN, Burke JP, Johnston PB, **Patel R**. Vancomycin-resistant enterococcal colonization appears associated with increased mortality among allogeneic hematopoietic stem cell transplant recipients. Bone Marrow Transplant. 2008 Feb; 41 (4):385-92 Epub 2007 Dec 17 PMID: 18084341 DOI: 10.1038/sj.bmt.1705912
151. * van de Beek D, Kremers WK, Del Pozo JL, Daly RC, Edwards BS, McGregor CG, **Patel R**. Effect of infectious diseases on outcome after heart transplant. Mayo Clin Proc. 2008 Mar; 83 (3):304-8 PMID: 18315996 DOI: 10.4065/83.3.304
152. * Arthurs SK, Eid AJ, Pedersen RA, Kremers WK, Cosio FG, **Patel R**, Razonable RR. Delayed-onset primary cytomegalovirus disease and the risk of allograft failure and mortality after kidney transplantation. Clin Infect Dis. 2008 Mar 15; 46 (6):840-6 PMID: 18260785 DOI: 10.1086/528718
153. * Jacobson MJ, Piper KE, Nguyen G, Steckelberg JM, **Patel R**. In vitro activity of anidulafungin against Candida albicans biofilms. Antimicrob Agents Chemother. 2008 Jun; 52 (6):2242-3 Epub 2008 Apr 07 PMID: 18391031 PMCID: 2415795 DOI: 10.1128/AAC.00211-08
154. * van de Beek D, **Patel R**, Campeau NG, Badley A, Parisi JE, Rabinstein AA, Manno EM, Wijdicks EF. Insidious sinusitis leading to catastrophic cerebral aspergillosis in transplant recipients. Neurology. 2008 Jun 10; 70 (24 Pt 2):2411-3 PMID: 18541875 PMCID: 3145203 DOI: 10.1212/01.wnl.0000314690.18731.1b
155. * Verdoorn BP, Orenstein R, Wilson JW, Estes LL, Wendt RF, Schleck CD, Harmsen WS, Nyre LM, **Patel R**. Effect of telephoned notification of positive Clostridium difficile test results on the time to the ordering of antimicrobial therapy. Infect Control Hosp Epidemiol. 2008 Jul; 29 (7):658-60 PMID: 18518668 DOI: 10.1086/589586
156. * Arness T, Pedersen R, Dierkhising R, Kremers W, **Patel R**. Varicella zoster virus-associated disease in adult kidney transplant recipients: incidence and risk-factor analysis. Transpl Infect Dis. 2008 Jul; 10(4):260-8. Epub 2007 Dec 11. PMID: 18086277 DOI: 10.1111/j.1399-3062.2007.00289.x
157. * Uslan DZ, **Patel R**, Virk A. International travel and exposure risks in solid-organ transplant recipients. Transplantation. 2008 Aug 15; 86(3):407-12. PMID: 18698243 DOI: 10.1097/TP.0b013e31817c0673
158. * Del Pozo JL, Rouse MS, **Patel R**. Bioelectric effect and bacterial biofilms. A systematic review. Int J Artif Organs. 2008 Sep; 31 (9):786-95 PMID: 18924090 PMCID: 3910516 DOI: 10.1177/039139880803100906
159. * Baddley JW, Perfect JR, Oster RA, Larsen RA, Pankey GA, Henderson H, Haas DW, Kauffman CA, **Patel R**, Zaas AK, Pappas PG. Pulmonary cryptococcosis in patients without HIV infection: factors associated with disseminated disease. European Journal of Clinical Microbiology & Infectious Diseases. 2008 Oct; 27(10):937-43. PMID: 0
160. * Del Pozo JL, **Patel R**. Ceftobiprole medocaril: a new generation beta-lactam. Drugs Today (Barc). 2008 Nov; 44: (11)801-25. PMID: 19180259 DOI: 10.1358/dot.2008.44.11.1264007
161. Aichinger E, Schleck CD, Harmsen WS, Nyre LM, **Patel R**. Nonutility of repeat laboratory testing for detection of Clostridium difficile by use of PCR or enzyme immunoassay. J Clin Microbiol. 2008 Nov; 46 (11):3795-7 Epub 2008 Sept 10 PMID: 18784320 PMCID: 2576580 DOI: 10.1128/JCM.00684-08
162. * Rajagopalan G, Asmann YW, Lytle AK, Tilahun AY, Theuer JE, Smart MK, **Patel R**, David CS. Cyclooxygenase 2 pathway and its therapeutic inhibition in superantigen-induced toxic shock. Shock. 2008 Dec; 30(6):721-8. PMID: 18496243 DOI: 10.1097/SHK.0b013e31817048f7
163. * Babady NE, Sloan LM, Vetter EA, **Patel R**, Binnicker MJ. Percent positive rate of Lyme real-time polymerase chain reaction in blood, cerebrospinal fluid, synovial fluid, and tissue. Diagn Microbiol Infect Dis. 2008 Dec; 62 (4):464-6. Epub 2008 Oct 22. PMID: 18947959 DOI: 10.1016/j.diagmicrobio.2008.08.016
164. * Karre T, **Patel R**. A renal transplant patient with psoas fluid collection. Clin Microbiol Newsl. 2009; 31 (23):182-3. PMID: 0
165. * del Pozo JL, Rouse MS, Mandrekar JN, Sampedro MF, Steckelberg JM, **Patel R**. Effect of electrical current on the activities of antimicrobial agents against Pseudomonas aeruginosa, Staphylococcus aureus, and Staphylococcus epidermidis biofilms. Antimicrob Agents Chemother. 2009 Jan; 53 (1):35-40 Epub 2008 Aug 25 PMID: 18725436 PMCID: 2612137 DOI: 10.1128/AAC.00237-08

166. * del Pozo JL, Rouse MS, Mandrekar JN, Steckelberg JM, **Patel R**. The electricidal effect: reduction of Staphylococcus and pseudomonas biofilms by prolonged exposure to low-intensity electrical current. *Antimicrob Agents Chemother*. 2009 Jan; 53 (1):41-5 Epub 2008 Oct 27 PMID: 18955534 PMCID: 2612149 DOI: 10.1128/AAC.00680-08
167. * Robberts FJ, Kohner PC, **Patel R**. Unreliable extended-spectrum beta-lactamase detection in the presence of plasmid-mediated AmpC in Escherichia coli clinical isolates. *J Clin Microbiol*. 2009 Feb; 47 (2):358-61 Epub 2008 Dec 24 PMID: 19109470 PMCID: 2643682 DOI: 10.1128/JCM.01687-08
168. * Mook-Kanamori BB, Rouse MS, Kang CI, van de Beek D, Steckelberg JM, **Patel R**. Daptomycin in experimental murine pneumococcal meningitis. *BMC Infect Dis*. 2009 Apr 30; 9:50 PMID: 19405978 PMCID: 2685802 DOI: 10.1186/1471-2334-9-50
169. * Del Pozo JL, Tran NV, Petty PM, Johnson CH, Walsh MF, Bite U, Clay RP, Mandrekar JN, Piper KE, Steckelberg JM, **Patel R**. Pilot study of association of bacteria on breast implants with capsular contracture. *J Clin Microbiol*. 2009 May; 47 (5):1333-7 Epub 2009 Mar 04 PMID: 19261794 PMCID: 2681843 DOI: 10.1128/JCM.00096-09
170. * Kang CI, Rouse MS, **Patel R**, Kita H, Juhn YJ. Allergic airway inflammation and susceptibility to pneumococcal pneumonia in a murine model with real-time in vivo evaluation. *Clin Exp Immunol*. 2009 Jun; 156 (3):552-61 PMID: 19438610 PMCID: 2691986 DOI: 10.1111/j.1365-2249.2009.03925.x
171. Jacobson MJ, Steckelberg KE, Piper KE, Steckelberg JM, **Patel R**. In vitro activity of micafungin against planktonic and sessile Candida albicans isolates. *Antimicrob Agents Chemother*. 2009 Jun; 53 (6):2638-9 Epub 2009 Mar 23 PMID: 19307371 PMCID: 2687220 DOI: 10.1128/AAC.01724-08
172. * Piper KE, Jacobson MJ, Cofield RH, Sperling JW, Sanchez-Sotelo J, Osmon DR, McDowell A, Patrick S, Steckelberg JM, Mandrekar JN, Fernandez Sampedro M, **Patel R**. Microbiologic diagnosis of prosthetic shoulder infection by use of implant sonication. *J Clin Microbiol*. 2009 Jun; 47 (6):1878-84 Epub 2009 Mar 04 PMID: 19261785 PMCID: 2691098 DOI: 10.1128/JCM.01686-08
173. * Sampedro MF, Piper KE, McDowell A, Patrick S, Mandrekar JN, Rouse MS, Steckelberg JM, **Patel R**. Species of Propionibacterium and Propionibacterium acnes phylotypes associated with orthopedic implants. *Diagn Microbiol Infect Dis*. 2009 Jun; 64(2):138-45. PMID: 19505429 DOI: 10.1016/j.diagmicrobio.2009.01.024
174. * Grys TE, Sloan LM, Rosenblatt JE, **Patel R**. Rapid and sensitive detection of Shiga toxin-producing Escherichia coli from nonenriched stool specimens by real-time PCR in comparison to enzyme immunoassay and culture. *J Clin Microbiol*. 2009 Jul; 47 (7):2008-12 Epub 2009 May 13 PMID: 19439539 PMCID: 2708480 DOI: 10.1128/JCM.02013-08
175. * Kang CI, Rouse MS, Mandrekar JN, Steckelberg JM, **Patel R**. Anidulafungin treatment of candidal central nervous system infection in a murine model. *Antimicrob Agents Chemother*. 2009 Aug; 53(8):3576-8. Epub 2009 Jun 08. PMID: 19506064 PMCID: 2715626 DOI: 10.1128/AAC.00646-09
176. * Kohner PC, Robberts FJ, Cockerill FR 3rd, **Patel R**. Cephalosporin MIC distribution of extended-spectrum-beta-lactamase- and pAmpC-producing Escherichia coli and Klebsiella species. *J Clin Microbiol*. 2009 Aug; 47 (8):2419-25 Epub 2009 June 03 PMID: 19494061 PMCID: 2725637 DOI: 10.1128/JCM.00508-09
177. * Del Pozo JL, van de Beek D, Daly RC, Pulido JS, McGregor CG, **Patel R**. Incidence and clinical characteristics of ocular infections after heart transplantation: a retrospective cohort study. *Clin Transplant*. 2009 Aug-Sep; 23(4):484-9. Epub 2009 Jun 30. PMID: 19573087 DOI: 10.1111/j.1399-0012.2009.01026.x
178. * Del Pozo JL, **Patel R**. Clinical practice. Infection associated with prosthetic joints. *N Engl J Med*. 2009 Aug 20; 361 (8):787-94 PMID: 19692690 PMCID: 2850113 DOI: 10.1056/NEJMcp0905029
179. * Sun HY, Aguado JM, Bonatti H, Forrest G, Gupta KL, Safdar N, John GT, Pursell KJ, Munoz P, **Patel R**, Fortun J, Martin-Davila P, Philippe B, Philit F, Tabah A, Terzi N, Chatelet V, Kusne S, Clark N, Blumberg E, Julia MB, Humar A, Houston S, Lass-Florl C, Johnson L, Dubberke ER, Barron MA, Lortholary O, Singh N, Zygomycosis Transplant Study Group. Pulmonary zygomycosis in solid organ transplant recipients in the current era. *Am J Transplant*. 2009 Sep; 9(9):2166-71. Epub 2009 Jul 22. PMID: 19681829 DOI: 10.1111/j.1600-6143.2009.02754.x
180. Singh N, Aguado JM, Bonatti H, Forrest G, Gupta KL, Safdar N, John GT, Pursell KJ, Munoz P, **Patel R**, Fortun J, Martin-Davila P, Philippe B, Philit F, Tabah A, Terzi N, Chatelet V, Kusne S, Clark N, Blumberg E, Julia MB, Humar A, Houston S, Lass-Florl C, Johnson L, Dubberke ER, Barron MA, Lortholary O. Zygomycosis in solid organ transplant recipients: a prospective, matched case-control study to assess risks for disease and outcome. *J Infect Dis*. 2009 Sep 15; 200(6):1002-11. PMID: 19659439 DOI: 10.1086/605445
181. * Del Pozo JL, Rouse MS, Euba G, Kang CI, Mandrekar JN, Steckelberg JM, **Patel R**. The electricidal effect is

active in an experimental model of *Staphylococcus epidermidis* chronic foreign body osteomyelitis. *Antimicrob Agents Chemother*. 2009 Oct; 53 (10):4064-8 Epub 2009 Aug 03 PMID: 19651912 PMCID: 2764171 DOI: 10.1128/AAC.00432-09

182. * Verdoorn BP, Orenstein R, Rosenblatt JE, Sloan LM, Schleck CD, Harmsen WS, Nyre LM, **Patel R**. High prevalence of tcdC deletion-carrying *Clostridium difficile* and lack of association with disease severity. *Diagn Microbiol Infect Dis*. 2010 Jan; 66 (1):24-8 Epub 2009 Sept 23 PMID: 19775847 DOI: 10.1016/j.diagmicrobio.2009.08.015
183. * Lappinga PJ, Abraham SC, Murray JA, Vetter EA, **Patel R**, Wu TT. Small intestinal bacterial overgrowth: histopathologic features and clinical correlates in an underrecognized entity. *Arch Pathol Lab Med*. 2010 Feb; 134 (2):264-70 PMID: 20121616 DOI: 10.5858/134.2.264
184. * Piper KE, Fernandez-Sampedro M, Steckelberg KE, Mandrekar JN, Karau MJ, Steckelberg JM, Berbari EF, Osmon DR, Hanssen AD, Lewallen DG, Cofield RH, Sperling JW, Sanchez-Sotelo J, Huddleston PM, Dekutoski MB, Yaszemski M, Currier B, **Patel R**. C-reactive protein, erythrocyte sedimentation rate and orthopedic implant infection. *PLoS One*. 2010 Feb 22; 5 (2):e9358 PMID: 20179760 PMCID: 2825262 DOI: 10.1371/journal.pone.0009358
185. * Lin EY, Tsigrelis C, Baddour LM, Lepidi H, Rolain JM, **Patel R**, Raoult D. *Candidatus Bartonella mayotimonensis* and endocarditis. *Emerg Infect Dis*. 2010 Mar; 16 (3):500-3 PMID: 20202430 PMCID: 3321999 DOI: 10.3201/eid1603.081673
186. * Shah NB, Osmon DR, Fadel H, **Patel R**, Kohner PC, Steckelberg JM, Mabry T, Berbari EF. Laboratory and clinical characteristics of *Staphylococcus lugdunensis* prosthetic joint infections. *J Clin Microbiol*. 2010 May; 48 (5):1600-3 Epub 2010 Feb 24 PMID: 20181900 PMCID: 2863876 DOI: 10.1128/JCM.01769-09
187. * Sampedro MF, Huddleston PM, Piper KE, Karau MJ, Dekutoski MB, Yaszemski MJ, Currier BL, Mandrekar JN, Osmon DR, McDowell A, Patrick S, Steckelberg JM, **Patel R**. A biofilm approach to detect bacteria on removed spinal implants. *Spine (Phila Pa 1976)*. 2010 May 20; 35 (12):1218-24 PMID: 20445479 DOI: 10.1097/BRS.0b013e3181c3b2f3
188. * Tilahun AY, Theuer JE, **Patel R**, David CS, Rajagopalan G. Detrimental effect of the proteasome inhibitor, bortezomib in bacterial superantigen- and lipopolysaccharide-induced systemic inflammation. *Mol Ther*. 2010 Jun; 18 (6):1143-54 Epub 2010 Apr 06 PMID: 20372109 PMCID: 2889741 DOI: 10.1038/mt.2010.53
189. * Shah NB, Suri RM, Melduni RM, **Patel R**, Kommedal O, Saebo O, Gustafson DR, Wilson WR, Baddour LM. *Shuttleworthia satelles* endocarditis: evidence of non-dental human disease. *J Infect*. 2010 Jun; 60(6):491-3. Epub 2010 Feb 17. PMID: 20170673 DOI: 10.1016/j.jinf.2010.02.008
190. Karau MJ, Piper KE, Steckelberg JM, Kavros SJ, **Patel R**. In vitro activity of the Qoustic Wound Therapy System against planktonic and biofilm bacteria. *Adv Skin Wound Care*. 2010 Jul; 23(7):316-20. PMID: 20562540 DOI: 10.1097/01.ASW.0000363557.45726.41
191. Sun HY, Forrest G, Gupta KL, Aguado JM, Lortholary O, Julia MB, Safdar N, **Patel R**, Kusne S, Singh N. Rhino-orbital-cerebral zygomycosis in solid organ transplant recipients. *Transplantation*. 2010 Jul 15; 90(1):85-92. PMID: 20626095
192. Cunningham SA, Sloan LM, Nyre LM, Vetter EA, Mandrekar J, **Patel R**. Three-hour molecular detection of *Campylobacter*, *Salmonella*, *Yersinia*, and *Shigella* species in feces with accuracy as high as that of culture. *J Clin Microbiol*. 2010 Aug; 48 (8):2929-33 Epub 2010 June 02 PMID: 20519461 PMCID: 2916566 DOI: 10.1128/JCM.00339-10
193. * Gomez E, Gustafson DR, Colgrove R, Ly T, Santana R, Rosenblatt JE, **Patel R**. Isolation of *Robinsoniella peoriensis* from four human specimens. *J Clin Microbiol*. 2011 Jan; 49 (1):458-60 Epub 2010 Nov 03 PMID: 21048018 PMCID: 3020413 DOI: 10.1128/JCM.01305-10
194. * Gomez E, **Patel R**. Laboratory diagnosis of prosthetic joint infection, part I. *Clin Microbiol Newsl*. 2011; 33 (8):55-60.
195. * Gomez E, **Patel R**. Laboratory diagnosis of prosthetic joint infection, part II. *Clin Microbiol Newsl*. 2011; 33 (9):1-8.
196. * Zhao H, Kang CI, Rouse MS, **Patel R**, Kita H, Juhn YJ. The Role of IL-17 in the Association between Pneumococcal Pneumonia and Allergic Sensitization. *Int J Microbiol*. 2011; 2011:709509 Epub 2011 Nov 17 PMID: 22164165 PMCID: 3227511 DOI: 10.1155/2011/709509
197. * Karre T, Sloan L, **Patel R**, Mandrekar J, Rosenblatt J. Comparison of two commercial molecular assays to a laboratory-developed molecular assay for diagnosis of *Clostridium difficile* infection. *J Clin Microbiol*. 2011 Feb; 49 (2):725-7 Epub 2010 Dec 01 PMID: 21123537 PMCID: 3043497 DOI: 10.1128/JCM.01028-10

198. * Saffert RT, Cunningham SA, Ihde SM, Jobe KE, Mandrekar J, **Patel R**. Comparison of Bruker Biotyper matrix-assisted laser desorption ionization-time of flight mass spectrometer to BD Phoenix automated microbiology system for identification of gram-negative bacilli. *J Clin Microbiol*. 2011 Mar; 49 (3):887-92 Epub 2011 Jan 05 PMID: 21209160 PMCID: 3067728 DOI: 10.1128/JCM.01890-10
199. * Hebart H, Lengerke C, Ljungman P, Paya CV, Klingebiel T, Loeffler J, Pfaffenrath S, Lewensohn-Fuchs I, Barkholt L, Tomiuk J, Meisner C, Lunenberg J, Top B, Razonable RR, **Patel R**, Litzow MR, Jahn G, Einsele H. Prospective comparison of PCR-based vs late mRNA-based preemptive antiviral therapy for HCMV infection in patients after allo-SCT. *Bone Marrow Transplant*. 2011 Mar; 46(3):408-15. Epub 2010 Jun 28. PMID: 20581879 DOI: 10.1038/bmt.2010.136
200. * Vergidis P, Rouse MS, Euba G, Karau MJ, Schmidt SM, Mandrekar JN, Steckelberg JM, **Patel R**. Treatment with linezolid or vancomycin in combination with rifampin is effective in an animal model of methicillin-resistant *Staphylococcus aureus* foreign body osteomyelitis. *Antimicrob Agents Chemother*. 2011 Mar; 55 (3):1182-6 Epub 2010 Dec 28 PMID: 21189340 PMCID: 3067063 DOI: 10.1128/AAC.00740-10
201. * Rouse MS, Heijink A, Steckelberg JM, **Patel R**. Are anidulafungin or voriconazole released from polymethylmethacrylate in vitro? *Clin Orthop Relat Res*. 2011 May; 469 (5):1466-9 Epub 2010 Oct 21 PMID: 20963525 PMCID: 3069256 DOI: 10.1007/s11999-010-1643-7
202. * Tilahun AY, Marietta EV, Wu TT, **Patel R**, David CS, Rajagopalan G. Human leukocyte antigen class II transgenic mouse model unmasks the significant extrahepatic pathology in toxic shock syndrome. *Am J Pathol*. 2011 Jun; 178 (6):2760-73 PMID: 21641398 PMCID: 3124354 DOI: 10.1016/j.ajpath.2011.02.033
203. * Shelton-Dodge K, Vetter EA, Kohner PC, Nyre LM, **Patel R**. Clinical significance and antimicrobial susceptibilities of *Aerococcus sanguinicola* and *Aerococcus urinae*. *Diagn Microbiol Infect Dis*. 2011 Aug; 70 (4):448-51 PMID: 21767701 DOI: 10.1016/j.diagmicrobio.2010.09.001
204. Alatoon AA, Cunningham SA, Ihde SM, Mandrekar J, **Patel R**. Comparison of direct colony method versus extraction method for identification of gram-positive cocci by use of Bruker Biotyper matrix-assisted laser desorption ionization-time of flight mass spectrometry. *J Clin Microbiol*. 2011 Aug; 49 (8):2868-73 Epub 2011 May 25 PMID: 21613431 PMCID: 3147777 DOI: 10.1128/JCM.00506-11
205. * Pritt BS, Sloan LM, Johnson DK, Munderloh UG, Paskewitz SM, McElroy KM, McFadden JD, Binnicker MJ, Neitzel DF, Liu G, Nicholson WL, Nelson CM, Franson JJ, Martin SA, Cunningham SA, Steward CR, Bogumill K, Bjorgaard ME, Davis JP, McQuiston JH, Warshauer DM, Wilhelm MP, **Patel R**, Trivedi VA, Ereemeeva ME. Emergence of a new pathogenic *Ehrlichia* species, Wisconsin and Minnesota, 2009. *N Engl J Med*. 2011 Aug 4; 365 (5):422-9 PMID: 21812671 PMCID: 3319926 DOI: 10.1056/NEJMoa1010493
206. * Gomez E, Gustafson DR, Rosenblatt JE, **Patel R**. *Actinobaculum* bacteremia: a report of 12 cases. *J Clin Microbiol*. 2011 Dec; 49 (12):4311-3 Epub 2011 Oct 05 PMID: 21976754 PMCID: 3232933 DOI: 10.1128/JCM.00798-11
207. * Vergidis P, Greenwood-Quaintance KE, Sanchez-Sotelo J, Morrey BF, Steinmann SP, Karau MJ, Osmon DR, Mandrekar JN, Steckelberg JM, **Patel R**. Implant sonication for the diagnosis of prosthetic elbow infection. *J Shoulder Elbow Surg*. 2011 Dec; 20 (8):1275-81 PMID: 22078323 PMCID: 3910532 DOI: 10.1016/j.jse.2011.06.016
208. **Patel R**, Vetter EA, Harmsen WS, Schleck CD, Fadel HJ, Cockerill FR 3rd. Optimized pathogen detection with 30- compared to 20-milliliter blood culture draws. *J Clin Microbiol*. 2011 Dec; 49 (12):4047-51 Epub 2011 Oct 05 PMID: 21976759 PMCID: 3232938 DOI: 10.1128/JCM.01314-11
209. Krause ML, Sohail MR, **Patel R**, Wittich CM. *Achromobacter piechaudii* bloodstream infection in an immunocompetent host. *Am J Case Rep*. 2012; 13:265-7 Epub 2012 Oct 26 PMID: 23569545 PMCID: 3615974 DOI: 10.12659/AJCR.883527
210. * Alatoon AA, Cazanave CJ, Cunningham SA, Ihde SM, **Patel R**. Identification of non-diphtheriae corynebacterium by use of matrix-assisted laser desorption ionization-time of flight mass spectrometry. *J Clin Microbiol*. 2012 Jan; 50 (1):160-3 Epub 2011 Nov 09 PMID: 22075579 PMCID: 3256690 DOI: 10.1128/JCM.05889-11
211. * Babu MA, **Patel R**, Marsh WR, Wijdicks EF. Strategies to decrease the risk of ventricular catheter infections: a review of the evidence. *Neurocrit Care*. 2012 Feb; 16 (1):194-202 PMID: 22045248 DOI: 10.1007/s12028-011-9647-z
212. * Eastlack RK, Kesman TJ, **Patel R**, Huddleston PM. Infection not associated with use of human musculoskeletal tissue allografts. *Cell Tissue Bank*. 2012 Mar; 13(1):47-51. Epub 2010 Sep 29. PMID: 20878483 DOI: 10.1007/s10561-010-9222-4
213. * Vergidis P, **Patel R**. Novel approaches to the diagnosis, prevention, and treatment of medical device-associated infections. *Infect Dis Clin North Am*. 2012 Mar; 26 (1):173-86 PMID: 22284383 PMCID: 3269005 DOI: 10.1016/j.idc.2011.09.012

214. * Maduka-Ezeh A, Seville MT, Kusne S, Vikram HR, Blair JE, Greenwood-Quaintance K, Arabia F, **Patel R**. Thymidine auxotrophic *Staphylococcus aureus* small-colony variant endocarditis and left ventricular assist device infection. *J Clin Microbiol*. 2012 Mar; 50 (3):1102-5 Epub 2012 Jan 11 PMID: 22205806 PMCID: 3295146 DOI: 10.1128/JCM.01170-11
215. Saffert RT, Cunningham SA, Mandrekar J, **Patel R**. Comparison of three preparatory methods for detection of bacteremia by MALDI-TOF mass spectrometry. *Diagn Microbiol Infect Dis*. 2012 May; 73(1):21-6. PMID: 22578935 DOI: 10.1016/j.diagmicrobio.2012.01.010
216. Cazanave C, Greenwood-Quaintance KE, Hanssen AD, **Patel R**. *Corynebacterium* prosthetic joint infection. *J Clin Microbiol*. 2012 May; 50 (5):1518-23 Epub 2012 Feb 15 PMID: 22337986 PMCID: 3347109 DOI: 10.1128/JCM.06439-11
217. Baracaldo R, Foltzer M, **Patel R**, Bourbeau P. Empyema caused by *Mycoplasma salivarium*. *J Clin Microbiol*. 2012 May; 50(5):1805-6. Epub 2012 Feb 15. PMID: 22337977 PMCID: 3347133 DOI: 10.1128/JCM.06839-11
218. Marko DC, Saffert RT, Cunningham SA, Hyman J, Walsh J, Arbefeville S, Howard W, Pruessner J, Safwat N, Cockerill FR, Bossler AD, **Patel R**, Richter SS. Evaluation of the Bruker Biotyper and Vitek MS matrix-assisted laser desorption ionization-time of flight mass spectrometry systems for identification of nonfermenting gram-negative bacilli isolated from cultures from cystic fibrosis patients. *J Clin Microbiol*. 2012 Jun; 50 (6):2034-9 Epub 2012 Apr 11 PMID: 22495566 PMCID: 3372130 DOI: 10.1128/JCM.00330-12
219. Ariza-Heredia EJ, **Patel R**, Blumberg EA, Walker RC, Lewis R, Evans J, Sankar A, Williams MD, Rogers J, Milano C, Razonable RR. Outcomes of transplantation using organs from a donor infected with *Klebsiella pneumoniae* carbapenemase (KPC)-producing *K. pneumoniae*. *Transpl Infect Dis*. 2012 Jun; 14(3):229-36. Epub 2012 May 25. PMID: 22624726 DOI: 10.1111/j.1399-3062.2012.00742.x
220. * Tilahun AY, Karau MJ, Clark CR, **Patel R**, Rajagopalan G. The impact of tacrolimus on the immunopathogenesis of staphylococcal enterotoxin-induced systemic inflammatory response syndrome and pneumonia. *Microbes Infect*. 2012 Jun; 14 (6):528-36 Epub 2012 Jan 10 PMID: 22273732 DOI: 10.1016/j.micinf.2012.01.001
221. Binnicker MJ, Theel ES, Larsen SM, **Patel R**. A high percentage of serum samples that test reactive by enzyme immunoassay for anti-*Brucella* antibodies are not confirmed by the standard tube agglutination test. *Clin Vaccine Immunol*. 2012 Aug; 19 (8):1332-4 Epub 2012 June 20 PMID: 22718127 PMCID: 3416085 DOI: 10.1128/COVI.00197-12
222. Nagpal A, Pritt BS, **Patel R**. PHOTO QUIZ. A 46-year-old man with recurrent fever and chills. *Clin Infect Dis*. 2012 Aug; 55 (3):413, 469-70 PMID: 22786960 DOI: 10.1093/cid/cis130
223. Zheng X, O'Leary A, Uhl JR, **Patel R**, Shulman ST. Rapid detection of *Streptococcus pyogenes* in pleural fluid samples from pediatric patients with empyema. *J Clin Microbiol*. 2012 Aug; 50(8):2786-7. Epub 2012 May 23. PMID: 22622442 PMCID: 3421500 DOI: 10.1128/JCM.00603-12
224. Theel ES, Schmitt BH, Hall L, Cunningham SA, Walchak RC, **Patel R**, Wengenack NL. Formic acid-based direct, on-plate testing of yeast and *Corynebacterium* species by Bruker Biotyper matrix-assisted laser desorption ionization-time of flight mass spectrometry. *J Clin Microbiol*. 2012 Sep; 50 (9):3093-5 Epub 2012 July 03 PMID: 22760034 PMCID: 3421773 DOI: 10.1128/JCM.01045-12
225. Karau MJ, Tilahun AY, Schmidt SM, Clark CR, **Patel R**, Rajagopalan G. Linezolid is superior to vancomycin in experimental pneumonia caused by Superantigen-Producing *Staphylococcus aureus* in HLA class II transgenic mice. *Antimicrob Agents Chemother*. 2012 Oct; 56 (10):5401-5 Epub 2012 July 30 PMID: 22850509 PMCID: 3457354 DOI: 10.1128/AAC.01080-12
226. * Khanna S, Pardi DS, Rosenblatt JE, **Patel R**, Kammer PP, Baddour LM. An evaluation of repeat stool testing for *Clostridium difficile* infection by polymerase chain reaction. *J Clin Gastroenterol*. 2012 Nov-Dec; 46 (10):846-9 PMID: 22334221 DOI: 10.1097/MCG.0b013e3182432273
227. Maduka-Ezeh AN, Greenwood-Quaintance KE, Karau MJ, Berbari EF, Osmon DR, Hanssen AD, Steckelberg JM, **Patel R**. Antimicrobial susceptibility and biofilm formation of *Staphylococcus epidermidis* small colony variants associated with prosthetic joint infection. *Diagn Microbiol Infect Dis*. 2012 Nov; 74(3):224-9. Epub 2012 Aug 15. PMID: 22901790 DOI: 10.1016/j.diagmicrobio.2012.06.029
228. Gomez E, Cazanave C, Cunningham SA, Greenwood-Quaintance KE, Steckelberg JM, Uhl JR, Hanssen AD, Karau MJ, Schmidt SM, Osmon DR, Berbari EF, Mandrekar J, **Patel R**. Prosthetic joint infection diagnosis using broad-range PCR of biofilms dislodged from knee and hip arthroplasty surfaces using sonication. *J Clin Microbiol*. 2012 Nov; 50 (11):3501-8 Epub 2012 Aug 15 PMID: 22895042 PMCID: 3486250 DOI: 10.1128/JCM.00834-12
229. Tande AJ, Cunningham SA, Raoult D, Sim FH, Berbari EF, **Patel R**. A case of Q fever prosthetic joint

- infection and description of an assay for detection of *Coxiella burnetii*. *J Clin Microbiol*. 2013 Jan; 51 (1):66-9 Epub 2012 Oct 17 PMID: 23077126 PMCID: 3536193 DOI: 10.1128/JCM.02352-12
230. Karau MJ, Greenwood-Quaintance KE, Schmidt SM, Tran NV, Convery PA, Jacobson SR, Bite U, Clay RP, Petty PM, Johnson CH, Mandrekar J, **Patel R**. Microbial biofilms and breast tissue expanders. *Biomed Res Int*. 2013; 2013:254940 Epub 2013 July 16 PMID: 23956974 PMCID: 3730356 DOI: 10.1155/2013/254940
231. Cunningham SA, Mandrekar JN, Rosenblatt JE, **Patel R**. Rapid PCR Detection of *Mycoplasma hominis*, *Ureaplasma urealyticum*, and *Ureaplasma parvum*. *Int J Bacteriol*. 2013; 2013:168742 Epub 2013 Mar 11 PMID: 26904723 PMCID: 4745450 DOI: 10.1155/2013/168742
232. Karau MJ, Schmidt-Malan SM, Greenwood-Quaintance KE, Mandrekar J, Cai J, Pierce WM Jr, Merten K, **Patel R**. Treatment of Methicillin-resistant *Staphylococcus aureus* experimental Osteomyelitis with bone-targeted Vancomycin. *Springerplus*. 2013; 2:329 Epub 2013 July 18 PMID: 25674391 PMCID: 4320154 DOI: 10.1186/2193-1801-2-329
233. **Patel R**. MALDI-TOF mass spectrometry: transformative proteomics for clinical microbiology. *Clin Chem*. 2013 Feb; 59 (2):340-2 Epub 2012 June 04 PMID: 22665917 DOI: 10.1373/clinchem.2012.183558
234. Leekha S, Irish CL, Schneider SK, Fernholz EC, Espy MJ, Cunningham SA, **Patel R**, Juhn YJ, Pritt B, Smith TF, Sampathkumar P. Viral detection using a multiplex polymerase chain reaction-based assay in outpatients with upper respiratory infection. *Diagn Microbiol Infect Dis*. 2013 Feb; 75 (2):169-73 Epub 2012 Nov 22 PMID: 23182565 PMCID: 7127585 DOI: 10.1016/j.diagmicrobio.2012.10.016
235. Abidi MZ, Wilhelm MP, Neff JL, Hughes JG, Cunningham SA, **Patel R**. *Helicobacter canis* bacteremia in a patient with fever of unknown origin. *J Clin Microbiol*. 2013 Mar; 51 (3):1046-8 Epub 2013 Jan 02 PMID: 23284025 PMCID: 3592094 DOI: 10.1128/JCM.02548-12
236. Schmitt BH, Cunningham SA, Dailey AL, Gustafson DR, **Patel R**. Identification of anaerobic bacteria by Bruker Biotyper matrix-assisted laser desorption ionization-time of flight mass spectrometry with on-plate formic acid preparation. *J Clin Microbiol*. 2013 Mar; 51 (3):782-6 Epub 2012 Dec 19 PMID: 23254126 PMCID: 3592085 DOI: 10.1128/JCM.02420-12
237. Cunningham SA, Noorie T, Meunier D, Woodford N, **Patel R**. Rapid and simultaneous detection of genes encoding *Klebsiella pneumoniae* carbapenemase (*blaKPC*) and New Delhi metallo-beta-lactamase (*blaNDM*) in Gram-negative bacilli. *J Clin Microbiol*. 2013 Apr; 51 (4):1269-71 Epub 2013 Jan 23 PMID: 23345290 PMCID: 3666784 DOI: 10.1128/JCM.03062-12
238. Leekha S, Aronhalt KC, Sloan LM, **Patel R**, Orenstein R. Asymptomatic *Clostridium difficile* colonization in a tertiary care hospital: admission prevalence and risk factors. *Am J Infect Control*. 2013 May; 41 (5):390-3 PMID: 23622704 DOI: 10.1016/j.ajic.2012.09.023
239. Cunningham SA, **Patel R**. Importance of using Bruker's security-relevant library for Biotyper identification of *Burkholderia pseudomallei*, *Brucella* species, and *Francisella tularensis*. *J Clin Microbiol*. 2013 May; 51 (5):1639-40 Epub 2013 Feb 27 PMID: 23447635 PMCID: 3647932 DOI: 10.1128/JCM.00267-13
240. Banerjee R, Fernandez MG, Enthaler N, Graml C, Greenwood-Quaintance KE, **Patel R**. Combinations of cefoxitin plus other beta-lactams are synergistic in vitro against community associated methicillin-resistant *Staphylococcus aureus*. *Eur J Clin Microbiol Infect Dis*. 2013 Jun; 32 (6):827-33 Epub 2013 Jan 23 PMID: 23340864 DOI: 10.1007/s10096-013-1817-9
241. Binnicker MJ, Baddour LM, Grys TE, Espy MJ, Hata DJ, Wotton JT, **Patel R**. Identification of an influenza A H1N1/2009 virus with mutations in the matrix gene causing a negative result by a commercial molecular assay. *J Clin Microbiol* 2013 Jun; 51 (6):2006-7 Epub 2013 Apr 03 PMID: 23554187 PMCID: 3716063 DOI: 10.1128/JCM.00446-13
242. Giesen CD, Greeno AM, Thompson KA, **Patel R**, Jenkins SM, Lieske JC. Performance of flow cytometry to screen urine for bacteria and white blood cells prior to urine culture. *Clin Biochem*. 2013 Jun; 46(9):810-3. Epub 2013 Mar 13. PMID: 23500010 DOI: 10.1016/j.clinbiochem.2013.03.005
243. Brinkman CL, Vergidis P, Uhl JR, Pritt BS, Cockerill FR, Steckelberg JM, Baddour LM, Maleszewski JJ, Edwards WD, Sampath R, **Patel R**. PCR-electrospray ionization mass spectrometry for direct detection of pathogens and antimicrobial resistance from heart valves in patients with infective endocarditis. *J Clin Microbiol*. 2013 Jul; 51 (7):2040-6 Epub 2013 Apr 17 PMID: 23596241 PMCID: 3697732 DOI: 10.1128/JCM.00304-13
244. Cazanave C, Greenwood-Quaintance KE, Hanssen AD, Karau MJ, Schmidt SM, Gomez Urena EO, Mandrekar JN, Osmon DR, Lough LE, Pritt BS, Steckelberg JM, **Patel R**. Rapid molecular microbiologic diagnosis of prosthetic joint infection. *J Clin Microbiol*. 2013 Jul; 51 (7):2280-7 Epub 2013 May 08 PMID: 23658273 PMCID: 3697690 DOI: 10.1128/JCM.00335-13
245. Baron EJ, Miller JM, Weinstein MP, Richter SS, Gilligan PH, Thomson RB Jr, Bourbeau P, Carroll KC, Kehl

- SC, Dunne WM, Robinson-Dunn B, Schwartzman JD, Chapin KC, Snyder JW, Forbes BA, **Patel R**, Rosenblatt JE, Pritt BS. A guide to utilization of the microbiology laboratory for diagnosis of infectious diseases: 2013 recommendations by the Infectious Diseases Society of America (IDSA) and the American Society for Microbiology (ASM)(a). *Clin Infect Dis*. 2013 Aug; 57 (4):e22-e121 Epub 2013 July 10 PMID: 23845951 PMCID: 3719886 DOI: 10.1093/cid/cit278
246. Baron EJ, Miller JM, Weinstein MP, Richter SS, Gilligan PH, Thomson RB Jr, Bourbeau P, Carroll KC, Kehl SC, Dunne WM, Robinson-Dunn B, Schwartzman JD, Chapin KC, Snyder JW, Forbes BA, **Patel R**, Rosenblatt JE, Pritt BS. Executive summary: a guide to utilization of the microbiology laboratory for diagnosis of infectious diseases: 2013 recommendations by the Infectious Diseases Society of America (IDSA) and the American Society for Microbiology (ASM)(a). *Clin Infect Dis*. 2013 Aug; 57 (4):485-8 PMID: 23881727 PMCID: 3719893 DOI: 10.1093/cid/cit441
247. **Patel R**. Matrix-assisted laser desorption ionization-time of flight mass spectrometry in clinical microbiology. *Clin Infect Dis*. 2013 Aug; 57 (4):564-72 Epub 2013 Apr 17 PMID: 23595835 DOI: 10.1093/cid/cit247
248. Degnim AC, Scow JS, Hoskin TL, Miller JP, Loprinzi M, Boughey JC, Jakub JW, Throckmorton A, **Patel R**, Baddour LM. Randomized controlled trial to reduce bacterial colonization of surgical drains after breast and axillary operations. *Ann Surg*. 2013 Aug; 258 (2):240-7 PMID: 23518704 PMCID: 3954532 DOI: 10.1097/SLA.0b013e31828c0b85
249. Vasoo S, Cunningham SA, Kohner PC, Simner PJ, Mandrekar JN, Lolans K, Hayden MK, **Patel R**. Comparison of a novel, rapid chromogenic biochemical assay, the Carba NP test, with the modified Hodge test for detection of carbapenemase-producing Gram-negative bacilli. *J Clin Microbiol*. 2013 Sep; 51 (9):3097-101 Epub 2013 July 03 PMID: 23824767 PMCID: 3754676 DOI: 10.1128/JCM.00965-13
250. Vasoo S, Cunningham SA, Kohner PC, Mandrekar JN, Lolans K, Hayden MK, **Patel R**. Rapid and direct real-time detection of blaKPC and blaNDM from surveillance samples. *J Clin Microbiol*. 2013 Nov; 51(11):3609-15. Epub 2013 Aug 21. PMID: 23966498 PMCID: 3889741 DOI: 10.1128/JCM.01731-13
251. Schmitt BH, Sloan LM, **Patel R**. Real-time PCR detection of *Mycoplasma pneumoniae* in respiratory specimens. *Diagn Microbiol Infect Dis*. 2013 Nov; 77 (3):202-5 Epub 2013 Sept 14 PMID: 24041553 DOI: 10.1016/j.diagmicrobio.2013.07.016
252. Burnham CA, Dunne WM Jr, Greub G, Novak SM, **Patel R**. Automation in the clinical microbiology laboratory. *Clin Chem*. 2013 Dec; 59(12):1696-702. Epub 2013 May 20. PMID: 23690497 DOI: 10.1373/clinchem.2012.201038
253. Chambers HF, Bartlett JG, Bonomo RA, Chiou C, Cosgrove SE, Cross HR, Daum RS, Downing M, Evans SR, Knisely J, Kreiswirth BN, Lautenbach E, Mickley BS, **Patel R**, Pettigrew MM, Rodvold KA, Spellberg B, Fowler VG. Antibacterial resistance leadership group: open for business. *Clin Infect Dis*. 2014; 58(11):1571-6. PMID: 24610430 PMCID: 4017892
254. Campeau ME, **Patel R**. Antibiofilm Activity of Manuka Honey in Combination with Antibiotics. *Int J Bacteriol*. 2014; 2014:795281 Epub 2014 Feb 26 PMID: 26904740 PMCID: 4745454 DOI: 10.1155/2014/795281
255. **Patel R**. MALDI-TOFF mass spectrometry: transformative proteomics in clinical microbiology. *Klinicheskaya Laboratornaya Diagnostika*. 2014; (11):8-10.
256. Tilahun AY, Karau M, Ballard A, Gunaratna MP, Thapa A, David CS, **Patel R**, Rajagopalan G. The impact of *Staphylococcus aureus*-associated molecular patterns on staphylococcal superantigen-induced toxic shock syndrome and pneumonia. *Mediators Inflamm*. 2014; 2014:468285 Epub 2014 June 12 PMID: 25024509 PMCID: 4082930 DOI: 10.1155/2014/468285
257. Greenwood-Quaintance KE, Uhl JR, Hanssen AD, Sampath R, Mandrekar JN, **Patel R**. Diagnosis of prosthetic joint infection by use of PCR-electrospray ionization mass spectrometry. *J Clin Microbiol*. 2014 Feb; 52 (2):642-9 Epub 2013 Nov 27 PMID: 24478503 PMCID: 3911314 DOI: 10.1128/JCM.03217-13
258. Vasoo S, Madigan T, Cunningham SA, Mandrekar JN, Porter SB, Johnston B, Sampathkumar P, Tosh PK, Johnson JR, **Patel R**, Banerjee R. Prevalence of rectal colonization with multidrug-resistant Enterobacteriaceae among international patients hospitalized at Mayo Clinic, Rochester, Minnesota. *Infect Control Hosp Epidemiol*. 2014 Feb; 35 (2):182-6 PMID: 24442082 DOI: 10.1086/674853
259. Tande AJ, **Patel R**. Prosthetic joint infection. *Clin Microbiol Rev*. 2014 Apr; 27 (2):302-45 PMID: 24696437 PMCID: 3993098 DOI: 10.1128/CMR.00111-13
260. Vasoo S, Schwab JJ, Cunningham SA, Robinson TJ, Cass JR, Berbari EF, Walker RC, Osmon DR, **Patel R**. *Campylobacter* prosthetic joint infection. *J Clin Microbiol*. 2014 May; 52 (5):1771-4 Epub 2014 Feb 12 PMID: 24523462 PMCID: 3993679 DOI: 10.1128/JCM.03572-13
261. Melendez DP, Uhl JR, Greenwood-Quaintance KE, Hanssen AD, Sampath R, **Patel R**. Detection of prosthetic

- joint infection by use of PCR-electrospray ionization mass spectrometry applied to synovial fluid. *J Clin Microbiol.* 2014 Jun; 52 (6):2202-5 Epub 2014 Apr 09 PMID: 24719438 PMCID: 4042771 DOI: 10.1128/JCM.00570-14
262. Buckwalter SP, Sloan LM, Cunningham SA, Espy MJ, Uhl JR, Jones MF, Vetter EA, Mandrekar J, Cockerill FR 3rd, Pritt BS, **Patel R**, Wengenack NL. Inhibition controls for qualitative real-time PCR assays: are they necessary for all specimen matrices? *J Clin Microbiol.* 2014 Jun; 52 (6):2139-43 Epub 2014 Apr 16 PMID: 24740078 PMCID: 4042775 DOI: 10.1128/JCM.03389-13
263. Cunningham SA, Mainella JM, **Patel R**. Misidentification of *Neisseria polysaccharea* as *Neisseria meningitidis* with the use of matrix-assisted laser desorption ionization-time of flight mass spectrometry. *J Clin Microbiol.* 2014 Jun; 52 (6):2270-1 Epub 2014 Apr 02 PMID: 24696027 PMCID: 4042766 DOI: 10.1128/JCM.00664-14
264. Gomez E, Kennedy CC, Gottschalk M, Cunningham SA, **Patel R**, Virk A. Streptococcus suis-related prosthetic joint infection and streptococcal toxic shock-like syndrome in a pig farmer in the United States. *J Clin Microbiol.* 2014 Jun; 52 (6):2254-8 Epub 2014 Apr 09 PMID: 24719433 PMCID: 4042794 DOI: 10.1128/JCM.02934-13
265. Chung JW, Karau MJ, Greenwood-Quaintance KE, Ballard AD, Tilahun A, Khaleghi SR, David CS, **Patel R**, Rajagopalan G. Superantigen profiling of *Staphylococcus aureus* infective endocarditis isolates. *Diagn Microbiol Infect Dis.* 2014 Jun; 79 (2):119-24 Epub 2014 Mar 17 PMID: 24745820 PMCID: 4031024 DOI: 10.1016/j.diagmicrobio.2014.03.009
266. Farrell JJ, Larson JA, Akeson JW, Lowery KS, Rounds MA, Sampath R, Bonomo RA, **Patel R**. *Ureaplasma parvum* prosthetic joint infection detected by PCR. *J Clin Microbiol.* 2014 Jun; 52 (6):2248-50 Epub 2014 Mar 26 PMID: 24671783 PMCID: 4042745 DOI: 10.1128/JCM.00432-14
267. Vasoo S, Mason EL, Gustafson DR, Cunningham SA, Cole NC, Vetter EA, Steinmann SP, Wilson WR, **Patel R**, Berbari EF, Henry NK. *Desulfovibrio legallii* prosthetic shoulder joint infection and review of antimicrobial susceptibility and clinical characteristics of *Desulfovibrio* infections. *J Clin Microbiol.* 2014 Aug; 52 (8):3105-10 Epub 2014 May 21 PMID: 24850351 PMCID: 4136176 DOI: 10.1128/JCM.00083-14
268. Ryu SY, Greenwood-Quaintance KE, Hanssen AD, Mandrekar JN, **Patel R**. Low sensitivity of periprosthetic tissue PCR for prosthetic knee infection diagnosis. *Diagn Microbiol Infect Dis.* 2014 Aug; 79 (4):448-53 Epub 2014 Apr 12 PMID: 24972853 DOI: 10.1016/j.diagmicrobio.2014.03.021
269. Del Pozo JL, Rouse MS, Euba G, Greenwood-Quaintance KE, Mandrekar JN, Steckelberg JM, **Patel R**. Prevention of *Staphylococcus epidermidis* biofilm formation using electrical current. *J Appl Biomater Funct Mater.* 2014 Sep 5; 12 (2):81-3 Epub 2014 Sept 05 PMID: 25097026 PMCID: 6067010 DOI: 10.5301/jabfm.5000208
270. Tande AJ, Osmon DR, Greenwood-Quaintance KE, Mabry TM, Hanssen AD, **Patel R**. Clinical characteristics and outcomes of prosthetic joint infection caused by small colony variant staphylococci. *mBio.* 2014 Sep 30; 5 (5):e01910-14 Epub 2014 Sept 30 PMID: 25271290 PMCID: 4196237 DOI: 10.1128/mBio.01910-14
271. Khare R, Espy MJ, Cebelinski E, Boxrud D, Sloan LM, Cunningham SA, Pritt BS, **Patel R**, Binnicker MJ. Comparative evaluation of two commercial multiplex panels for detection of gastrointestinal pathogens by use of clinical stool specimens. *J Clin Microbiol.* 2014 Oct; 52 (10):3667-73 Epub 2014 Aug 06 PMID: 25100818 PMCID: 4187753 DOI: 10.1128/JCM.01637-14
272. Theofiles AG, Cunningham SA, Chia N, Jeraldo PR, Quest DJ, Mandrekar JN, **Patel R**. Pertussis outbreak, southeastern Minnesota, 2012. *Mayo Clin Proc.* 2014 Oct; 89 (10):1378-88 PMID: 25282430 PMCID: 4400804 DOI: 10.1016/j.mayocp.2014.08.004
273. Degnim AC, Hoskin TL, Brahmabhatt RD, Warren-Peled A, Loprinzi M, Pavey ES, Boughey JC, Hieken TJ, Jacobson S, Lemaine V, Jakub JW, Irwin C, Foster RD, Sbitany H, Saint-Cyr M, Duralde E, Ramaker S, Chin R, Sieg M, Wildeman M, Scow JS, **Patel R**, Ballman K, Baddour LM, Esserman LJ. Randomized trial of drain antiseptics after mastectomy and immediate prosthetic breast reconstruction. *Ann Surg Oncol.* 2014 Oct; 21 (10):3240-8 Epub 2014 Aug 06 PMID: 25096386 PMCID: 4373621 DOI: 10.1245/s10434-014-3918-9
274. Gupta A, **Patel R**, Baddour LM, Pardi DS, Khanna S. Extraintestinal *Clostridium difficile* infections: a single-center experience. *Mayo Clin Proc.* 2014 Nov; 89 (11):1525-36 Epub 2014 Sept 20 PMID: 25245597 DOI: 10.1016/j.mayocp.2014.07.012
275. Frank KL, Vergidis P, Brinkman CL, Greenwood Quaintance KE, Barnes AM, Mandrekar JN, Schlievert PM, Dunny GM, **Patel R**. Evaluation of the *Enterococcus faecalis* Biofilm-Associated Virulence Factors AhrC and Eep in Rat Foreign Body Osteomyelitis and In Vitro Biofilm-Associated Antimicrobial Resistance. *PLoS One.* 2015; 10 (6):e0130187 Epub 2015 June 15 PMID: 26076451 PMCID: 4467866 DOI: 10.1371/journal.pone.0130187
276. Tyner H, **Patel R**. Hyaluronidase in Clinical Isolates of *Propionibacterium acnes*. *Int J Bacteriol.* 2015; 2015:218918 Epub 2015 Feb 18 PMID: 26904745 PMCID: 4745459 DOI: 10.1155/2015/218918
277. **Patel R**. MALDI-TOF MS for the diagnosis of infectious diseases. *Clin Chem.* 2015 Jan; 61 (1):100-11 Epub

2014 Oct 02 PMID: 25278500 DOI: 10.1373/clinchem.2014.221770

278. Murray MA, Schulz LA, Furst JW, Homme JH, Jenkins SM, Uhl JR, **Patel R**, Cockerill FC, Myers JF, Pritt BS. Equal performance of self-collected and health care worker-collected pharyngeal swabs for group A streptococcus testing by PCR. *J Clin Microbiol*. 2015 Feb; 53 (2):573-8 Epub 2014 Dec 10 PMID: 25502528 PMCID: 4298563 DOI: 10.1128/JCM.02500-14
279. Peel TN, Cole NC, Dylla BL, **Patel R**. Matrix-assisted laser desorption ionization time of flight mass spectrometry and diagnostic testing for prosthetic joint infection in the clinical microbiology laboratory. *Diagn Microbiol Infect Dis*. 2015 Mar; 81(3):163-8. Epub 2014 Dec 03. PMID: 25533615 DOI: 10.1016/j.diagmicrobio.2014.11.015
280. Kim CK, Karau MJ, Greenwood-Quaintance KE, Tilahun AY, David CS, Mandrekar JN, **Patel R**, Rajagopalan G. Superantigens in *Staphylococcus aureus* isolated from prosthetic joint infection. *Diagn Microbiol Infect Dis*. 2015 Mar; 81 (3):201-7 Epub 2014 Nov 24 PMID: 25619753 PMCID: 4336809 DOI: 10.1016/j.diagmicrobio.2014.11.007
281. Nagpal A, **Patel R**, Greenwood-Quaintance KE, Baddour LM, Lynch DT, Lahr BD, Maleszewski JJ, Friedman PA, Hayes DL, Sohail MR. Usefulness of sonication of cardiovascular implantable electronic devices to enhance microbial detection. *Am J Cardiol*. 2015 Apr 1; 115 (7):912-7 Epub 2015 Jan 14 PMID: 25779615 PMCID: 4545652 DOI: 10.1016/j.amjcard.2015.01.017
282. Bharat A, Cunningham SA, Scott Budinger GR, Kreisel D, DeWet CJ, Gelman AE, Waites K, Crabb D, Xiao L, Borhade S, Ambalavanan N, Dilling DF, Lowery EM, Astor T, Hachem R, Krupnick AS, DeCamp MM, Ison MG, **Patel R**. Disseminated *Ureaplasma* infection as a cause of fatal hyperammonemia in humans. *Sci Transl Med*. 2015 Apr 22; 7 (284):284re3 PMID: 25904745 PMCID: 4677674 DOI: 10.1126/scitranslmed.aaa8419
283. Greenwood-Quaintance KE, Kohner P, Osmon DR, Virk A, **Patel R**. Ceftriaxone susceptibility of oxacillin-susceptible *Staphylococcus aureus* from patients with prosthetic joint infection. *Diagn Microbiol Infect Dis*. 2015 Jun; 82: (2)177-8. PMID: 25842182 DOI: 10.1016/j.diagmicrobio.2015.03.002
284. Vergidis P, Schmidt-Malan SM, Mandrekar JN, Steckelberg JM, **Patel R**. Comparative activities of vancomycin, tigecycline and rifampin in a rat model of methicillin-resistant *Staphylococcus aureus* osteomyelitis. *J Infect*. 2015 Jun; 70 (6):609-15 Epub 2015 Jan 07 PMID: 25576292 DOI: 10.1016/j.jinf.2014.12.016
285. Sadarangani SP, Cunningham SA, Jeraldo PR, Wilson JW, Khare R, **Patel R**. Metronidazole- and carbapenem-resistant *Bacteroides thetaiotaomicron* isolated in Rochester, Minnesota, in 2014. *Antimicrob Agents Chemother*. 2015 Jul; 59 (7):4157-61 Epub 2015 May 04 PMID: 25941219 PMCID: 4468676 DOI: 10.1128/AAC.00677-15
286. Schmidt-Malan SM, Karau MJ, Cede J, Greenwood-Quaintance KE, Brinkman CL, Mandrekar JN, **Patel R**. Antibiofilm Activity of Low-Amperage Continuous and Intermittent Direct Electrical Current. *Antimicrob Agents Chemother*. 2015 Aug; 59 (8):4610-5 Epub 2015 May 26 PMID: 26014944 PMCID: 4505246 DOI: 10.1128/AAC.00483-15
287. Brinkman CL, Tyner HL, Schmidt-Malan SM, Mandrekar JN, **Patel R**. Causes and Implications of the Disappearance of Rifampin Resistance in a Rat Model of Methicillin-Resistant *Staphylococcus aureus* Foreign Body Osteomyelitis. *Antimicrob Agents Chemother*. 2015 Aug; 59 (8):4481-8 Epub 2015 May 18 PMID: 25987614 PMCID: 4505282 DOI: 10.1128/AAC.05078-14
288. Chung JW, Greenwood-Quaintance KE, Karau MJ, Tilahun A, Khaleghi SR, Chowdhary VR, David CS, **Patel R**, Rajagopalan G. Superantigens produced by catheter-associated *Staphylococcus aureus* elicit systemic inflammatory disease in the absence of bacteremia. *J Leukoc Biol*. 2015 Aug; 98 (2):271-81 Epub 2015 May 15 PMID: 25979434 PMCID: 4501677 DOI: 10.1189/jlb.4A1214-577RR
289. Banerjee R, Teng CB, Cunningham SA, Ihde SM, Steckelberg JM, Moriarty JP, Shah ND, Mandrekar JN, **Patel R**. Randomized Trial of Rapid Multiplex Polymerase Chain Reaction-Based Blood Culture Identification and Susceptibility Testing. *Clin Infect Dis*. 2015 Oct 1; 61 (7):1071-80 Epub 2015 July 20 PMID: 26197846 PMCID: 4560903 DOI: 10.1093/cid/civ447
290. Snyderman DR, McDermott LA, Jacobus NV, Thorpe C, Stone S, Jenkins SG, Goldstein EJ, **Patel R**, Forbes BA, Mirrett S, Johnson S, Gerding DN. U.S.-Based National Sentinel Surveillance Study for the Epidemiology of *Clostridium difficile*-Associated Diarrheal Isolates and Their Susceptibility to Fidaxomicin. *Antimicrob Agents Chemother*. 2015 Oct; 59 (10):6437-43 Epub 2015 Aug 03 PMID: 26239985 PMCID: 4576112 DOI: 10.1128/AAC.00845-15
291. Jeraldo P, Cunningham SA, Quest D, Sikkink RA, O'Brien D, Eckloff BW, **Patel R**, Chia N. Draft Genome Sequences of Nine *Pseudomonas aeruginosa* Strains, Including Eight Clinical Isolates. *Genome Announc*. 2015 Oct 8; 3 (5) Epub 2015 Oct 08 PMID: 26450729 PMCID: 4599088 DOI: 10.1128/genomeA.01154-15
292. Shah NB, Tande AJ, **Patel R**, Berbari EF. Anaerobic prosthetic joint infection. *Anaerobe*. 2015 Dec; 36:1-8.

PMID: 26341272 DOI: 10.1016/j.anaerobe.2015.08.003

293. Houdek MT, Greenwood-Quaintance KE, Morrey ME, **Patel R**, Hanssen AD. Elution of High Dose Amphotericin B Deoxycholate From Polymethylmethacrylate. *J Arthroplasty*. 2015 Dec; 30 (12):2308-10 Epub 2015 June 11 PMID: 26162513 DOI: 10.1016/j.arth.2015.06.002
294. Gregory SW, Boyce TG, Larson AN, **Patel R**, Jackson MA. *Fusobacterium nucleatum* Osteomyelitis in 3 Previously Healthy Children: A Case Series and Review of the Literature. *J Pediatric Infect Dis Soc*. 2015 Dec; 4 (4):e155-9 Epub 2015 Aug 25 PMID: 26407282 PMCID: 4681383 DOI: 10.1093/jpids/piv052
295. Vasoo S, Cunningham SA, Cole NC, Kohner PC, Menon SR, Krause KM, Harris KA, De PP, Koh TH, **Patel R**. In Vitro Activities of Ceftazidime-Avibactam, Aztreonam-Avibactam, and a Panel of Older and Contemporary Antimicrobial Agents against Carbapenemase-Producing Gram-Negative Bacilli. *Antimicrob Agents Chemother*. 2015 Dec; 59 (12):7842-6 Epub 2015 Sept 21 PMID: 26392487 PMCID: 4649150 DOI: 10.1128/AAC.02019-15
296. Kim CK, Karau MJ, Greenwood-Quaintance KE, Tilahun AY, Krogman A, David CS, Pritt BS, **Patel R**, Rajagopalan G. Superantigen-Producing *Staphylococcus aureus* Elicits Systemic Immune Activation in a Murine Wound Colonization Model. *Toxins (Basel)*. 2015 Dec 8; 7 (12):5308-19 Epub 2015 Dec 08 PMID: 26670252 PMCID: 4690136 DOI: 10.3390/toxins7124886
297. Albayati ZA, Sunkara M, Schmidt-Malan SM, Karau MJ, Morris AJ, Steckelberg JM, **Patel R**, Breen PJ, Smeltzer MS, Taylor KG, Merten KE, Pierce WM, Crooks PA. Novel Bone-Targeting Agent for Enhanced Delivery of Vancomycin to Bone. *Antimicrob Agents Chemother*. 2015 Dec 14; 60 (3):1865-8 PMID: 26666918 PMCID: 4776008 DOI: 10.1128/AAC.01609-15
298. Voegelé P, Badiola J, Schmidt-Malan SM, Karau MJ, Greenwood-Quaintance KE, Mandrekar JN, **Patel R**. Antibiofilm Activity of Electrical Current in a Catheter Model. *Antimicrob Agents Chemother*. 2015 Dec 28; 60 (3):1476-80 PMID: 26711752 PMCID: 4775985 DOI: 10.1128/AAC.01628-15
299. Gustafson CT, Boakye-Agyeman F, Brinkman CL, Reid JM, **Patel R**, Bajzer Z, Dadsetan M, Yaszemski MJ. Controlled Delivery of Vancomycin via Charged Hydrogels. *PLoS One*. 2016; 11 (1):e0146401 Epub 2016 Jan 13 PMID: 26760034 PMCID: 4711919 DOI: 10.1371/journal.pone.0146401
300. Ruiz-Ruigomez M, Badiola J, Schmidt-Malan SM, Greenwood-Quaintance K, Karau MJ, Brinkman CL, Mandrekar JN, **Patel R**. Direct Electrical Current Reduces Bacterial and Yeast Biofilm Formation. *Int J Bacteriol*. 2016; 2016:9727810 Epub 2016 Mar 17 PMID: 27073807 PMCID: 4814670 DOI: 10.1155/2016/9727810
301. Melendez DP, Greenwood-Quaintance KE, Berbari EF, Osmon DR, Mandrekar JN, Hanssen AD, **Patel R**. Evaluation of a Genus- and Group-Specific Rapid PCR Assay Panel on Synovial Fluid for Diagnosis of Prosthetic Knee Infection. *J Clin Microbiol*. 2016 Jan; 54 (1):120-6 Epub 2015 Nov 04 PMID: 26537446 PMCID: 4702737 DOI: 10.1128/JCM.02302-15
302. Brinkman CL, Schmidt-Malan SM, Karau MJ, Greenwood-Quaintance K, Hassett DJ, Mandrekar JN, **Patel R**. Exposure of Bacterial Biofilms to Electrical Current Leads to Cell Death Mediated in Part by Reactive Oxygen Species. *PLoS One*. 2016; 11 (12):e0168595 Epub 2016 Dec 19 PMID: 27992529 PMCID: 5167413 DOI: 10.1371/journal.pone.0168595
303. **Patel R**. MALDITOF MS for the diagnosis of infectious diseases *Biochimica Clinica*. 2016; 40: (2)154-65.
304. Marietta EV, Murray JA, Luckey DH, Jeraldo PR, Lamba A, **Patel R**, Luthra HS, Mangalam A, Taneja V. Suppression of inflammatory arthritis by human gut-derived *Prevotella histicola* in humanized mice *Arthritis & Rheumatology*. 2016; 68(12):2878-88. Epub 1900 Jan 01.
305. Wang X, Karau MJ, Greenwood-Quaintance KE, Block DR, Mandrekar JN, Cunningham SA, **Patel R**. *Ureaplasma urealyticum* Causes Hyperammonemia in an Experimental Immunocompromised Murine Model. *PLoS One*. 2016; 11 (8):e0161214 Epub 2016 Aug 18 PMID: 27537683 PMCID: 4990232 DOI: 10.1371/journal.pone.0161214
306. Peel TN, Dylla BL, Hughes JG, Lynch DT, Greenwood-Quaintance KE, Cheng AC, Mandrekar JN, **Patel R**. Improved Diagnosis of Prosthetic Joint Infection by Culturing Periprosthetic Tissue Specimens in Blood Culture Bottles. *mBio*. 2016 Jan 5; 7 (1):e01776-15 Epub 2016 Jan 05 PMID: 26733067 PMCID: 4725002 DOI: 10.1128/mBio.01776-15
307. Park KH, Greenwood-Quaintance KE, **Patel R**. In vitro activity of ceftaroline against staphylococci from prosthetic joint infection. *Diagn Microbiol Infect Dis*. 2016 Feb; 84: (2)141-3. PMID: 26602948 DOI: 10.1016/j.diagmicrobio.2015.10.012
308. Uhl JR, **Patel R**. Fifteen-Minute Detection of *Streptococcus pyogenes* in Throat Swabs by Use of a Commercially Available Point-of-Care PCR Assay. *J Clin Microbiol* 2016 Mar; 54 (3):815 Epub 2016 Jan 13

PMID: 26763964 PMCID: 4767987 DOI: 10.1128/JCM.03387-15

309. Parry JA, Karau MJ, Aho JM, Taunton M, **Patel R**. To Beard or Not to Beard? Bacterial Shedding Among Surgeons. *Orthopedics*. 2016 Mar-Apr; 39: (2)e290-4. PMID: 26942473
310. Norgan AP, Freese JM, Tuin PM, Cunningham SA, Jeraldo PR, **Patel R**. Carbapenem- and Colistin-Resistant *Enterobacter cloacae* from Delta, Colorado, in 2015. *Antimicrob Agents Chemother*. 2016 May; 60 (5):3141-4 Epub 2016 Apr 22 PMID: 26883705 PMCID: 4862446 DOI: 10.1128/AAC.03055-15
311. Cunningham SA, Vasoo S, **Patel R**. Evaluation of the Check-Points Check MDR CT103 and CT103 XL Microarray Kits by Use of Preparatory Rapid Cell Lysis. *J Clin Microbiol*. 2016 May; 54 (5):1368-71 Epub 2016 Feb 17 PMID: 26888905 PMCID: 4844729 DOI: 10.1128/JCM.03302-15
312. Pritt BS, Mead PS, Johnson DKH, Neitzel DF, Respicio-Kingry LB, Davis JP, Schiffman E, Sloan LM, Schriefer ME, Replogle AJ, Paskewitz SM, Ray JA, Bjork J, Steward CR, Deedon A, Lee X, Kingry LC, Miller TK, Feist MA, Theel ES, **Patel R**, Irish CL, Petersen JM. Identification of a novel pathogenic *Borrelia* species causing Lyme borreliosis with unusually high spirochaetaemia: a descriptive study. *Lancet Infect Dis*. 2016 May; 16 (5):556-564 Epub 2016 Feb 06 PMID: 26856777 PMCID: 4975683 DOI: 10.1016/S1473-3099(15)00464-8
313. Silva-Del Toro SL, Greenwood-Quaintance KE, **Patel R**. In vitro activity of tedizolid against linezolid-resistant staphylococci and enterococci. *Diagn Microbiol Infect Dis*. 2016 May; 85 (1):102-4 Epub 2016 Feb 09 PMID: 26971179 PMCID: 8067670 DOI: 10.1016/j.diagmicrobio.2016.02.008
314. Schmidt-Malan SM, Greenwood Quaintance KE, Karau MJ, **Patel R**. In vitro activity of tedizolid against staphylococci isolated from prosthetic joint infections. *Diagn Microbiol Infect Dis*. 2016 May; 85 (1):77-9 Epub 2016 Jan 12 PMID: 26906190 DOI: 10.1016/j.diagmicrobio.2016.01.008
315. Hasassri ME, Boyce TG, Norgan AP, Cunningham SA, Jeraldo PR, Weissman SJ, **Patel R**, Banerjee R, Pogue JM, Kaye KS. An Immunocompromised Child with Bloodstream Infection Caused by Two *Escherichia coli* Strains, One Harboring NDM-5 and the Other Harboring OXA-48-Like Carbapenemase. *Antimicrob Agents Chemother*. 2016 Jun; 60 (6):3270-5 Epub 2016 May 23 PMID: 27217442 PMCID: 4879384 DOI: 10.1128/AAC.03118-15
316. Park KH, Greenwood-Quaintance KE, Hanssen AD, Abdel MP, **Patel R**. Antimicrobial-Loaded Bone Cement Does Not Negatively Influence Sonicate Fluid Culture Positivity for Diagnosis of Prosthetic Joint Infection. *J Clin Microbiol*. 2016 Jun; 54 (6):1656-1659 Epub 2016 Mar 30 PMID: 27030490 PMCID: 4879271 DOI: 10.1128/JCM.00516-16
317. Rivera CG, Narayanan PP, **Patel R**, Estes LL. Impact of Cefepime Susceptible-Dose-Dependent MIC for Enterobacteriaceae on Reporting and Prescribing. *Antimicrob Agents Chemother*. 2016 Jun; 60 (6):3854-5 Epub 2016 May 23 PMID: 27067319 PMCID: 4879407 DOI: 10.1128/AAC.00442-16
318. Mushtaq A, Chen DJ, Strand GJ, Dylla BL, Cole NC, Mandrekar J, **Patel R**. Clinical significance of coryneform Gram-positive rods from blood identified by MALDI-TOF mass spectrometry and their susceptibility profiles - a retrospective chart review. *Diagn Microbiol Infect Dis*. 2016 Jul; 85 (3):372-376 Epub 2016 Apr 23 PMID: 27179368 DOI: 10.1016/j.diagmicrobio.2016.04.013
319. Velez Perez AL, Schmidt-Malan SM, Kohner PC, Karau MJ, Greenwood-Quaintance KE, **Patel R**. In vitro activity of ceftolozane/tazobactam against clinical isolates of *Pseudomonas aeruginosa* in the planktonic and biofilm states. *Diagn Microbiol Infect Dis*. 2016 Jul; 85 (3):356-359 Epub 2016 Feb 18 PMID: 27130477 DOI: 10.1016/j.diagmicrobio.2016.02.014
320. Reynolds MM, Greenwood-Quaintance KE, **Patel R**, Pulido JS. Selected Antimicrobial Activity of Topical Ophthalmic Anesthetics. *Transl Vis Sci Technol*. 2016 Jul; 5 (4):2 Epub 2016 July 05 PMID: 27441100 PMCID: 4942249 DOI: 10.1167/tvst.5.4.2
321. Fernandez J, Karau MJ, Cunningham SA, Greenwood-Quaintance KE, **Patel R**. Antimicrobial Susceptibility and Clonality of Clinical *Ureaplasma* Isolates in the United States. *Antimicrob Agents Chemother*. 2016 Aug; 60 (8):4793-8 Epub 2016 July 22 PMID: 27246773 PMCID: 4958210 DOI: 10.1128/AAC.00671-16
322. Norgan AP, Freese JM, Tuin PM, Cunningham SA, Jeraldo PR, **Patel R**. Carbapenem- and colistin-resistant *enterobacter cloacae* from Delta, Colorado, in 2015 (vol 60, pg 3141, 2016) *Antimicrobial Agents And Chemotherapy*. 2016 Aug; 60: (8)5106.
323. Thoendel M, Jeraldo PR, Greenwood-Quaintance KE, Yao JZ, Chia N, Hanssen AD, Abdel MP, **Patel R**. Comparison of microbial DNA enrichment tools for metagenomic whole genome sequencing. *J Microbiol Methods*. 2016 Aug; 127:141-145 Epub 2016 May 26 PMID: 27237775 PMCID: 5752108 DOI: 10.1016/j.mimet.2016.05.022
324. Hasassri ME, Boyce TG, Norgan AP, Cunningham SA, Jeraldo PR, Weissman SJ, **Patel R**, Banerjee R,

- Pogue JM, Kaye KS. Correction for Hasassri et al., An Immunocompromised Child with Bloodstream Infection Caused by Two *Escherichia coli* Strains, One Harboring NDM-5 and the Other Harboring OXA-48-Like Carbapenemase. *Antimicrob Agents Chemother*. 2016 Aug; 60 (8):5108 Epub 2016 July 22 PMID: 27451441 PMCID: 4958178 DOI: 10.1128/AAC.01338-16
325. Mushtaq A, Greenwood-Quaintance KE, Cole NC, Kohner PC, Ihde SM, Strand GJ, Harper LW, Virk A, **Patel R**. Differential Antimicrobial Susceptibilities of *Granulicatella adiacens* and *Abiotrophia defectiva*. *Antimicrob Agents Chemother*. 2016 Aug; 60 (8):5036-9 Epub 2016 July 22 PMID: 27216060 PMCID: 4958207 DOI: 10.1128/AAC.00485-16
326. Norgan AP, Freese JM, Tuin PM, Cunningham SA, Jeraldo PR, **Patel R**. Erratum for Norgan et al., Carbapenem- and Colistin-Resistant *Enterobacter cloacae* from Delta, Colorado, in 2015. *Antimicrob Agents Chemother*. 2016 Aug; 60 (8):5106 Epub 2016 July 22 PMID: 27451439 PMCID: 4958225 DOI: 10.1128/AAC.01219-16
327. Fernandez J, Greenwood-Quaintance KE, **Patel R**. In vitro activity of dalbavancin against biofilms of staphylococci isolated from prosthetic joint infections. *Diagn Microbiol Infect Dis*. 2016 Aug; 85: (4)449-51. PMID: 27241369 DOI: 10.1016/j.diagmicrobio.2016.05.009
328. Tyner H, **Patel R**. *Propionibacterium acnes* biofilm - A sanctuary for *Staphylococcus aureus*? *Anaerobe*. 2016 Aug; 40:63-7. PMID: 27241780 DOI: 10.1016/j.anaerobe.2016.05.014
329. Wadhwa A, Al Nahhas MF, Dierkhising RA, **Patel R**, Kashyap P, Pardi DS, Khanna S, Grover M. High risk of post-infectious irritable bowel syndrome in patients with *Clostridium difficile* infection. *Aliment Pharmacol Ther*. 2016 Sep; 44 (6):576-82 Epub 2016 July 22 PMID: 27444134 PMCID: 4982831 DOI: 10.1111/apt.13737
330. Evans SR, Pennello G, Pantoja-Galicia N, Jiang H, Hujer AM, Hujer KM, Manca C, Hill C, Jacobs MR, Chen L, **Patel R**, Kreiswirth BN, Bonomo RA, Antibacterial Resistance Leadership Group. Benefit-risk Evaluation for Diagnostics: A Framework (BED-FRAME). *Clin Infect Dis*. 2016 Sep 15; 63 (6):812-7 Epub 2016 May 18 PMID: 27193750 PMCID: 4996133 DOI: 10.1093/cid/ciw329
331. Khanna S#, Montassier E, Schmidt B, **Patel R**, Knights D, Pardi DS, Kashyap P. Gut microbiome predictors of treatment response and recurrence in primary *Clostridium difficile* infection. *Aliment Pharmacol Ther*. 2016 Oct; 44 (7):715-727 Epub 2016 Aug 02 PMID: 27481036 PMCID: 5012905 DOI: 10.1111/apt.13750
332. **Patel R**. New Developments in Clinical Bacteriology Laboratories. *Mayo Clin Proc*. 2016 Oct; 91 (10):1448-1459 Epub 2016 Aug 21 PMID: 27552910 PMCID: 5786463 DOI: 10.1016/j.mayocp.2016.06.020
333. Pritt BS, **Patel R**, Kirn TJ, Thomson RB Jr. Point-Counterpoint: A Nucleic Acid Amplification Test for *Streptococcus pyogenes* Should Replace Antigen Detection and Culture for Detection of Bacterial Pharyngitis. *J Clin Microbiol*. 2016 Oct; 54 (10):2413-9 Epub 2016 July 20 PMID: 27440817 PMCID: 5035405 DOI: 10.1128/JCM.01472-16
334. Ramanan P, Gebrehiwot S, Rucinski S, Dylla B, Wengenack NL, Hughes J, Ihde S, **Patel R**. Discrepancies Between Microbial Detection and Identification Using the Blood Culture Identification FilmArray Panel Assay and Standard Subculture of Positive Blood Culture Bottles *Open Forum Infectious Diseases*. 2016;
335. Park KH, Greenwood-Quaintance KE, Mandrekar J, **Patel R**. Activity of Tedizolid in Methicillin-Resistant *Staphylococcus aureus* Experimental Foreign Body-Associated Osteomyelitis. *Antimicrob Agents Chemother*. 2016 Nov; 60 (11):6568-6572 Epub 2016 Oct 21 PMID: 27550347 PMCID: 5075060 DOI: 10.1128/AAC.01248-16
336. Pritt BS, Respicio-Kingry LB, Sloan LM, Schriefer ME, Replogle AJ, Bjork J, Liu G, Kingry LC, Mead PS, Neitzel DF, Schiffman E, Hoang Johnson DK, Davis JP, Paskewitz SM, Boxrud D, Deedon A, Lee X, Miller TK, Feist MA, Steward CR, Theel ES, **Patel R**, Irish CL, Petersen JM. *Borrelia mayonii* sp. nov., a member of the *Borrelia burgdorferi* sensu lato complex, detected in patients and ticks in the upper midwestern United States. *Int J Syst Evol Microbiol*. 2016 Nov; 66 (11):4878-4880 Epub 2016 Aug 24 PMID: 27558626 PMCID: 5214957 DOI: 10.1099/ijsem.0.001445
337. Banerjee R, Ozenci V, **Patel R**. Individualized Approaches Are Needed for Optimized Blood Cultures. *Clin Infect Dis*. 2016 Nov 15; 63 (10):1332-1339 Epub 2016 Aug 23 PMID: 27558570 PMCID: 5091349 DOI: 10.1093/cid/ciw573
338. Marietta EV, Murray JA, Luckey DH, Jeraldo PR, Lamba A, **Patel R**, Luthra HS, Mangalam A, Taneja V. Suppression of Inflammatory Arthritis by Human Gut-Derived *Prevotella histicola* in Humanized Mice. *Arthritis Rheumatol*. 2016 Dec; 68 (12):2878-2888 PMID: 27337150 PMCID: 5125894 DOI: 10.1002/art.39785
339. Hefazi M, Damla M, Alkhateeb HB, Partain DK, **Patel R**, Razonable RR, Gastineau DA, Al-Kali A, Hashmi SK, Hogan WJ, Litzow MR, Patnaik MM. Vancomycin-resistant *Enterococcus* colonization and bloodstream infection: prevalence, risk factors, and the impact on early outcomes after allogeneic hematopoietic cell transplantation in patients with acute myeloid leukemia. *Transpl Infect Dis*. 2016 Dec; 18 (6):913-920 Epub 2016 Nov 11 PMID: 27642723 DOI: 10.1111/tid.12612

340. Evans SR, Hujer AM, Jiang H, Hill CB, Hujer KM, Mediavilla JR, Manca C, Tran TT, Domitrovic TN, Higgins PG, Seifert H, Kreiswirth BN, **Patel R**, Jacobs MR, Chen L, Sampath R, Hall T, Marzan C, Fowler VG Jr, Chambers HF, Bonomo RA. Informing Antibiotic Treatment Decisions: Evaluating Rapid Molecular Diagnostics To Identify Susceptibility and Resistance to Carbapenems against *Acinetobacter* spp. in PRIMERS III. *J Clin Microbiol*. 2017 Jan; 55 (1):134-144 Epub 2016 Dec 28 PMID: 27795336 PMCID: 5228224 DOI: 10.1128/JCM.01524-16
341. Park KH, Greenwood-Quaintance KE, Uhl JR, Cunningham SA, Chia N, Jeraldo PR, Sampathkumar P, Nelson H, **Patel R**. Molecular epidemiology of *Staphylococcus aureus* bacteremia in a single large Minnesota medical center in 2015 as assessed using MLST, core genome MLST and spa typing. *PLoS One*. 2017; 12 (6):e0179003 Epub 2017 June 02 PMID: 28575112 PMCID: 5456361 DOI: 10.1371/journal.pone.0179003
342. Peel TN, Spelman T, Dylla BL, Hughes JG, Greenwood-Quaintance KE, Cheng AC, Mandrekar JN, **Patel R**. Optimal Periprosthetic Tissue Specimen Number for Diagnosis of Prosthetic Joint Infection. *J Clin Microbiol*. 2017 Jan; 55 (1):234-243 Epub 2016 Dec 28 PMID: 27807152 PMCID: 5228235 DOI: 10.1128/JCM.01914-16
343. Schmidt-Malan SM, Brinkman CL, Greenwood-Quaintance KE, Karau MJ, Mandrekar JN, **Patel R**. Activity of Electrical Current in Experimental *Propionibacterium acnes* Foreign-Body Osteomyelitis. *Antimicrob Agents Chemother*. 2017 Feb; 61 (2) Epub 2017 Jan 24 PMID: 27821457 PMCID: 5278700 DOI: 10.1128/AAC.01863-16
344. Park KH, Greenwood-Quaintance KE, Schuetz AN, Mandrekar JN, **Patel R**. Activity of Tedizolid in Methicillin-Resistant *Staphylococcus epidermidis* Experimental Foreign Body-Associated Osteomyelitis. *Antimicrob Agents Chemother*. 2017 Feb; 61 (2) Epub 2017 Jan 24 PMID: 27855069 PMCID: 5278734 DOI: 10.1128/AAC.01644-16
345. **Patel R**, Tsalik EL, Petzold E, Fowler VG Jr, Klausner JD, Evans S, Antibacterial Resistance Leadership Group (ARLG). MASTERMIND: Bringing Microbial Diagnostics to the Clinic. *Clin Infect Dis*. 2017 Feb 1; 64 (3):355-360 Epub 2016 Dec 07 PMID: 27927867 PMCID: 5894935 DOI: 10.1093/cid/ciw788
346. Miller SA, Karichu J, Kohner P, Cole N, Hindler JA, **Patel R**, Richter S, Humphries RM. Multicenter Evaluation of a Modified Cefoxitin Disk Diffusion Method and PBP2a Testing To Predict *mecA*-Mediated Oxacillin Resistance in Atypical *Staphylococcus aureus*. *J Clin Microbiol*. 2017 Feb; 55 (2):485-494 Epub 2016 Nov 30 PMID: 27903603 PMCID: 5277518 DOI: 10.1128/JCM.02211-16
347. Brinkman CL, Schmidt-Malan SM, Mandrekar JN, **Patel R**. Rifampin-Based Combination Therapy Is Active in Foreign-Body Osteomyelitis after Prior Rifampin Monotherapy. *Antimicrob Agents Chemother*. 2017 Feb; 61 (2) Epub 2017 Jan 24 PMID: 27855064 PMCID: 5278745 DOI: 10.1128/AAC.01822-16
348. Snyderman DR, Jacobus NV, McDermott LA, Goldstein EJ, Harrell L, Jenkins SG, Newton D, **Patel R**, Hecht DW. Trends in antimicrobial resistance among *Bacteroides* species and *Parabacteroides* species in the United States from 2010-2012 with comparison to 2008-2009. *Anaerobe*. 2017 Feb; 43:21-26 Epub 2016 Nov 17 PMID: 27867083 DOI: 10.1016/j.anaerobe.2016.11.003
349. Norambuena GA, **Patel R**, Karau M, Wyles CC, Jannetto PJ, Bennet KE, Hanssen AD, Sierra RJ. Antibacterial and Biocompatible Titanium-Copper Oxide Coating May Be a Potential Strategy to Reduce Periprosthetic Infection: An In Vitro Study. *Clin Orthop Relat Res*. 2017 Mar; 475 (3):722-732 PMID: 26847453 PMCID: 5289154 DOI: 10.1007/s11999-016-4713-7
350. Bhatti MM, Rucinski SL, Schwab JJ, Cole NC, Gebrehiwot SA, **Patel R**. Eight-Year Review of *Bordetella pertussis* Testing Reveals Seasonal Pattern in the United States. *J Pediatric Infect Dis Soc*. 2017 Mar 1; 6 (1):91-93 PMID: 26621328 DOI: 10.1093/jpids/piv079
351. Wang X, Greenwood-Quaintance KE, Karau MJ, Block DR, Mandrekar JN, Cunningham SA, Mallea JM, **Patel R**. *Ureaplasma parvum* causes hyperammonemia in a pharmacologically immunocompromised murine model. *Eur J Clin Microbiol Infect Dis*. 2017 Mar; 36 (3):517-522 Epub 2016 Oct 28 PMID: 27796644 PMCID: 5310980 DOI: 10.1007/s10096-016-2827-1
352. Tsalik EL, Petzold E, Kreiswirth BN, Bonomo RA, Banerjee R, Lautenbach E, Evans SR, Hanson KE, Klausner JD, **Patel R**, and the Diagnostics and Devices Committee//of the Antibacterial Resistance Leadership Group. Advancing Diagnostics to Address Antibacterial Resistance: The Diagnostics and Devices Committee of the Antibacterial Resistance Leadership Group. *Clin Infect Dis*. 2017 Mar 15; 64 (suppl_1):S41-S47 PMID: 28350903 PMCID: 5848376 DOI: 10.1093/cid/ciw831
353. Manca C, Hill C, Hujer AM, **Patel R**, Evans SR, Bonomo RA, Kreiswirth BN, Laboratory Center of the Antibacterial Resistance Leadership Group (ARLG). Leading Antibacterial Laboratory Research by Integrating Conventional and Innovative Approaches: The Laboratory Center of the Antibacterial Resistance Leadership Group. *Clin Infect Dis*. 2017 Mar 15; 64 (suppl_1):S13-S17 PMID: 28350898 PMCID: 5848373 DOI: 10.1093/cid/ciw826
354. Anderson DJ, Jenkins TC, Evans SR, Harris AD, Weinstein RA, Tamma PD, Han JH, Banerjee R, **Patel R**, Zaoutis T, Lautenbach E, Stewardship and Infection Control Committee of the Antibacterial Resistance

- Leadership Group (ARLG). The Role of Stewardship in Addressing Antibacterial Resistance: Stewardship and Infection Control Committee of the Antibacterial Resistance Leadership Group. *Clin Infect Dis*. 2017 Mar 15; 64 (suppl_1):S36-S40 PMID: 28350902 PMCID: 5848301 DOI: 10.1093/cid/ciw830
355. Chen D, Cunningham SA, Cole NC, Kohner PC, Mandrekar JN, **Patel R**. Phenotypic and Molecular Antimicrobial Susceptibility of *Helicobacter pylori*. *Antimicrob Agents Chemother*. 2017 Apr; 61 (4) Epub 2017 Mar 24 PMID: 28167563 PMCID: 5365656 DOI: 10.1128/AAC.02530-16
356. Barnes AMT, Dale JL, Chen Y, Manias DA, Greenwood Quaintance KE, Karau MK, Kashyap PC, **Patel R**, Wells CL, Dunny GM. *Enterococcus faecalis* readily colonizes the entire gastrointestinal tract and forms biofilms in a germ-free mouse model. *Virulence*. 2017 Apr 3; 8 (3):282-296 Epub 2016 Aug 25 PMID: 27562711 PMCID: 5411234 DOI: 10.1080/21505594.2016.1208890
357. Karalius VP, Rucinski SL, Mandrekar JN, **Patel R**. *Bordetella parapertussis* outbreak in Southeastern Minnesota and the United States, 2014. *Medicine (Baltimore)*. 2017 May; 96 (20):e6730 PMID: 28514288 PMCID: 5440125 DOI: 10.1097/MD.00000000000006730
358. Sampath R, **Patel R**, Cunningham SA, Arif S, Daly RC, Badley AD, Wylam ME. Cardiothoracic Transplant Recipient *Mycoplasma hominis*: An Uncommon Infection with Probable Donor Transmission. *EBioMedicine*. 2017 May; 19:84-90 Epub 2017 Apr 19 PMID: 28438507 PMCID: 5440619 DOI: 10.1016/j.ebiom.2017.04.026
359. Cunningham SA, Chia N, Jeraldo PR, Quest DJ, Johnson JA, Boxrud DJ, Taylor AJ, Chen J, Jenkins GD, Drucker TM, Nelson H, **Patel R**. Comparison of Whole-Genome Sequencing Methods for Analysis of Three Methicillin-Resistant *Staphylococcus aureus* Outbreaks. *J Clin Microbiol*. 2017 Jun; 55 (6):1946-1953 Epub 2017 Apr 12 PMID: 28404677 PMCID: 5442552 DOI: 10.1128/JCM.00029-17
360. Thoendel M, Jeraldo P, Greenwood-Quaintance KE, Yao J, Chia N, Hanssen AD, Abdel MP, **Patel R**. Impact of Contaminating DNA in Whole-Genome Amplification Kits Used for Metagenomic Shotgun Sequencing for Infection Diagnosis. *J Clin Microbiol*. 2017 Jun; 55 (6):1789-1801 Epub 2017 Mar 29 PMID: 28356418 PMCID: 5442535 DOI: 10.1128/JCM.02402-16
361. Cunningham SA, Limbago B, Traczewski M, Anderson K, Hackel M, Hindler J, Sahm D, Alyanak E, Lawsin A, Gulvik CA, de Man TJB, Mandrekar JN, Schuetz AN, Jenkins S, Humphries R, Palavecino E, Vasoo S, **Patel R**. Multicenter Performance Assessment of Carba NP Test. *J Clin Microbiol*. 2017 Jun; 55 (6):1954-1960 Epub 2017 Apr 12 PMID: 28404676 PMCID: 5442553 DOI: 10.1128/JCM.00244-17
362. **Patel R**, Karon BS. Advances Afoot in Microbiology. *J Clin Microbiol*. 2017 Jul; 55 (7):1984-1988 Epub 2017 May 24 PMID: 28539341 PMCID: 5483899 DOI: 10.1128/JCM.00664-17
363. Fernandez J, Cunningham SA, Fernandez-Verdugo A, Vina-Soria L, Martin L, Rodicio MR, Escudero D, Vazquez F, Mandrekar JN, **Patel R**. Evaluation of a real-time PCR assay for rectal screening of OXA-48-producing Enterobacteriaceae in a general intensive care unit of an endemic hospital. *Diagn Microbiol Infect Dis*. 2017 Jul; 88 (3):252-258 Epub 2017 Apr 06 PMID: 28442306 DOI: 10.1016/j.diagmicrobio.2017.04.001
364. Thoendel M, Jeraldo P, Greenwood-Quaintance KE, Chia N, Abdel MP, Steckelberg JM, Osmon DR, **Patel R**. A Novel Prosthetic Joint Infection Pathogen, *Mycoplasma salivarium*, Identified by Metagenomic Shotgun Sequencing. *Clin Infect Dis*. 2017 Jul 15; 65 (2):332-335 PMID: 28379472 PMCID: 5848249 DOI: 10.1093/cid/cix296
365. Parry JA, Karau MJ, Kakar S, Hanssen AD, **Patel R**, Abdel MP. Disclosing Agents for the Intraoperative Identification of Biofilms on Orthopedic Implants. *J Arthroplasty*. 2017 Aug; 32 (8):2501-2504 Epub 2017 Mar 16 PMID: 28420544 DOI: 10.1016/j.arth.2017.03.010
366. Mangalam A, Shahi SK, Luckey D, Karau M, Marietta E, Luo N, Choung RS, Ju J, Sompallae R, Gibson-Corley K, **Patel R**, Rodriguez M, David C, Taneja V, Murray J. Human Gut-Derived Commensal Bacteria Suppress CNS Inflammatory and Demyelinating Disease. *Cell Rep*. 2017 Aug 8; 20 (6):1269-1277 PMID: 28793252 PMCID: 5763484 DOI: 10.1016/j.celrep.2017.07.031
367. Liesman RM, Pritt BS, Maleszewski JJ, **Patel R**. Laboratory Diagnosis of Infective Endocarditis. *J Clin Microbiol*. 2017 Sep; 55 (9):2599-2608 Epub 2017 June 28 PMID: 28659319 PMCID: 5648697 DOI: 10.1128/JCM.00635-17
368. Peel TN, Sedarski JA, Dylla BL, Shannon SK, Amirahmadi F, Hughes JG, Cheng AC, **Patel R**. Laboratory Workflow Analysis of Culture of Periprosthetic Tissues in Blood Culture Bottles. *J Clin Microbiol*. 2017 Sep; 55 (9):2817-2826 Epub 2017 July 12 PMID: 28701418 PMCID: 5648717 DOI: 10.1128/JCM.00652-17
369. Karau MJ, Tilahun ME, Krogman A, Osborne BA, Goldsby RA, David CS, Mandrekar JN, **Patel R**, Rajagopalan G. Passive therapy with humanized anti-staphylococcal enterotoxin B antibodies attenuates systemic inflammatory response and protects from lethal pneumonia caused by staphylococcal enterotoxin B-producing *Staphylococcus aureus*. *Virulence*. 2017 Oct 3; 8 (7):1148-1159 Epub 2016 Dec 07 PMID: 27925510 PMCID: 5711449 DOI: 10.1080/21505594.2016.1267894

370. Virk A, Pritt B, **Patel R**, Uhl JR, Bezalel SA, Gibson LE, Stryjewska BM, Peters MS. Mycobacterium lepromatosis Lepromatous Leprosy in US Citizen Who Traveled to Disease-Endemic Areas. *Emerg Infect Dis*. 2017 Nov; 23 (11):1864-1866 PMID: 29048278 PMCID: 5652441 DOI: 10.3201/eid2311.171104
371. Fang FC, **Patel R**. 2017 Infectious Diseases Society of America Infectious Diarrhea Guidelines: A View From the Clinical Laboratory. *Clin Infect Dis* 2017 Nov 29; 65 (12):1974-1976 PMID: 29053793 DOI: 10.1093/cid/cix730
372. Ramanan P, Qureshi AS, Martin SA, Zea D, **Patel R**, Pritt BS. A 79-Year-Old Man With Chronic Aspiration and an (18)F-Fluorodeoxyglucose-Positron Emission Tomography/Computerized Tomography Positive Lung Mass. *Open Forum Infect Dis*. 2017 Winter; 4 (1):ofw256 Epub 2017 Feb 10 PMID: 28702466 PMCID: 5499773 DOI: 10.1093/ofid/ofw256
373. Balakrishnan B, Luckey D, Marietta E, Karau M, **Patel R**, Murray J, Taneja V. Development of a real-time PCR method for quantification of *Prevotella histicola* from the gut. *Anaerobe*. 2017 Dec; 48:37-41 Epub 2017 July 03 PMID: 28684342 DOI: 10.1016/j.anaerobe.2017.06.019
374. Wi YM, Greenwood-Quaintance KE, Schuetz AN, Ko KS, Peck KR, Song JH, **Patel R**. Activity of Ceftolozane-Tazobactam against Carbapenem-Resistant, Non-Carbapenemase-Producing *Pseudomonas aeruginosa* and Associated Resistance Mechanisms. *Antimicrob Agents Chemother*. 2018 Jan; 62 (1) Epub 2017 Dec 21 PMID: 29133568 PMCID: 5740377 DOI: 10.1128/AAC.01970-17
375. Neudorfer K, Schmidt-Malan SM, **Patel R**. Dalbavancin is active in vitro against biofilms formed by dalbavancin-susceptible enterococci. *Diagn Microbiol Infect Dis*. 2018 Jan; 90 (1):58-63 Epub 2017 Sept 27 PMID: 29195766 DOI: 10.1016/j.diagmicrobio.2017.09.015
376. Ramanan P, Bryson AL, Binnicker MJ, Pritt BS, **Patel R**. Syndromic Panel-Based Testing in Clinical Microbiology. *Clin Microbiol Rev*. 2018 Jan; 31 (1) Epub 2017 Nov 15 PMID: 29142077 PMCID: 5740973 DOI: 10.1128/CMR.00024-17
377. Ozenci V, **Patel R**, Ullberg M, Stralin K. Demise of Polymerase Chain Reaction/Electrospray Ionization-Mass Spectrometry as an Infectious Diseases Diagnostic Tool. *Clin Infect Dis*. 2018 Jan 18; 66 (3):452-455 PMID: 29020209 DOI: 10.1093/cid/cix743
378. Homme JH, Greenwood CS, Cronk LB, Nyre LM, Uhl JR, Weaver AL, **Patel R**. Duration of Group A Streptococcus PCR positivity following antibiotic treatment of pharyngitis. *Diagn Microbiol Infect Dis*. 2018 Feb; 90 (2):105-108 Epub 2017 Oct 12 PMID: 29150372 DOI: 10.1016/j.diagmicrobio.2017.10.003
379. Hirt H#, Greenwood-Quaintance KE#, Karau MJ, Till LM, Kashyap PC, **Patel R**, Dunny GM. Enterococcus faecalis Sex Pheromone cCF10 Enhances Conjugative Plasmid Transfer In Vivo. *mBio*. 2018 Feb 13; 9 (1) PMID: 29440568 PMCID: 5821081 DOI: 10.1128/mBio.00037-18
380. Chandrasekaran S, Abbott A, Campeau S, Zimmer BL, Weinstein M, Thrupp L, Hejna J, Walker L, Ammann T, Kim T, **Patel R**, Humphries RM. Direct-from-Blood-Culture Disk Diffusion To Determine Antimicrobial Susceptibility of Gram-Negative Bacteria: Preliminary Report from the Clinical and Laboratory Standards Institute Methods Development and Standardization Working Group. *J Clin Microbiol*. 2018 Mar; 56 (3) Epub 2018 Feb 22 PMID: 29305540 PMCID: 5824059 DOI: 10.1128/JCM.01678-17
381. Liesman RM, Strasburg AP, Heitman AK, Theel ES, **Patel R**, Binnicker MJ. Evaluation of a Commercial Multiplex Molecular Panel for Diagnosis of Infectious Meningitis and Encephalitis. *J Clin Microbiol*. 2018 Apr; 56 (4) Epub 2018 Mar 26 PMID: 29436421 PMCID: 5869843 DOI: 10.1128/JCM.01927-17
382. Yan Q, Karau MJ, **Patel R**. Evaluation of Non-Tissue Culture- versus Tissue Culture-Treated Microplates for Oritavancin Susceptibility Testing. *J Clin Microbiol* 2018 Apr; 56 (4) Epub 2018 Mar 26 PMID: 29367298 PMCID: 5869813 DOI: 10.1128/JCM.02001-17
383. Pancholi P#, Carroll KC#, Buchan BW, Chan RC, Dhiman N, Ford B, Granato PA, Harrington AT, Hernandez DR, Humphries RM, Jindra MR, Ledebner NA, Miller SA, Mochon AB, Morgan MA, **Patel R**, Schreckenberger PC, Stamper PD, Simner PJ, Tucci NE, Zimmerman C, Wolk DM#. Multicenter Evaluation of the Accelerate PhenoTest BC Kit for Rapid Identification and Phenotypic Antimicrobial Susceptibility Testing Using Morphokinetic Cellular Analysis. *J Clin Microbiol*. 2018 Apr; 56 (4) Epub 2018 Mar 26 PMID: 29305546 PMCID: 5869823 DOI: 10.1128/JCM.01329-17
384. Wi YM, Greenwood-Quaintance KE, Brinkman CL, Lee JYH, Howden BP, **Patel R**. Rifampicin resistance in *Staphylococcus epidermidis*: molecular characterisation and fitness cost of rpoB mutations. *Int J Antimicrob Agents*. 2018 May; 51 (5):670-677 Epub 2017 Dec 26 PMID: 29287710 DOI: 10.1016/j.ijantimicag.2017.12.019
385. Yan Q, Karau MJ, Greenwood-Quaintance KE, Mandrekar JN, Osmon DR, Abdel MP, **Patel R**. Comparison of Diagnostic Accuracy of Periprosthetic Tissue Culture in Blood Culture Bottles to That of Prosthesis Sonication Fluid Culture for Diagnosis of Prosthetic Joint Infection (PJI) by Use of Bayesian Latent Class Modeling and

- IDSA PJI Criteria for Classification. *J Clin Microbiol.* 2018 Jun; 56 (6) Epub 2018 May 25 PMID: 29643202 PMCID: 5971557 DOI: 10.1128/JCM.00319-18
386. Crews NR, Cawcutt KA, Pritt BS, **Patel R**, Virk A. Diagnostic Approach for Classic Compared With Localized Whipple Disease. *Open Forum Infect Dis.* 2018 Jul; 5 (7):ofy136 Epub 2018 June 13 PMID: 29992176 PMCID: 6030902 DOI: 10.1093/ofid/ofy136
387. Rucinski SL, Murphy MP, Kies KD, Cunningham SA, Schuetz AN, **Patel R**. Eight Years of Clinical Legionella PCR Testing Illustrates a Seasonal Pattern. *J Infect Dis* 2018 Jul 13; 218 (4):669-670 PMID: 29659880 DOI: 10.1093/infdis/jiy201
388. Yan Q, Karau MJ, **Patel R**. In vitro activity of oritavancin against planktonic and biofilm states of vancomycin-susceptible and vancomycin-resistant enterococci. *Diagn Microbiol Infect Dis.* 2018 Aug; 91 (4):348-350 Epub 2018 Mar 16 PMID: 29678300 DOI: 10.1016/j.diagmicrobio.2018.03.008
389. * Madigan T, Cunningham SA, Ramanan P, Bhatti MM, **Patel R**. Real-Time PCR Assay for Detection of *Kingella kingae* in Children *Journal of Pediatric Infectious Diseases.* 2018; 13(3):216-223. Epub 2018 Apr 11. DOI: 10.1055/s-0038-1641603
390. **Patel R**, Fang FC. Diagnostic Stewardship: Opportunity for a Laboratory-Infectious Diseases Partnership. *Clin Infect Dis.* 2018 Aug 16; 67 (5):799-801 PMID: 29547995 PMCID: 6093996 DOI: 10.1093/cid/ciy077
391. Miller JM, Binnicker MJ, Campbell S, Carroll KC, Chapin KC, Gilligan PH, Gonzalez MD, Jerris RC, Kehl SC, **Patel R**, Pritt BS, Richter SS, Robinson-Dunn B, Schwartzman JD, Snyder JW, Telford S 3rd, Theel ES, Thomson RB Jr, Weinstein MP, Yao JD. A Guide to Utilization of the Microbiology Laboratory for Diagnosis of Infectious Diseases: 2018 Update by the Infectious Diseases Society of America and the American Society for Microbiology. *Clin Infect Dis.* 2018 Aug 31; 67 (6):813-816 PMID: 30169655 DOI: 10.1093/cid/ciy584
392. Miller JM, Binnicker MJ, Campbell S, Carroll KC, Chapin KC, Gilligan PH, Gonzalez MD, Jerris RC, Kehl SC, **Patel R**, Pritt BS, Richter SS, Robinson-Dunn B, Schwartzman JD, Snyder JW, Telford S 3rd, Theel ES, Thomson RB Jr, Weinstein MP, Yao JD. A Guide to Utilization of the Microbiology Laboratory for Diagnosis of Infectious Diseases: 2018 Update by the Infectious Diseases Society of America and the American Society for Microbiology. *Clin Infect Dis.* 2018 Aug 31; 67 (6):e1-e94 PMID: 29955859 PMCID: 7108105 DOI: 10.1093/cid/ciy381
393. Park KH, **Patel R**. Diagnostic Methods for Prosthetic Joint Infection in Korea. *Infect Chemother.* 2018 Sep; 50 (3):199-209 PMID: 30270579 PMCID: 6167515 DOI: 10.3947/ic.2018.50.3.199
394. Ivy MI, Thoendel MJ, Jeraldo PR, Greenwood-Quaintance KE, Hanssen AD, Abdel MP, Chia N, Yao JZ, Tande AJ, Mandrekar JN, **Patel R**. Direct Detection and Identification of Prosthetic Joint Infection Pathogens in Synovial Fluid by Metagenomic Shotgun Sequencing. *J Clin Microbiol.* 2018 Sep; 56 (9) Epub 2018 Aug 27 PMID: 29848568 PMCID: 6113468 DOI: 10.1128/JCM.00402-18
395. Mendis SM#, Vasoo S#, Johnston BD, Porter SB, Cunningham SA, Menon SR, Teng CB, De PP, **Patel R**, Johnson JR, Banerjee R. Clinical and Molecular Correlates of *Escherichia coli* Bloodstream Infection from Two Geographically Diverse Centers in Rochester, Minnesota, and Singapore. *Antimicrob Agents Chemother.* 2018 Oct; 62 (10) Epub 2018 Sept 24 PMID: 30082285 PMCID: 6153841 DOI: 10.1128/AAC.00937-18
396. Yan Q, Karau MJ, Raval YS, **Patel R**. Evaluation of Oritavancin Combinations with Rifampin, Gentamicin, or Linezolid against Prosthetic Joint Infection-Associated Methicillin-Resistant *Staphylococcus aureus* Biofilms by Time-Kill Assays. *Antimicrob Agents Chemother.* 2018 Oct; 62 (10) Epub 2018 Sept 24 PMID: 30012765 PMCID: 6153823 DOI: 10.1128/AAC.00943-18
397. Lee JYH, Monk IR, Goncalves da Silva A, Seemann T, Chua KYL, Kearns A, Hill R, Woodford N, Bartels MD, Strommenger B, Laurent F, Dodemont M, Deplano A, **Patel R**, Larsen AR, Korman TM, Stinear TP, Howden BP. Global spread of three multidrug-resistant lineages of *Staphylococcus epidermidis*. *Nat Microbiol.* 2018 Oct; 3 (10):1175-1185 Epub 2018 Sept 03 PMID: 30177740 PMCID: 6660648 DOI: 10.1038/s41564-018-0230-7
398. Yan Q, Karau MJ, **Patel R**. In vitro activity of oritavancin against biofilms of staphylococci isolated from prosthetic joint infection. *Diagn Microbiol Infect Dis.* 2018 Oct; 92 (2):155-157 Epub 2018 May 18 PMID: 29885758 DOI: 10.1016/j.diagmicrobio.2018.05.010
399. Perez K, **Patel R**. Survival of *Staphylococcus epidermidis* in Fibroblasts and Osteoblasts. *Infect Immun.* 2018 Oct; 86 (10) Epub 2018 Sept 21 PMID: 30061380 PMCID: 6204734 DOI: 10.1128/IAI.00237-18
400. Thoendel MJ, Jeraldo PR, Greenwood-Quaintance KE, Yao JZ, Chia N, Hanssen AD, Abdel MP, **Patel R**. Identification of Prosthetic Joint Infection Pathogens Using a Shotgun Metagenomics Approach. *Clin Infect Dis.* 2018 Oct 15; 67 (9):1333-1338 PMID: 29648630 PMCID: 6186856 DOI: 10.1093/cid/ciy303
401. Battaglioli EJ, Hale VL, Chen J, Jeraldo P, Ruiz-Mojica C, Schmidt BA, Rekdal VM, Till LM, Huq L, Smits SA, Moor WJ, Jones-Hall Y, Smyrk T, Khanna S, Pardi DS, Grover M, **Patel R**, Chia N, Nelson H, Sonnenburg JL,

- Farrugia G, Kashyap PC. Clostridioides difficile uses amino acids associated with gut microbial dysbiosis in a subset of patients with diarrhea. *Sci Transl Med*. 2018 Oct 24; 10 (464) PMID: 30355801 PMCID: 6537101 DOI: 10.1126/scitranslmed.aam7019
402. Cafilisch KM, Schmidt-Malan SM, Mandrekar JN, Karau MJ, Nicklas JP, Williams LB, **Patel R**. Antibacterial activity of reduced iron clay against pathogenic bacteria associated with wound infections. *Int J Antimicrob Agents*. 2018 Nov; 52 (5):692-696 Epub 2018 July 31 PMID: 30075292 DOI: 10.1016/j.ijantimicag.2018.07.018
403. Masters TL, Hilker CA, Jeraldo PR, Bhagwate AV, Greenwood-Quaintance KE, Eckloff BW, Chia N, Hanssen AD, Abdel MP, Yao JZ, Jen J, **Patel R**. Comparative evaluation of cDNA library construction approaches for RNA-Seq analysis from low RNA-content human specimens. *J Microbiol Methods*. 2018 Nov; 154:55-62 Epub 2018 Oct 14 PMID: 30332617 PMCID: 6242773 DOI: 10.1016/j.mimet.2018.10.008
404. Yan Q, Karau MJ, Raval YS, **Patel R**. In vitro activity of oritavancin in combination with rifampin or gentamicin against prosthetic joint infection-associated methicillin-resistant *Staphylococcus epidermidis* biofilms. *Int J Antimicrob Agents*. 2018 Nov; 52 (5):608-615 Epub 2018 July 24 PMID: 30048689 DOI: 10.1016/j.ijantimicag.2018.07.012
405. Shannon S, Kronemann D, **Patel R**, Schuetz AN. Routine use of MALDI-TOF MS for anaerobic bacterial identification in clinical microbiology. *Anaerobe*. 2018 Dec; 54:191-196 Epub 2018 July 03 PMID: 30541686 DOI: 10.1016/j.anaerobe.2018.07.001
406. Wi YM, **Patel R**. Understanding Biofilms and Novel Approaches to the Diagnosis, Prevention, and Treatment of Medical Device-Associated Infections. *Infect Dis Clin North Am*. 2018 Dec; 32 (4):915-929 Epub 2018 Sept 18 PMID: 30241715 PMCID: 6215726 DOI: 10.1016/j.idc.2018.06.009
407. Madigan T, Cunningham SA, **Patel R**, Greenwood-Quaintance KE, Barth JE, Sampathkumar P, Cole NC, Kohner PC, Colby CE, Asay GF, Fang JL, Baker CA, Heinrich AL, Fjerstad KA, Lujero MJ, Chia N, Jeraldo PR, Nelson H, Huskins WC. Whole-genome sequencing for methicillin-resistant *Staphylococcus aureus* (MRSA) outbreak investigation in a neonatal intensive care unit. *Infect Control Hosp Epidemiol*. 2018 Dec; 39 (12):1412-1418 Epub 2018 Oct 04 PMID: 30282566 DOI: 10.1017/ice.2018.239
408. Brinkman CL, Schmidt-Malan SM, Karau MJ, **Patel R**. A novel rat model of foreign body osteomyelitis for evaluation of antimicrobial efficacy. *J Exp Appl Anim Sci*. 2019; 3 (1):7-14 PMID: 31404442 PMCID: 6688763 DOI: 10.20454/jeaas.2019.1555
409. Vijayvargiya P, Jeraldo PR, Thoendel MJ, Greenwood-Quaintance KE, Esquer Garrigos Z, Sohail MR, Chia N, Pritt BS, **Patel R**. Application of metagenomic shotgun sequencing to detect vector-borne pathogens in clinical blood samples. *PLoS One*. 2019; 14 (10):e0222915 Epub 2019 Oct 02 PMID: 31577814 PMCID: 6774502 DOI: 10.1371/journal.pone.0222915
410. **Patel R**. A Moldy Application of MALDI: MALDI-ToF Mass Spectrometry for Fungal Identification. *J Fungi (Basel)*. 2019 Jan 3; 5 (1) Epub 2019 Jan 03 PMID: 30609833 PMCID: 6463175 DOI: 10.3390/jof5010004
411. Stralin K, **Patel R**, Ullberg M, Ozenci V. Reply to Spyridou et al. *Clin Infect Dis* 2019 Jan 7; 68 (2):351 PMID: 29481637 DOI: 10.1093/cid/ciy109
412. Schmidt-Malan SM, Brinkman CL, Greenwood-Quaintance KE, Karau MJ, Mandrekar JN, **Patel R**. Activity of fixed direct electrical current in experimental *Staphylococcus aureus* foreign-body osteomyelitis. *Diagn Microbiol Infect Dis*. 2019 Feb; 93 (2):92-95 Epub 2018 Sept 17 PMID: 30293677 PMCID: 6330138 DOI: 10.1016/j.diagmicrobio.2018.09.006
413. Schmidt-Malan SM, Mishra AJ, Mushtaq A, Brinkman CL, **Patel R**. Correction for Schmidt-Malan et al., "In Vitro Activity of Imipenem-Relebactam and Ceftolozane-Tazobactam against Resistant Gram-Negative Bacilli". *Antimicrob Agents Chemother*. 2019 Feb; 63 (2) Epub 2019 Jan 29 PMID: 30696694 PMCID: 6355576 DOI: 10.1128/AAC.02563-18
414. Yan Q, Wi YM, Thoendel MJ, Raval YS, Greenwood-Quaintance KE, Abdel MP, Jeraldo PR, Chia N, **Patel R**. Evaluation of the CosmosID Bioinformatics Platform for Prosthetic Joint-Associated Sonicate Fluid Shotgun Metagenomic Data Analysis. *J Clin Microbiol*. 2019 Feb; 57 (2) Epub 2019 Jan 30 PMID: 30429253 PMCID: 6355540 DOI: 10.1128/JCM.01182-18
415. Gomez-Urena E, Sierra RJ, Greenwood-Quaintance KE, Karau MJ, Steckelberg JM, **Patel R**. Sonication Culture of Antimicrobial Agent-Containing Cement Spacers Removed during Staged Revisions for Arthroplasty Infection. *J Clin Microbiol*. 2019 Feb; 57 (2) Epub 2019 Jan 30 PMID: 30541933 PMCID: 6355534 DOI: 10.1128/JCM.01483-18
416. Schmidt-Malan SM, Greenwood-Quaintance KE, Berglund LJ, Mandrekar J, **Patel R**. Oritavancin polymethylmethacrylate (PMMA)-compressive strength testing and in vitro elution. *J Orthop Surg Res*. 2019 Feb 12; 14 (1):43 PMID: 30755223 PMCID: 6373086 DOI: 10.1186/s13018-019-1080-6

417. Kiamco MM, Zmuda HM, Mohamed A, Call DR, Raval YS, **Patel R**, Beyenal H. Hypochlorous-Acid-Generating Electrochemical Scaffold for Treatment of Wound Biofilms. *Sci Rep*. 2019 Feb 25; 9 (1):2683 PMID: 30804362 PMCID: 6389966 DOI: 10.1038/s41598-019-38968-y
418. Bezalel SA, Onajin O, Gonzalez-Santiago TM, **Patel R**, Pritt BS, Virk A, Gibson LE, Peters MS. Leprosy in a Midwestern Dermatology Clinic: Report of 9 Patients. *Mayo Clin Proc*. 2019 Mar; 94 (3):417-423 Epub 2019 Feb 21 PMID: 30799052 DOI: 10.1016/j.mayocp.2018.11.022
419. Mushtaq A, Chen DJ, Strand GJ, Dylla BL, Cole NC, Mandrekar J, **Patel R**. Corrigendum to "Clinical significance of coryneform Gram-positive rods from blood identified by MALDI-TOF mass spectrometry and their susceptibility profiles - a retrospective chart review" [*Diagn Microbiol Infect Dis* 2016;85(3):372-376]. *Diagn Microbiol Infect Dis*. 2019 May; 94 (1):106 Epub 2019 Mar 08 PMID: 30857915 DOI: 10.1016/j.diagmicrobio.2019.02.002
420. Schmidt-Malan SM, Brinkman CL, Karau MJ, Brown RA, Waletzki BE, Berglund LJ, Schuetz AN, Greenwood-Quaintance KE, Mandrekar JN, **Patel R**. Effect of Direct Electrical Current on Bones Infected with *Staphylococcus epidermidis*. *JBMR Plus*. 2019 May; 3 (5):e10119 Epub 2019 Jan 31 PMID: 31131342 PMCID: 6524671 DOI: 10.1002/jbm4.10119
421. Madigan T, Carey WA, Kaemingk BD, **Patel R**. Low *Ureaplasma* Polymerase Chain Reaction Positivity Rate Among Newborns in a Neonatal Intensive Care Unit or Intermediate Special Care Nursery. *Pediatr Infect Dis J* 2019 May; 38 (5):e111 PMID: 30985550 DOI: 10.1097/INF.0000000000002275
422. Saffouri GB, Shields-Cutler RR, Chen J, Yang Y, Lekatz HR, Hale VL, Cho JM, Battaglioli EJ, Bhattarai Y, Thompson KJ, Kalari KK, Behera G, Berry JC, Peters SA, **Patel R**, Schuetz AN, Faith JJ, Camilleri M, Sonnenburg JL, Farrugia G, Swann JR, Grover M, Knights D, Kashyap PC. Small intestinal microbial dysbiosis underlies symptoms associated with functional gastrointestinal disorders. *Nat Commun*. 2019 May 1; 10 (1):2012 Epub 2019 May 01 PMID: 31043597 PMCID: 6494866 DOI: 10.1038/s41467-019-09964-7
423. Evans SR, Tran TTT, Hujer AM, Hill CB, Hujer KM, Mediavilla JR, Manca C, Domitrovic TN, Perez F, Farmer M, Pitzer KM, Wilson BM, Kreiswirth BN, **Patel R**, Jacobs MR, Chen L, Fowler VG, Chambers HF, Bonomo RA, Antibacterial Resistance Leadership Group (ARLG). Rapid Molecular Diagnostics to Inform Empiric Use of Ceftazidime/Avibactam and Ceftolozane/Tazobactam Against *Pseudomonas aeruginosa*: PRIMERS IV. *Clin Infect Dis*. 2019 May 17; 68 (11):1823-1830 PMID: 30239599 PMCID: 6938201 DOI: 10.1093/cid/ciy801
424. Raval YS, Mohamed A, Zmuda HM, **Patel R**, Beyenal H. Hydrogen-Peroxide-Generating Electrochemical Scaffold Eradicates Methicillin-Resistant *Staphylococcus aureus* Biofilms. *Glob Chall*. 2019 Jun; 3 (6):1800101 Epub 2019 Mar 06 PMID: 31218078 PMCID: 6551415 DOI: 10.1002/gch2.201800101
425. Flurin L, Greenwood-Quaintance KE, **Patel R**. Microbiology of polymicrobial prosthetic joint infection. *Diagn Microbiol Infect Dis*. 2019 Jul; 94 (3):255-259 Epub 2019 Jan 15 PMID: 30738691 DOI: 10.1016/j.diagmicrobio.2019.01.006
426. Thorpe CM, McDermott LA, Tran MK, Chang J, Jenkins SG, Goldstein EJC, **Patel R**, Forbes BA, Johnson S, Gerding DN, Snyderman DR. U.S.-Based National Surveillance for Fidaxomicin Susceptibility of *Clostridioides difficile*-Associated Diarrheal Isolates from 2013 to 2016. *Antimicrob Agents Chemother*. 2019 Jul; 63 (7) Epub 2019 June 24 PMID: 31085514 PMCID: 6591623 DOI: 10.1128/AAC.00391-19
427. Cafilisch KM, **Patel R**. Implications of Bacteriophage- and Bacteriophage Component-Based Therapies for the Clinical Microbiology Laboratory. *J Clin Microbiol*. 2019 Aug; 57 (8) Epub 2019 July 26 PMID: 31092596 PMCID: 6663902 DOI: 10.1128/JCM.00229-19
428. Park KH, Greenwood-Quaintance KE, Cunningham SA, Rajagopalan G, Chia N, Jeraldo PR, Mandrekar J, **Patel R**. Lack of correlation of virulence gene profiles of *Staphylococcus aureus* bacteremia isolates with mortality. *Microb Pathog*. 2019 Aug; 133:103543 Epub 2019 May 15 PMID: 31102653 DOI: 10.1016/j.micpath.2019.103543
429. Dyrhovden R, Nygaard RM, **Patel R**, Ulvestad E, Kommedal O. The bacterial aetiology of pleural empyema. A descriptive and comparative metagenomic study. *Clin Microbiol Infect*. 2019 Aug; 25 (8):981-986 Epub 2018 Dec 21 PMID: 30580031 DOI: 10.1016/j.cmi.2018.11.030
430. Cunningham SA, Jeraldo P, Jeraldo P, **Patel R**. *Yersinia kristensenii* subsp. *rochesterensis* subsp. nov., isolated from human feces. *Int J Syst Evol Microbiol*. 2019 Aug; 69 (8):2292-2298 Epub 2019 May 28 PMID: 31135335 DOI: 10.1099/ijsem.0.003464
431. Fang FC, **Patel R**. Reply to Fernandez and Vazquez. *Clin Infect Dis* 2019 Aug 30; 69 (6):1087-1088 PMID: 30715231 DOI: 10.1093/cid/ciz083
432. Karau MJ, Schmidt-Malan SM, Yan Q, Greenwood-Quaintance KE, Mandrekar J, Lehoux D, Schuch R, Cassino C, **Patel R**. Exebacase in Addition to Daptomycin Is More Active than Daptomycin or Exebacase

- Alone in Methicillin-Resistant *Staphylococcus aureus* Osteomyelitis in Rats. *Antimicrob Agents Chemother.* 2019 Oct; 63 (10) Epub 2019 Sept 23 PMID: 31358593 PMCID: 6761499 DOI: 10.1128/AAC.01235-19
433. Albano M, Karau MJ, Greenwood-Quaintance KE, Osmon DR, Oravec CP, Berry DJ, Abdel MP, **Patel R.** In Vitro Activity of Rifampin, Rifabutin, Rifapentine, and Rifaximin against Planktonic and Biofilm States of *Staphylococci* Isolated from Periprosthetic Joint Infection. *Antimicrob Agents Chemother.* 2019 Nov; 63 (11) Epub 2019 Oct 22 PMID: 31451499 PMCID: 6811393 DOI: 10.1128/AAC.00959-19
434. Caflisch KM, Suh GA, **Patel R.** Biological challenges of phage therapy and proposed solutions: a literature review. *Expert Rev Anti Infect Ther.* 2019 Dec; 17 (12):1011-1041 Epub 2019 Dec 02 PMID: 31735090 PMCID: 6919273 DOI: 10.1080/14787210.2019.1694905
435. Ramakrishna J, Libertin CR, Yang JN, Diaz MA, Nengue AL, **Patel R.** 16S Ribosomal RNA Gene PCR/ Sequencing of CSF in the Diagnosis of Post-operative Meningitis *Access Microbiology.* 2019; 2(2). Epub 2020 Feb 03. DOI: 10.1099/acm.0.000100
436. Ramakrishna JM, Libertin CR, Yang JN, Diaz MA, Nengue AL, **Patel R.** 16S rRNA Gene PCR/Sequencing of Cerebrospinal Fluid in the Diagnosis of Post-operative Meningitis. *Access Microbiol.* 2020; 2 (2):acmi000100 Epub 2020 Feb 03 PMID: 34568757 PMCID: 8459102 DOI: 10.1099/acmi.0.000100
437. Fleischmann WA, Greenwood-Quaintance KE, **Patel R.** In Vitro Activity of Plazomicin Compared to Amikacin, Gentamicin, and Tobramycin against Multidrug-Resistant Aerobic Gram-Negative Bacilli. *Antimicrob Agents Chemother.* 2020 Jan 27; 64 (2) PMID: 31712206 PMCID: 6985721 DOI: 10.1128/AAC.01711-19
438. Esquer Garrigos Z, Sohail MR, Greenwood-Quaintance KE, Cunningham SA, Vijayvargiya P, Fida M, Friedman PA, Mandrekar J, DeSimone DC, Baddour LM, **Patel R.** Molecular Approach to Diagnosis of Cardiovascular Implantable Electronic Device Infection. *Clin Infect Dis.* 2020 Feb 14; 70 (5):898-906 PMID: 30944928 PMCID: 7931840 DOI: 10.1093/cid/ciz266
439. Thoendel M, Jeraldo P, Greenwood-Quaintance KE, Yao J, Chia N, Hanssen AD, Abdel MP, **Patel R.** Comparison of Three Commercial Tools for Metagenomic Shotgun Sequencing Analysis. *J Clin Microbiol.* 2020 Feb 24; 58 (3) PMID: 31826963 PMCID: 7041569 DOI: 10.1128/JCM.00981-19
440. Madigan T, Block DR, Carey WA, Kaemingk BD, **Patel R.** Proposed Plasma Ammonia Reference Intervals in a Reference Group of Hospitalized Term and Preterm Neonates. *J Appl Lab Med.* 2020 Mar 1; 5 (2):363-369 PMID: 32445380 PMCID: 7055669 DOI: 10.1093/jalm/jfz001
441. Raval YS, Mohamed A, Song J, Greenwood-Quaintance KE, Beyenal H, **Patel R.** Hydrogen Peroxide-Generating Electrochemical Scaffold Activity against Trispecies Biofilms. *Antimicrob Agents Chemother.* 2020 Mar 24; 64 (4) PMID: 31964793 PMCID: 7179276 DOI: 10.1128/AAC.02332-19
442. Wyles CC, Paradise CR, Masters TL, **Patel R,** van Wijnen AJ, Abdel MP, Trousdale RT, Sierra RJ. Cobalt and Chromium Ion Release in Metal-on-Polyethylene and Ceramic-on-Polyethylene THA: A Simulator Study With Cellular and Microbiological Correlations. *J Arthroplasty.* 2020 Apr; 35 (4):1123-1129 Epub 2019 Nov 27 PMID: 31852609 PMCID: 7085456 DOI: 10.1016/j.arth.2019.11.031
443. Jacobs MR, Good CE, Hujer AM, Abdelhamed AM, Rhoads DD, Hujer KM, Rudin SD, Domitrovic TN, Connolly LE, Krause KM, **Patel R,** Arias CA, Kreiswirth BN, Rojas LJ, D'Souza R, White RC, Brinkac LM, Nguyen K, Singh I, Fouts DE, van Duin D, Bonomo RA, Antibacterial Resistance Leadership Group. ARGONAUT II Study of the In Vitro Activity of Plazomicin against Carbapenemase-Producing *Klebsiella pneumoniae*. *Antimicrob Agents Chemother.* 2020 Apr 21; 64 (5) PMID: 32152078 PMCID: 7179617 DOI: 10.1128/AAC.00012-20
444. Fida M, Cunningham SA, Murphy MP, Bonomo RA, Hujer KM, Hujer AM, Kreiswirth BN, Chia N, Jeraldo PR, Nelson H, Zinsmaster NM, Toraskar N, Chang W, **Patel R,** Antibacterial Resistance Leadership Group. Core genome MLST and resistome analysis of *Klebsiella pneumoniae* using a clinically amenable workflow. *Diagn Microbiol Infect Dis.* 2020 May; 97 (1):114996 Epub 2020 Jan 21 PMID: 32098688 PMCID: 7422488 DOI: 10.1016/j.diagmicrobio.2020.114996
445. Carlson BC, Hines JT, Robinson WA, Sebastian AS, Greenwood-Quaintance KE, **Patel R,** Huddleston PM. Implant Sonication versus Tissue Culture for the Diagnosis of Spinal Implant Infection. *Spine (Phila Pa 1976).* 2020 May 1; 45 (9):E525-E532 PMID: 32282655 PMCID: 7158758 DOI: 10.1097/BRS.0000000000003311
446. Adamson PC, Pandori MW, Doernberg SB, Komarow L, Sund Z, Tran TTT, Jensen D, Tsalik EL, Deal CD, Chambers HF, Fowler VG Jr, Evans SR, **Patel R,** Klausner JD, Antibacterial Resistance Leadership Group. Analytical Evaluation of the Abbott RealTime CT/NG Assay for Detection of *Chlamydia trachomatis* and *Neisseria gonorrhoeae* in Rectal and Pharyngeal Swabs. *J Mol Diagn.* 2020 Jun; 22 (6):811-816 Epub 2020 Apr 02 PMID: 32247863 PMCID: 7295135 DOI: 10.1016/j.jmoldx.2020.03.004
447. Snyderman DR, McDermott LA, Jenkins SG, Goldstein EJC, **Patel R,** Forbes BA, Johnson S, Gerding DN,

- Thorpe CM, Walk ST. Epidemiologic trends in *Clostridioides difficile* isolate ribotypes in United States from 2011 to 2016. *Anaerobe*. 2020 Jun; 63:102185 Epub 2020 May 06 PMID: 32387171 DOI: 10.1016/j.anaerobe.2020.102185
448. van Duin D, Arias CA, Komarow L, Chen L, Hanson BM, Weston G, Cober E, Garner OB, Jacob JT, Satlin MJ, Fries BC, Garcia-Diaz J, Doi Y, Dhar S, Kaye KS, Earley M, Hujer AM, Hujer KM, Domitrovic TN, Shropshire WC, Dinh A, Manca C, Luterbach CL, Wang M, Paterson DL, Banerjee R, **Patel R**, Evans S, Hill C, Arias R, Chambers HF, Fowler VG Jr, Kreiswirth BN, Bonomo RA, Multi-Drug Resistant Organism Network Investigators. Molecular and clinical epidemiology of carbapenem-resistant Enterobacteriales in the USA (CRACKLE-2): a prospective cohort study. *Lancet Infect Dis*. 2020 Jun; 20 (6):731-741 Epub 2020 Mar 06 PMID: 32151332 PMCID: 7473597 DOI: 10.1016/S1473-3099(19)30755-8
449. Hanson KE, Caliendo AM, Arias CA, Englund JA, Lee MJ, Loeb M, **Patel R**, El Alayli A, Kalot MA, Falck-Ytter Y, Lavergne V, Morgan RL, Murad MH, Sultan S, Bhimraj A, Mustafa RA. Infectious Diseases Society of America Guidelines on the Diagnosis of COVID-19. *Clin Infect Dis*. 2020 Jun 16 Epub 2020 June 16 PMID: 32556191 PMCID: 7337674 DOI: 10.1093/cid/ciaa760
450. Ferreira I, Beisken S, Lueftinger L, Weinmaier T, Klein M, Bacher J, **Patel R**, von Haeseler A, Posch AE. Species Identification and Antibiotic Resistance Prediction by Analysis of Whole-Genome Sequence Data by Use of ARESdb: an Analysis of Isolates from the Unyvero Lower Respiratory Tract Infection Trial. *J Clin Microbiol*. 2020 Jun 24; 58 (7) Epub 2020 June 24 PMID: 32295890 PMCID: 7315026 DOI: 10.1128/JCM.00273-20
451. Fisher CR, Schmidt-Malan SM, Ma Z, Yuan Y, He S, **Patel R**. In vitro activity of TNP-2092 against periprosthetic joint infection-associated staphylococci. *Diagn Microbiol Infect Dis*. 2020 Jul; 97 (3):115040 Epub 2020 Mar 19 PMID: 32354459 DOI: 10.1016/j.diagmicrobio.2020.115040
452. Cunningham SA, Jeraldo PR, Schuetz AN, Heitman AA, **Patel R**. *Staphylococcus aureus* whole genome sequence-based susceptibility and resistance prediction using a clinically amenable workflow. *Diagn Microbiol Infect Dis*. 2020 Jul; 97 (3):115060 Epub 2020 Apr 11 PMID: 32417617 PMCID: 8094441 DOI: 10.1016/j.diagmicrobio.2020.115060
453. Rucinski SL, Binnicker MJ, Thomas AS, **Patel R**. Seasonality of Coronavirus 229E, HKU1, NL63, and OC43 From 2014 to 2020. *Mayo Clin Proc*. 2020 Aug; 95 (8):1701-1703 Epub 2020 June 06 PMID: 32753142 PMCID: 7275147 DOI: 10.1016/j.mayocp.2020.05.032
454. Karau MJ, Zhang C, Mandrekar JN, Kohrs NJ, Puleo DA, van Wijnen AJ, **Patel R**, Boyce TG, Larson AN, Milbrandt TA. Topical vancomycin for treatment of methicillin-resistant *Staphylococcus epidermidis* infection in a rat spinal implant model. *Spine Deform*. 2020 Aug; 8 (4):553-559 Epub 2020 Feb 20 PMID: 32078142 DOI: 10.1007/s43390-020-00087-4
455. Corsini Campioli C, Cano Cevallos E, Assi M, **Patel R**, Binnicker MJ, O'Horo JC. Clinical predictors and timing of cessation of viral RNA shedding in patients with COVID-19. *J Clin Virol*. 2020 Sep; 130:104577 Epub 2020 Aug 05 PMID: 32777762 PMCID: 7405830 DOI: 10.1016/j.jcv.2020.104577
456. Hanson KE, Caliendo AM, Arias CA, Englund JA, Hayden MK, Lee MJ, Loeb M, **Patel R**, Altayar O, El Alayli A, Sultan S, Falck-Ytter Y, Lavergne V, Morgan RL, Murad MH, Bhimraj A, Mustafa RA. Infectious Diseases Society of America Guidelines on the Diagnosis of COVID-19: Serologic Testing. *Clin Infect Dis*. 2020 Sep 12 Epub 2020 Sept 12 PMID: 32918466 PMCID: 7543294 DOI: 10.1093/cid/ciaa1343
457. Hakvoort H, Bovenkamp E, Greenwood-Quaintance KE, Schmidt-Malan SM, Mandrekar JN, Schuetz AN, **Patel R**. Imipenem-Relebactam Susceptibility Testing of Gram-Negative Bacilli by Agar Dilution, Disk Diffusion, and Gradient Strip Methods Compared with Broth Microdilution. *J Clin Microbiol*. 2020 Sep 22; 58 (10) Epub 2020 Sept 22 PMID: 32727832 PMCID: 7512178 DOI: 10.1128/JCM.00695-20
458. Zmuda HM, Mohamed A, Raval YS, Call DR, Schuetz AN, **Patel R**, Beyenal H. Hypochlorous acid-generating electrochemical scaffold eliminates *Candida albicans* biofilms. *J Appl Microbiol*. 2020 Oct; 129 (4):776-786 Epub 2020 May 21 PMID: 32249986 PMCID: 7541570 DOI: 10.1111/jam.14656
459. Karau MJ, Schmidt-Malan SM, Albano M, Mandrekar JN, Rivera CG, Osmon DR, Oravec CP, Berry DJ, Abdel MP, **Patel R**. Novel Use of Rifabutin and Rifapentine to Treat Methicillin-Resistant *Staphylococcus aureus* in a Rat Model of Foreign Body Osteomyelitis. *J Infect Dis*. 2020 Oct 1; 222 (9):1498-1504 PMID: 32914837 DOI: 10.1093/infdis/jiaa401
460. Zhuchenko G, Schmidt-Malan S, **Patel R**. Planktonic and Biofilm Activity of Eravacycline against *Staphylococci* Isolated from Periprosthetic Joint Infections. *Antimicrob Agents Chemother*. 2020 Nov 17; 64 (12) PMID: 32988818 PMCID: 7674029 DOI: 10.1128/AAC.01304-20
461. Rodino KG, Toledano M, Norgan AP, Pritt BS, Binnicker MJ, Yao JD, Aksamit AJ, **Patel R**. Retrospective Review of Clinical Utility of Shotgun Metagenomic Sequencing Testing of Cerebrospinal Fluid from a U.S.

- Tertiary Care Medical Center. *J Clin Microbiol.* 2020 Nov 18; 58 (12) PMID: 32938739 PMCID: 7685881 DOI: 10.1128/JCM.01729-20
462. Sharma K, Ivy M, Block DR, Abdel MP, Hanssen AD, Beauchamp C, Perry KI, Rosemark CL, Greenwood-Quaintance KE, Mandrekar J, **Patel R**. Comparative analysis of 23 synovial fluid biomarkers for hip and knee periprosthetic joint infection detection. *J Orthop Res.* 2020 Dec; 38 (12):2664-2674 Epub 2020 June 19 PMID: 32485031 DOI: 10.1002/jor.24766
 463. Lee J, Greenwood Quaintance KE, Schuetz AN, Shukla DR, Cofield RH, Sperling JW, **Patel R**, Sanchez-Sotelo J. Correlation between hemolytic profile and phylotype of *Cutibacterium acnes* (formerly *Propionibacterium acnes*) and orthopedic implant infection. *Shoulder Elbow.* 2020 Dec; 12 (6):390-398 Epub 2019 Aug 09 PMID: 33281943 PMCID: 7689609 DOI: 10.1177/1758573219865884
 464. Cho HK, Yang JN, Cunningham SA, Greenwood-Quaintance KE, Dalton ML, Collura CA, Fang JL, Heinrich AL, Huskins WC, **Patel R**. Molecular epidemiology of methicillin-susceptible *Staphylococcus aureus* in infants in a neonatal intensive care unit. *Infect Control Hosp Epidemiol.* 2020 Dec; 41 (12):1402-1408 Epub 2020 Sept 16 PMID: 32935655 DOI: 10.1017/ice.2020.355
 465. Doernberg SB, Komarow L, Tran TTT, Sund Z, Pandori MW, Jensen D, Tsalik EL, Deal CD, Chambers HF, Fowler VG, Evans SR, **Patel R**, Klausner JD. Simultaneous Evaluation of Diagnostic Assays for Pharyngeal and Rectal *Neisseria gonorrhoeae* and *Chlamydia trachomatis* Using a Master Protocol. *Clin Infect Dis.* 2020 Dec 3; 71 (9):2314-2322 PMID: 31734695 PMCID: 7713680 DOI: 10.1093/cid/ciz1105
 466. Simner PJ, **Patel R**. Cefiderocol Antimicrobial Susceptibility Testing Considerations: the Achilles' Heel of the Trojan Horse? *J Clin Microbiol.* 2020 Dec 17; 59 (1) PMID: 32727829 PMCID: 7771437 DOI: 10.1128/JCM.00951-20
 467. Albano M, Karau MJ, Schuetz AN, **Patel R**. Comparison of Agar Dilution to Broth Microdilution for Testing In Vitro Activity of Cefiderocol against Gram-Negative Bacilli. *J Clin Microbiol.* 2020 Dec 17; 59 (1) PMID: 32967901 PMCID: 7771473 DOI: 10.1128/JCM.00966-20
 468. Li CH, Huang R, Makabenta JM, Schmidt-Malan S, **Patel R**, Rotello VM. In situ Generation of Antibiotics using Bioorthogonal "Nanofactories". *Microbiol Insights.* 2021; 14:1178636121997121 Epub 2021 Feb 24 PMID: 33707951 PMCID: 7907933 DOI: 10.1177/1178636121997121
 469. Saha S, Yadav D, Pardi R, **Patel R**, Khanna S, Pardi D. Kinetics of polymerase chain reaction positivity in patients with *Clostridioides difficile* infection. *Therap Adv Gastroenterol.* 2021; 14:17562848211050443 Epub 2021 Oct 08 PMID: 34646361 PMCID: 8504224 DOI: 10.1177/17562848211050443
 470. **Patel R**, Hoppman NL, Gosse CM, Hagen-Moe DJ, Dunemann SK, Kreuter JD, Preuss SA, Winters JL, Sturgis CD, Maleszewski JJ, Solanki MH, Pritt BS, Rivera M, Mairose AM, Nelsen MA, Hansing KL, Lehman SM, Gruhlke RC, Boland JM. Laboratory Medicine and Pathology Education During the COVID-19 Pandemic-Lessons Learned. *Acad Pathol.* 2021 Jan-Dec; 8:23742895211020487 Epub 2021 June 30 PMID: 34263023 PMCID: 8252337 DOI: 10.1177/23742895211020487
 471. Makabenta JMV, Nabawy A, Li CH, Schmidt-Malan S, **Patel R**, Rotello VM. Nanomaterial-based therapeutics for antibiotic-resistant bacterial infections. *Nat Rev Microbiol.* 2021 Jan; 19 (1):23-36 Epub 2020 Aug 19 PMID: 32814862 PMCID: 8559572 DOI: 10.1038/s41579-020-0420-1
 472. Moktan V, Elwasila S, Umadat G, Hata DJ, Meza D, **Patel R**, Libertin C, Brumble L. The first case of *Janibacter hoylei* bacteremia in an adult. *IDCases.* 2021; 26:e01339 Epub 2021 Nov 16 PMID: 34877256 PMCID: 8627997 DOI: 10.1016/j.idcr.2021.e01339
 473. Fisher C, **Patel R**. Rifampin, Rifapentine, and Rifabutin Are Active against Intracellular Periprosthetic Joint Infection-Associated *Staphylococcus epidermidis*. *Antimicrob Agents Chemother.* 2021 Jan 20; 65 (2) PMID: 33199387 PMCID: 7849003 DOI: 10.1128/AAC.01275-20
 474. Deirmengian C, Madigan J, Kallur Mallikarjuna S, Conway J, Higuera C, **Patel R**. Validation of the Alpha Defensin Lateral Flow Test for Periprosthetic Joint Infection. *J Bone Joint Surg Am.* 2021 Jan 20; 103 (2):115-122 PMID: 33165130 DOI: 10.2106/JBJS.20.00749
 475. Hanson KE, Caliendo AM, Arias CA, Hayden MK, Englund JA, Lee MJ, Loeb M, **Patel R**, El Alayli A, Altayar O, Patel P, Falck-Ytter Y, Lavergne V, Morgan RL, Murad MH, Sultan S, Bhimraj A, Mustafa RA. The Infectious Diseases Society of America Guidelines on the Diagnosis of COVID-19: Molecular Diagnostic Testing. *Clin Infect Dis.* 2021 Jan 22 [Epub ahead of print] PMID: 33480973 PMCID: 7929045 DOI: 10.1093/cid/ciab048
 476. Fleming D, Karau M, **Patel R**. A novel bioreactor for the stable growth of *Ureaplasma parvum* and *Ureaplasma urealyticum*. *J Microbiol Methods.* 2021 Feb; 181:106131 Epub 2020 Dec 30 PMID: 33385441 PMCID: 7870580 DOI: 10.1016/j.mimet.2020.106131
 477. Pu M, Cho JM, Cunningham SA, Behera GK, Becker S, Amjad T, Greenwood-Quaintance KE, Mendes-Soares

- H, Jones-Hall Y, Jeraldo PR, Chen J, Dunny G, **Patel R**, Kashyap PC. Plasmid Acquisition Alters Vancomycin Susceptibility in *Clostridioides difficile*. *Gastroenterology*. 2021 Feb; 160 (3):941-945.e8 Epub 2020 Nov 14 PMID: 33197449 PMCID: 7878333 DOI: 10.1053/j.gastro.2020.10.046
478. Nguyen SV, Cunningham SA, Jeraldo P, Tran A, **Patel R**. *Yersinia occitanica* is a later heterotypic synonym of *Yersinia kristensenii* subsp. *rochesterensis* and elevation of *Yersinia kristensenii* subsp. *rochesterensis* to species status. *Int J Syst Evol Microbiol*. 2021 Feb; 71 (2) PMID: 33406034 DOI: 10.1099/ijsem.0.004626
479. Croker JA, **Patel R**, Campbell KS, Barton-Baxter M, Wallet S, Firestein GS, Kimberly RP, Elemento O. Building biorepositories in the midst of a pandemic. *J Clin Transl Sci*. 2021 Feb 5; 5 (1):e92 Epub 2021 Feb 05 PMID: 34192049 PMCID: 8134891 DOI: 10.1017/cts.2021.6
480. Flurin L, Raval YS, Mohamed A, Greenwood-Quaintance KE, Cano EJ, Beyenal H, **Patel R**. An Integrated HOCl-Producing E-Scaffold Is Active against Monomicrobial and Polymicrobial Biofilms. *Antimicrob Agents Chemother*. 2021 Feb 17; 65 (3) PMID: 33397650 PMCID: 8092506 DOI: 10.1128/AAC.02007-20
481. Klein M, Bacher J, Barth S, Atrzadeh F, Siebenhaller K, Ferreira I, Beisken S, Posch AE, Carroll KC, Wunderink RG, Qi C, Wu F, Hardy DJ, **Patel R**, Sims MD. Multicenter Evaluation of the Unyvero Platform for Testing Bronchoalveolar Lavage Fluid. *J Clin Microbiol*. 2021 Feb 18; 59 (3) PMID: 33328178 PMCID: 8106704 DOI: 10.1128/JCM.02497-20
482. Cho J, Cunningham S, Pu M, Lennon RJ, Dens Higan J, Jeraldo P, Sampathkumar P, Shannon S, Kashyap PC, **Patel R**. *Clostridioides difficile* Whole-genome Sequencing Differentiates Relapse With the Same Strain From Reinfection With a New Strain. *Clin Infect Dis*. 2021 Mar 1; 72 (5):806-813 PMID: 32064535 PMCID: 7935391 DOI: 10.1093/cid/ciaa159
483. Raval YS, Flurin L, Mohamed A, Greenwood-Quaintance KE, Beyenal H, **Patel R**. in vitro Activity of Hydrogen Peroxide and Hypochlorous Acid Generated by Electrochemical Scaffolds Against Planktonic and Biofilm Bacteria. *Antimicrob Agents Chemother*. 2021 Mar 1 Epub 2021 Mar 01 PMID: 33649112 PMCID: 8092879 DOI: 10.1128/AAC.01966-20
484. Marrero Rolon R#, Cunningham SA#, Mandrekar JN, Polo ET, **Patel R**. Clinical Evaluation of a Real-Time PCR Assay for Simultaneous Detection of *Helicobacter pylori* and Genotypic Markers of Clarithromycin Resistance Directly from Stool. *J Clin Microbiol*. 2021 Apr 20; 59 (5) PMID: 33536295 PMCID: 8091827 DOI: 10.1128/JCM.03040-20
485. Rodino KG, Wolf MJ, Sheldon S, Kingry LC, Petersen JM, **Patel R**, Pritt BS. Detection of Tick-Borne Bacteria from Whole Blood Using 16S Ribosomal RNA Gene PCR Followed by Next-Generation Sequencing. *J Clin Microbiol*. 2021 Apr 20; 59 (5) PMID: 33627320 PMCID: 8091845 DOI: 10.1128/JCM.03129-20
486. Nabawy A, Makabenta JM, Li CH, Park J, Chattopadhyay AN, Schmidt-Malan S, Gupta A, **Patel R**, Rotello VM. Activity of Biodegradable Polymeric Nanosponges against Dual-Species Bacterial Biofilms. *ACS Biomater Sci Eng*. 2021 May 10; 7 (5):1780-1786 Epub 2020 Dec 01 PMID: 33966379 PMCID: 8582013 DOI: 10.1021/acsbomaterials.0c01433
487. Eshaghi A, Bommersbach C, Zittermann S, Burnham CA, **Patel R**, Schuetz AN, Patel SN, Kus JV. Phenotypic and Genomic Profiling of *Staphylococcus argenteus* in Canada and the United States and Recommendations for Clinical Result Reporting. *J Clin Microbiol*. 2021 May 19; 59 (6) PMID: 33731414 PMCID: 8316026 DOI: 10.1128/JCM.02470-20
488. Albano M, Greenwood-Quaintance KE, Karau MJ, Mandrekar JN, **Patel R**. Anti-biofilm activity of antibiotic-loaded Hylomate(R). *Int J Cardiol Heart Vasc*. 2021 Jun; 34:100801 Epub 2021 June 08 PMID: 34159252 PMCID: 8203729 DOI: 10.1016/j.ijcha.2021.100801
489. Li CH, Landis RF, Makabenta JM, Nabawy A, Tronchet T, Archambault D, Liu Y, Huang R, Golan M, Cui W, Mager J, Gupta A, Schmidt-Malan S, **Patel R**, Rotello VM. Nanotherapeutics using all-natural materials. Effective treatment of wound biofilm infections using crosslinked nanoemulsions. *Mater Horiz*. 2021 Jun 1; 8 (6):1776-1782 Epub 2021 Mar 18 PMID: 34594564 PMCID: 8478344 DOI: 10.1039/D0MH01826K
490. Ivy MI, Sharma K, Greenwood-Quaintance KE, Tande AJ, Osmon DR, Barbari EF, Mandrekar J, Beauchamp CP, Hanssen AD, Abdel MP, Lewallen DG, Perry K, Block DR, Snyder MR, **Patel R**. Synovial fluid alpha defensin has comparable accuracy to synovial fluid white blood cell count and polymorphonuclear percentage for periprosthetic joint infection diagnosis. *Bone Joint J*. 2021 Jun; 103-B (6):1119-1126 PMID: 34058872 DOI: 10.1302/0301-620X.103B6.BJJ-2020-1741.R1
491. Fang FC, Benson CA, Del Rio C, Edwards KM, Fowler VG, Fredricks DN, Limaye AP, Murray BE, Naggie S, Pappas PG, **Patel R**, Paterson DL, Pegues DA, Petri WA, Schooley RT. COVID-19-Lessons Learned and Questions Remaining. *Clin Infect Dis*. 2021 Jun 15; 72 (12):2225-2240 PMID: 33104186 PMCID: 7797746 DOI: 10.1093/cid/ciaa1654

492. Cawcutt KA, **Patel R**, Gerber J, Caliendo AM, Cosgrove SE, Ashley ED, Garzaro P, Miller M, Lautenbach E, IDSA Research Summit "Leveraging Existing and Novel Diagnostics for Optimizing Outpatient Antibiotic Stewardship in Patients with Respiratory Tract Infections" Group. Leveraging Existing and Soon-to-Be-Available Novel Diagnostics for Optimizing Outpatient Antibiotic Stewardship in Patients With Respiratory Tract Infections. *Clin Infect Dis*. 2021 Jun 15; 72 (12):e1115-e1121 PMID: 33277647 DOI: 10.1093/cid/ciaa1815
493. Kusejko K, Aunon A, Jost B, Natividad B, Strahm C, Thurnheer C, Pablo-Marcos D, Slama D, Scanferla G, Uckay I, Waldmann I, Esteban J, Lora-Tamayo J, Clauss M, Fernandez-Sampedro M, Wouthuyzen-Bakker M, Ferrari MC, Gassmann N, Sendi P, Jent P, Morand PC, Vijayvargiya P, Trebse R, **Patel R**, Kouyos RD, Corvec S, Kramer TS, Stadelmann VA, Achermann Y. The Impact of Surgical Strategy and Rifampin on Treatment Outcome in Cutibacterium Periprosthetic Joint Infections. *Clin Infect Dis*. 2021 Jun 15; 72 (12):e1064-e1073 PMID: 33300545 PMCID: 8427719 DOI: 10.1093/cid/ciaa1839
494. Hanson KE, Altayar O, Caliendo AM, Arias CA, Englund JA, Hayden MK, Lee MJ, Loeb M, **Patel R**, El Alayli A, Sultan S, Falck-Ytter Y, Lavergne V, Mansour R, Morgan RL, Murad MH, Patel P, Bhimraj A, Mustafa RA. The Infectious Diseases Society of America Guidelines on the Diagnosis of COVID-19: Antigen Testing. *Clin Infect Dis*. 2021 Jun 23 Epub 2021 June 23 PMID: 34160592 DOI: 10.1093/cid/ciab557
495. Mohamed A, Anoy MMI, Tibbitts G, Raval YS, Flurin L, Greenwood-Quaintance KE, **Patel R**, Beyenal H. Hydrogen peroxide-producing electrochemical bandage controlled by a wearable potentiostat for treatment of wound infections. *Biotechnol Bioeng*. 2021 Jul; 118 (7):2815-2821 Epub 2021 May 03 PMID: 33856049 PMCID: 8653773 DOI: 10.1002/bit.27794
496. Cano EJ, Cafilisch KM, Bollyky PL, Van Belleghem JD, **Patel R**, Fackler J, Brownstein MJ, Horne B, Biswas B, Henry M, Malagon F, Lewallen DG, Suh GA. Phage Therapy for Limb-threatening Prosthetic Knee Klebsiella pneumoniae Infection: Case Report and In Vitro Characterization of Anti-biofilm Activity. *Clin Infect Dis*. 2021 Jul 1; 73 (1):e144-e151 PMID: 32699879 PMCID: 8246933 DOI: 10.1093/cid/ciaa705
497. Banerjee R, Komarow L, Virk A, Rajapakse N, Schuetz AN, Dylla B, Earley M, Lok J, Kohner P, Ihde S, Cole N, Hines L, Reed K, Garner OB, Chandrasekaran S, de St Maurice A, Kanatani M, Curello J, Arias R, Swearingen W, Doernberg SB, **Patel R**. Randomized Trial Evaluating Clinical Impact of RAPid IDentification and Susceptibility Testing for Gram-negative Bacteremia: RAPIDS-GN. *Clin Infect Dis*. 2021 Jul 1; 73 (1):e39-e46 PMID: 32374822 PMCID: 8246790 DOI: 10.1093/cid/ciaa528
498. Le Masters T, Johnson S, Jeraldo PR, Greenwood-Quaintance KE, Cunningham SA, Abdel MP, Chia N, **Patel R**. Comparative Transcriptomic Analysis of Staphylococcus aureus Associated with Periprosthetic Joint Infection under in Vivo and in Vitro Conditions. *J Mol Diagn*. 2021 Aug; 23 (8):986-999 Epub 2021 June 05 PMID: 34098085 PMCID: 8351120 DOI: 10.1016/j.jmoldx.2021.05.011
499. Flurin L, Greenwood-Quaintance KE, Esper RN, Sanchez-Sotelo J, **Patel R**. Sonication improves microbiologic diagnosis of periprosthetic elbow infection. *J Shoulder Elbow Surg*. 2021 Aug; 30 (8):1741-1749 Epub 2021 Feb 18 PMID: 33609642 PMCID: 8319056 DOI: 10.1016/j.jse.2021.01.023
500. Chambers HF, Evans SR, **Patel R**, Cross HR, Harris AD, Doi Y, Boucher HW, van Duin D, Tsalik EL, Holland TL, Pettigrew MM, Tamma PD, Hodges KR, Souli M, Fowler VG. Antibacterial Resistance Leadership Group 2.0: Back to Business. *Clin Infect Dis*. 2021 Aug 16; 73 (4):730-739 PMID: 33588438 PMCID: 8366825 DOI: 10.1093/cid/ciab141
501. Makabenta JMV, Park J, Li CH, Chattopadhyay AN, Nabawy A, Landis RF, Gupta A, Schmidt-Malan S, **Patel R**, Rotello VM. Polymeric Nanoparticles Active against Dual-Species Bacterial Biofilms. *Molecules*. 2021 Aug 16; 26 (16) PMID: 34443542 PMCID: 8399783 DOI: 10.3390/molecules26164958
502. Banerjee R#, Cunningham SA#, Beisken S, Posch AE, Johnston B, Johnson JR, **Patel R**. Core Genome Multi-Locus Sequence Typing and Prediction of Antimicrobial Susceptibility Using Whole Genome Sequences of Escherichia coli Bloodstream Infection Isolates. *Antimicrob Agents Chemother*. 2021 Aug 23; AAC0113921 [Epub ahead of print] PMID: 34424049 PMCID: 8522740 DOI: 10.1128/AAC.01139-21
503. Peters S#, Pascoe B#, Wu Z, Bayliss SC, Zeng X, Edwinston A, Veerabhadran-Gurunathan S, Jawahir S, Calland JK, Mourkas E, **Patel R**, Wiens T, Decuir M, Boxrud D, Smith K, Parker CT, Farrugia G, Zhang Q, Sheppard SK, Grover M. Campylobacter jejuni genotypes are associated with post-infection irritable bowel syndrome in humans. *Commun Biol*. 2021 Aug 30; 4 (1):1015 PMID: 34462533 PMCID: 8405632 DOI: 10.1038/s42003-021-02554-8
504. Berumen A, Lennon R, Breen-Lyles M, Griffith J, **Patel R**, Boxrud D, Decuir M, Farrugia G, Smith K, Grover M. Characteristics and Risk Factors of Post-Infection Irritable Bowel Syndrome After Campylobacter Enteritis. *Clin Gastroenterol Hepatol*. 2021 Sep; 19 (9):1855-1863.e1 Epub 2020 July 23 PMID: 32711045 PMCID: 8994162 DOI: 10.1016/j.cgh.2020.07.033

505. Albano M, Karau MJ, Greenwood-Quaintance KE, Osmon DR, Oravec CP, Berry DJ, Abdel MP, **Patel R**. In Vitro Activity of Rifampin, Rifabutin, and Rifapentine against Enterococci and Streptococci from Periprosthetic Joint Infection. *Microbiol Spectr*. 2021 Sep 3; 9 (1):e0007121 Epub 2021 July 14 PMID: 34259553 PMCID: 8552655 DOI: 10.1128/Spectrum.00071-21
506. Ersoy SC, Rose WE, **Patel R**, Proctor RA, Chambers HF, Harrison EM, Pak Y, Bayer AS. A Combined Phenotypic-Genotypic Predictive Algorithm for In Vitro Detection of Bicarbonate: beta-Lactam Sensitization among Methicillin-Resistant *Staphylococcus aureus* (MRSA). *Antibiotics (Basel)*. 2021 Sep 9; 10 (9) Epub 2021 Sept 09 PMID: 34572671 PMCID: 8469475 DOI: 10.3390/antibiotics10091089
507. Fida M, Khalil S, Abu Saleh O, Challener DW, Sohail MR, Yang JN, Pritt BS, Schuetz AN, **Patel R**. Diagnostic Value of 16S Ribosomal RNA Gene Polymerase Chain Reaction/Sanger Sequencing in Clinical Practice. *Clin Infect Dis*. 2021 Sep 15; 73 (6):961-968 PMID: 34407178 PMCID: 8442790 DOI: 10.1093/cid/ciab167
508. Flurin L, Wolf MJ, Greenwood-Quaintance KE, Sanchez-Sotelo J, **Patel R**. Targeted next generation sequencing for elbow periprosthetic joint infection diagnosis. *Diagn Microbiol Infect Dis*. 2021 Oct; 101 (2):115448 Epub 2021 June 05 PMID: 34224945 PMCID: 8429173 DOI: 10.1016/j.diagmicrobio.2021.115448
509. Liu Y, Jeraldo P, Mendes-Soares H, Masters T, Asangba AE, Nelson H, **Patel R**, Chia N, Walther-Antonio M. Amplification of Femtograms of Bacterial DNA Within 3 h Using a Digital Microfluidics Platform for MinION Sequencing. *ACS Omega*. 2021 Oct 5; 6 (39):25642-25651 Epub 2021 Sept 23 PMID: 34632220 PMCID: 8495859 DOI: 10.1021/acsomega.1c03683
510. Perez F, Colindres RV, Wilson BM, Saade E, Jump RLP, Banerjee R, **Patel R**, Evans SR, Bonomo RA. Desirability of Outcome Ranking for the Management of Antimicrobial Therapy (DOOR MAT) Reveals Improvements in the Treatment of Bloodstream Infections Caused by *Escherichia coli* and *Klebsiella pneumoniae* in Patients from the Veterans Health Administration. *Clin Infect Dis*. 2021 Oct 5; 73 (7):1231-1238 PMID: 33978146 PMCID: 8492112 DOI: 10.1093/cid/ciab384
511. Fida M, Wolf MJ, Hamdi A, Vijayvargiya P, Esquer Garrigos Z, Khalil S, Greenwood-Quaintance KE, Thoendel MJ, **Patel R**. Detection of Pathogenic Bacteria From Septic Patients Using 16S Ribosomal RNA Gene-Targeted Metagenomic Sequencing. *Clin Infect Dis*. 2021 Oct 5; 73 (7):1165-1172 PMID: 33893492 PMCID: 8492209 DOI: 10.1093/cid/ciab349
512. Cafilisch KM, **Patel R**. Phage Activity Against Planktonic and Biofilm *Staphylococcus aureus* Periprosthetic Joint Infection Isolates. *Antimicrob Agents Chemother*. 2021 Oct 18; AAC0187921 [Epub ahead of print] PMID: 34662191 PMCID: 8765226 DOI: 10.1128/AAC.01879-21
513. Cano EJ, Flurin L, Mohamed A, Greenwood-Quaintance KE, Raval YS, Beyenal H, **Patel R**. Hypochlorous Acid-Generating Electrochemical Catheter Prototype for Prevention of Intraluminal Infection. *Microbiol Spectr*. 2021 Oct 31; 9 (2):e0055721 Epub 2021 Oct 27 PMID: 34704827 PMCID: 8549727 DOI: 10.1128/Spectrum.00557-21
514. Karau MJ, Schmidt-Malan SM, Cunningham SA, Mandrekar JN, Pritt BS, Keepers TR, Serio AW, Chitra S, **Patel R**. Activity of Omadacycline in Rat Methicillin-Resistant *Staphylococcus aureus* Osteomyelitis. *Antimicrob Agents Chemother*. 2021 Nov 1; AAC0170321 Epub 2021 Nov 01 PMID: 34723626 PMCID: 8765317 DOI: 10.1128/AAC.01703-21
515. Cho HK, Masters T, Greenwood-Quaintance KE, Johnson S, Jeraldo PR, Chia N, Pu M, Abdel MP, **Patel R**. Transcriptomic analysis of *Streptococcus agalactiae* periprosthetic joint infection. *Microbiologyopen*. 2021 Nov; 10 (6):e1256 PMID: 34964296 PMCID: 8678771 DOI: 10.1002/mbo3.1256
516. Kies KD, Thomas AS, Binnicker MJ, Bashynski KL, **Patel R**. Decrease in Enteroviral Meningitis: An Unexpected Benefit of Coronavirus Disease 2019 (COVID-19) Mitigation? *Clin Infect Dis*. 2021 Nov 2; 73 (9):e2807-e2809 PMID: 33354704 PMCID: 7799197 DOI: 10.1093/cid/ciaa1881
517. Raval YS, Mohamed A, Flurin L, Mandrekar JN, Greenwood Quaintance KE, Beyenal H, **Patel R**. Hydrogen-peroxide generating electrochemical bandage is active in vitro against mono- and dual-species biofilms. *Biofilm*. 2021 Dec; 3:100055 Epub 2021 Sept 03 PMID: 34585138 PMCID: 8455977 DOI: 10.1016/j.biofilm.2021.100055
518. Albano M, Fleischmann WA, Greenwood-Quaintance KE, **Patel R**. In vitro activity of arbekacin against multidrug-resistant gram-negative bacilli. *J Microbiol Immunol Infect*. 2021 Dec; 54 (6):1118-1121 Epub 2020 Sept 09 PMID: 32962921 DOI: 10.1016/j.jmii.2020.08.018
519. Raval YS, Mohamed A, Mandrekar JN, Fisher C, Greenwood-Quaintance KE, Beyenal H, **Patel R**. In Vitro Anti-Biofilm Activity of Hydrogen-Peroxide Generating Electrochemical Bandage Against Yeast Biofilms. *Antimicrob Agents Chemother*. 2021 Dec 20; AAC0179221 [Epub ahead of print] PMID: 34930030 PMCID: 8846466 DOI: 10.1128/AAC.01792-21
520. **Patel R**. Advances in Testing for Infectious Diseases-Looking Back and Projecting Forward. *Clin Chem*. 2021 Dec 30; 68 (1):10-15 PMID: 34969101 DOI: 10.1093/clinchem/hvab110

521. Totten KMC, Cunningham SA, Gades NM, Etzioni A, **Patel R**. Corrigendum: Pharmacokinetic assessment of staphylococcal phage K following parenteral and intra-articular administration in rabbits. *Front Pharmacol*. 2022; 13:1005123 Epub 2022 Sept 02 PMID: 36120295 PMCID: 9479454 DOI: 10.3389/fphar.2022.1005123
522. **Patel R**, Polage CR, Bard JD, May L, Lee FM, Fabre V, Hayden MK, Doernberg SDB, Haake DA, Trautner BW, Grigoryan L, Tsalik EL, Hanson KE. Envisioning future urinary tract infection diagnostics. *Clinical Infectious Diseases*. 2022; 74 (7):1284-92
523. Tai DBG, Wengenack NL, **Patel R**, Berbari EF, Abdel MP, Tande AJ. Fungal and mycobacterial cultures should not be routinely obtained for diagnostic work-up of patients with suspected periprosthetic joint infections. *Bone Joint J*. 2022 Jan; 104-B (1):53-58 PMID: 34969277 DOI: 10.1302/0301-620X.104B1.BJJ-2021-0876.R1
524. Karau M, Schmidt-Malan S, Mandrekar J, Lehoux D, Schuch R, Cassino C, **Patel R**. Locally delivered antistaphylococcal lysin exebacase or CF-296 is active in methicillin-resistant *Staphylococcus aureus* implant-associated osteomyelitis. *J Bone Jt Infect*. 2022; 7 (4):169-175 Epub 2022 July 27 PMID: 36032801 PMCID: 9399932 DOI: 10.5194/jbji-7-169-2022
525. Vijayvargiya P, Feri A, Mairey M, Rouillon C, Jeraldo PR, Esquer Garrigos Z, Thoendel MJ, Greenwood-Quaintance KE, Sohail MR, Sampathkumar P, Spsychalla MT, Stewart AK, Patnaik MM, Tande AJ, Cruveiller S, Hannet I, Beurdeley P, **Patel R**. Metagenomic shotgun sequencing of blood to identify bacteria and viruses in leukemic febrile neutropenia. *PLoS One*. 2022; 17 (6):e0269405 Epub 2022 June 16 PMID: 35709201 PMCID: 9202879 DOI: 10.1371/journal.pone.0269405
526. Totten KMC, Cunningham SA, Gades NM, Etzioni A, **Patel R**. Pharmacokinetic Assessment of Staphylococcal Phage K Following Parenteral and Intra-articular Administration in Rabbits. *Front Pharmacol*. 2022; 13:840165 Epub 2022 May 20 PMID: 35668926 PMCID: 9163985 DOI: 10.3389/fphar.2022.840165
527. Geno Tai DB, Tai DBG, **Patel R**, Abdel MP, Berbari EF, Tande AJ. Microbiology of hip and knee periprosthetic joint infections: a database study. *Clin Microbiol Infect*. 2022 Feb; 28 (2):255-259 Epub 2021 June 12 PMID: 34129907 PMCID: 8665939 DOI: 10.1016/j.cmi.2021.06.006
528. Fleming D, Cunningham SA, **Patel R**. Contribution of Uremia to *Ureaplasma*-Induced Hyperammonemia. *Microbiol Spectr*. 2022 Feb 23; 10 (1):e0194221 Epub 2022 Feb 16 PMID: 35171026 PMCID: 8849080 DOI: 10.1128/spectrum.01942-21
529. Whittle E, Yonkus JA, Jeraldo P, Alva-Ruiz R, Nelson H, Kendrick ML, Grys TE, **Patel R**, Truty MJ, Chia N. Optimizing Nanopore Sequencing for Rapid Detection of Microbial Species and Antimicrobial Resistance in Patients at Risk of Surgical Site Infections. *mSphere*. 2022 Feb 23; 7 (1):e0096421 Epub 2022 Feb 16 PMID: 35171692 PMCID: 8849348 DOI: 10.1128/msphere.00964-21
530. Yonkus JA, Whittle E, Alva-Ruiz R, Abdelrahman AM, Horsman SE, Suh GA, Cunningham SA, Nelson H, Grotz TE, Smoot RL, Cleary SP, Nagorney DM, Kendrick ML, **Patel R**, Truty MJ, Chia N. "Answers in hours": A prospective clinical study using nanopore sequencing for bile duct cultures. *Surgery*. 2022 Mar; 171 (3):693-702 Epub 2021 Dec 29 PMID: 34973809 DOI: 10.1016/j.surg.2021.09.037
531. Wang M, Earley M, Chen L, Hanson BM, Yu Y, Liu Z, Salcedo S, Cober E, Li L, Kanj SS, Gao H, Munita JM, Ordonez K, Weston G, Satlin MJ, Valderrama-Beltran SL, Marimuthu K, Stryjewski ME, Komarow L, Luterbach C, Marshall SH, Rudin SD, Manca C, Paterson DL, Reyes J, Villegas MV, Evans S, Hill C, Arias R, Baum K, Fries BC, Doi Y, **Patel R**, Kreiswirth BN, Bonomo RA, Chambers HF, Fowler VG Jr, Arias CA, van Duin D, Multi-Drug Resistant Organism Network Investigators. Clinical outcomes and bacterial characteristics of carbapenem-resistant *Klebsiella pneumoniae* complex among patients from different global regions (CRACKLE-2): a prospective, multicentre, cohort study. *Lancet Infect Dis*. 2022 Mar; 22 (3):401-412 Epub 2021 Nov 09 PMID: 34767753 PMCID: 8882129 DOI: 10.1016/S1473-3099(21)00399-6
532. Suh GA#, Lodise TP, Tamma PD, Knisely JM, Alexander J, Aslam S, Barton KD, Bizzell E, Totten KMC, Campbell JL, Chan BK, Cunningham SA, Goodman KE, Greenwood-Quaintance KE, Harris AD, Hesse S, Maresso A, Nussenblatt V, Pride D, Rybak MJ, Sund Z, van Duin D, Van Tyne D, **Patel R**, Antibacterial Resistance Leadership Group. Considerations for the Use of Phage Therapy in Clinical Practice. *Antimicrob Agents Chemother*. 2022 Mar 15; 66(3):e0207121. Epub 2022 Jan 18. PMID: 35041506 PMCID: 8923208 DOI: 10.1128/AAC.02071-21
533. Hirt H, Greenwood-Quaintance KE, Barnes AMT, Karau MJ, Till LM, Palzer E, Guan W, VanNieuwenhze MS, Kashyap PC, **Patel R**, Dunny GM. Dynamics of plasmid-mediated niche invasion, immunity to invasion, and pheromone-inducible conjugation in the murine gastrointestinal tract. *Nat Commun*. 2022 Mar 16; 13 (1):1377 PMID: 35296679 PMCID: 8927478 DOI: 10.1038/s41467-022-29028-7
534. Flurin L, Wolf M, Mutchler M, Daniels M, Wengenack N, **Patel R**. Targeted Metagenomic Sequencing-Based Approach Applied to 2,146 Tissue and Body Fluid Samples in Routine Clinical Practice. *Clin Infect Dis*. 2022

Apr 1 Epub 2022 Apr 01 PMID: 35362534 DOI: 10.1093/cid/ciac247

535. **Patel R**, Polage CR, Dien Bard J, May L, Lee FM, Fabre V, Hayden MK, Doernberg SDB, Haake DA, Trautner BW, Grigoryan L, Tsalik EL, Hanson KE. Envisioning Future Urinary Tract Infection Diagnostics. *Clin Infect Dis*. 2022 Apr 9; 74 (7):1284-1292 PMID: 34463708 PMCID: 8994576 DOI: 10.1093/cid/ciab749
536. Rothstein TE, Cunningham SA, Rieke RA, Mainella JM, Mutchler MM, **Patel R**. Macrolide Resistance in *Mycoplasma pneumoniae*, Midwestern United States, 2014 to 2021. *Antimicrob Agents Chemother*. 2022 Apr 19; 66 (4):e0243221 Epub 2022 Mar 21 PMID: 35311520 PMCID: 9017374 DOI: 10.1128/aac.02432-21
537. Shropshire WC , Dinh AQ , Earley M , Komarow L , Panesso D , Rydell K , Gomez-Villegas SI , Miao HY , Hill C , Chen L , **Patel R** , Fries BC , Abbo L , Cober E , Revolinski S , Luterbach CL , Chambers H , Fowler VG Jr, Bonomo RA , Shelburne SA , Kreiswirth BN , van Duin D , Hanson BM , Arias CA . Accessory genomes drive independent spread of carbapenem-resistant *Klebsiella pneumoniae* clonal groups 258 and 307 in Houston, TX. *MBIO*. 2022 Apr 26; 13 (2):e00497-22
538. Edwinson AL, Yang L, Peters S, Hanning N, Jeraldo P, Jagtap P, Simpson JB, Yang TY, Kumar P, Mehta S, Nair A, Breen-Lyles M, Chikkamenahalli L, Graham RP, De Winter B, **Patel R**, Dasari S, Kashyap P, Griffin T, Chen J, Farrugia G, Redinbo MR, Grover M. Gut microbial beta-glucuronidases regulate host luminal proteases and are depleted in irritable bowel syndrome. *Nat Microbiol*. 2022 May; 7 (5):680-694 Epub 2022 Apr 28 PMID: 35484230 PMCID: 9081267 DOI: 10.1038/s41564-022-01103-1
539. Comba IY, Schuetz AN, Misra A, Friedman DZP, Stevens R, **Patel R**, Lancaster ZD, Shah A. Antimicrobial Susceptibility of *Elizabethkingia* Species: Report from a Reference Laboratory. *J Clin Microbiol*. 2022 May 5; e0254121 Epub 2022 May 05 PMID: 35510517 PMCID: 9199404 DOI: 10.1128/jcm.02541-21
540. Ong SWX, Hon PY, Wee SSH, Chia JWZ, Mendis S, Izharuddin E, Lin RJ, Chia PY, Sim RCS, Chen MI, Chow A, Yoong J, Lye DC, Teng CB, Tambyah PA, Banerjee R, **Patel R**, De PP, Vasoo S. Accuracy of a Rapid Multiplex Polymerase Chain Reaction Plus a Chromogenic Phenotypic Test Algorithm for Detection of Extended-Spectrum beta-Lactamase and Carbapenemase-Producing Gram-Negative Bacilli in Positive Blood Culture Bottles. *Clin Infect Dis*. 2022 May 30; 74 (10):1850-1854 PMID: 34554228 DOI: 10.1093/cid/ciab848
541. Masters TL, Bhagwate AV, Dehankar MK, Greenwood-Quaintance KE, Abdel MP, Mandrekar JN, **Patel R**. Human transcriptomic response to periprosthetic joint infection. *Gene*. 2022 May 30; 825:146400 Epub 2022 Mar 17 PMID: 35306116 PMCID: 9007914 DOI: 10.1016/j.gene.2022.146400
542. Nabawy A, Makabenta JM, Schmidt-Malan S, Park J, Li CH, Huang R, Fedeli S, Chattopadhyay AN, **Patel R**, Rotello VM. Dual antimicrobial-loaded biodegradable nanoemulsions for synergistic treatment of wound biofilms. *J Control Release*. 2022 Jul; 347:379-388 Epub 2022 May 18 PMID: 35550914 DOI: 10.1016/j.jconrel.2022.05.013
543. Cunningham SA, Mandrekar JN, Suh GA, **Patel R**. Preliminary Evaluation of PhageBank Susceptibility Testing™ Reproducibility for *Escherichia coli* and *Staphylococcus aureus* The Journal of Applied Laboratory Medicine. 2022.
544. Cunningham SA, Mandrekar JN, Suh G, **Patel R**. Preliminary Reproducibility Evaluation of a Phage Susceptibility Testing Method Using a Collection of *Escherichia coli* and *Staphylococcus aureus* Phages. *J Appl Lab Med*. 2022 Jul 12 Epub 2022 July 12 PMID: 35818639 DOI: 10.1093/jalm/jfac051
545. Hong HL, Flurin L, Thoendel MJ, Wolf MJ, Abdel MP, Greenwood-Quaintance KE, **Patel R**. Targeted versus Shotgun Metagenomic Sequencing-Based Detection of Microorganisms in Sonicate Fluid for Periprosthetic Joint Infection Diagnosis. *Clin Infect Dis*. 2022 Aug 9 Epub 2022 Aug 09 PMID: 35944127 DOI: 10.1093/cid/ciac646
546. Tibbits G, Mohamed A, Gelston S, Flurin L, Raval YS, Greenwood-Quaintance K, **Patel R**, Beyenal H. Efficacy and toxicity of hydrogen peroxide producing electrochemical bandages in a porcine explant biofilm model. *J Appl Microbiol*. 2022 Sep 8 Epub 2022 Sept 08 PMID: 36073322 DOI: 10.1111/jam.15812
547. Anoy MMI, Gelston S, Mohamed A, Flurin L, Raval YS, Greenwood-Quaintance K, **Patel R**, Lewandowski Z, Beyenal H. Hypochlorous acid produced at the counter electrode inhibits catalase and increases bactericidal activity of a hydrogen peroxide generating electrochemical bandage. *Bioelectrochemistry*. 2022 Sep 12; 148:108261 Epub 2022 Sept 12 PMID: 36115186 DOI: 10.1016/j.bioelechem.2022.108261
548. Blaskovich MAT, Hansford KA, Butler MS, Ramu S, Kavanagh AM, Jarrad AM, Prasetyoputri A, Pitt ME, Huang JX, Lindahl F, Ziora ZM, Bradford T, Muldoon C, Rajaratnam P, Pelingon R, Edwards DJ, Zhang B, Amado M, Elliott AG, Zuegg J, Coin L, Woischnig AK, Khanna N, Breidenstein E, Stincone A, Mason C, Khan N, Cho HK, Karau MJ, Greenwood-Quaintance KE, **Patel R**, Wootton M, James ML, Hutton ML, Lyras D, Ogunniyi AD, Mahdi LK, Trott DJ, Wu X, Niles S, Lewis K, Smith JR, Barber KE, Yim J, Rice SA, Rybak MJ, Ishmael CR, Hori KR, Bernthal NM, Francis KP, Roberts JA, Paterson DL, Cooper MA. A lipoglycopeptide

antibiotic for Gram-positive biofilm-related infections. *Sci Transl Med.* 2022 Sep 14; 14 (662):eabj2381 Epub 2022 Sept 14 PMID: 36103517 DOI: 10.1126/scitranslmed.abj2381

549. Vaillant JJ, Cunningham SA, **Patel R.** Antibiotic susceptibility testing of *Staphylococcus aureus* using the Biolog OmniLog(R) system, a metabolic phenotyping assay. *Diagn Microbiol Infect Dis.* 2022 Oct; 104 (2):115759 Epub 2022 July 01 PMID: 35872370 DOI: 10.1016/j.diagmicrobio.2022.115759

Non-Peer-reviewed Articles

1. * Grys TE, **Patel R.** Update on Shiga Toxin-Producing *Escherichia coli*. *Mayo Medical Laboratories Communique.* 2010 Jul; 35.

Conference Reports

1. Y. Liu, P. Jeraldo, S. McDonough, J. Jen, **R. Patel**, M. Walther-Antonio, C. Lambert, B. Gale. Experimental validation of an optofluidic platform for microbial single cell isolation and whole genome amplification for human microbiome applications 2017 IEEE International Symposium on Medical Measurements and Applications (MeMeA).2017;62-66.

Book Chapters

1. **Patel R**, Paya CV. Fungal infections of solid organ transplants. In: *Cliniguide to Fungal Infections* 1994;5:1-6
2. **Patel R**, Steckelberg JM. Infections of the heart. In: Murphy JG. *Mayo Clinic Cardiology Review*. Armonk: Futura Publishing Company, Inc.; 1997. p. 555-82.
3. **Patel R**, Paya CV. Cytomegalovirus infection and disease in solid organ transplant recipients. In: Bowden RA, et al, editors. *Transplant Infections*. Philadelphia: Lippincott-Raven Publishers; 1998. p. 229-44.
4. **Patel R**, Uhl JR, Cockerill FR. Multiplex PCR for determination of vanA, vanB and vanC1. In: *Methods in Molecular Medicine: Antibiotic Resistance Methods*. Totowa, NJ: Humana Press, 1999.
5. **Patel R**, Steckelberg JM. Infections of the heart. In: Murphy JG. *Mayo Clinic Cardiology Review*. Second ed. Philadelphia: Lippincott Williams & Wilkins; 2000. p. 407-44.
6. **Patel R**. Enterococci. In: Wilson WR, Sande MA. *Current Diagnosis & Treatment in Infectious Diseases*. New York: Lange Medical Books/McGraw-Hill; 2001. p. 511-7.
7. **Patel R**. Infections in transplant recipients. In: Wilson WR, Sande MA, editors. *Current Diagnosis & Treatment in Infectious Diseases*. New York: Lange Medical Books/McGraw-Hill; 2001. p. 328-46.
8. **Patel R**. Other Gram-positive cocci. In: Wilson WR, Sande MA, editors. *Current Diagnosis & Treatment in Infectious Diseases*. New York: Lange Medical Books/McGraw-Hill; 2001. p. 518-27.
9. Rouse MS, **Patel R**. Endocarditis experimental. In: *Endocarditis infectiosa*, Vilacosta I, Sarria C, San Roman JE, Eds., Prous Science, S.A., 2002;25-29.
10. * Kolbert CP, Rys PN, Hopkins M, Lynch DT, Germer JJ, O'Sullivan CE, Trampuz A, **Patel R**. 16S ribosomal DNA sequence analysis for identification of bacteria in a clinical microbiology laboratory. In: Persing DH, editor., editor(s). *Molecular microbiology : diagnostic principles and practice*. Washington, DC: ASM Press; 2004. p. 361-77.
11. Mitchell PS, Germer JJ, **Patel R**. Nucleic acid amplification methods: laboratory design and operations. In: Persing DH, editor. *Molecular microbiology : diagnostic principles and practice*. Washington, DC: ASM Press; 2004. p. 85-93.
12. **Patel R**. Molecular laboratory diagnosis of infection. In: S. Peter Borriello, Patrick R. Murray and Guido Funke. *Topley & Wilson's Microbiology & Microbial Infections - Bacteriology* Edward Arnold (Publishers) Ltd; 2005. p. 721-37.
13. **Patel R**, Murphy JG, Steckelberg JM. Infective endocarditis. In: Murphy JG, Lloyd MA. *Mayo Clinic cardiology: concise textbook*. 3rd ed. Rochester: Mayo Clinic Scientific Press : Informa Healthcare; 2007. p. 983-1016.
14. Deirmengian CA, **Patel R**. Clinical and laboratory evaluation. In: Cierny G III; McLaren AC; Wongworawat MD editor. *Orthopaedic knowledge update. Musculoskeletal infection*. Rosemont: American Academy of Orthopaedic Surgeons; 2009. p. 57-65.
15. * del Pozo JL, Hanssen AD, **Patel R**. The microbiology of musculoskeletal infections. In: Cierny G III; McLaren AC; Wongworawat MD editor. *Orthopaedic knowledge update. Musculoskeletal infection*. Rosemont: American Academy of Orthopaedic Surgeons; 2009. p. 15-32.
16. * Babady NE, Cockerill FR, **Patel R**. Rapid PCR screening methods. In: *Molecular techniques for the study of*

hospital-acquired infection. 2011. p. 105-33.

17. **Patel R**. Select gram-positive aerobic bacteria. In: Temesgen Z; Baddour LM; Steckelberg JM editor. Mayo Clinic infectious diseases board review. Rochester: Mayo Clinic Scientific Press; 2011. p. 80-9.
18. **Patel R**, Nolte FS. Viral infections in transplant recipients. In: Persing DH; et al, editor. Molecular microbiology: diagnostic principles and practice. 2nd Edition. Washington, DC: ASM Press; 2011. p. 631-40.
19. Vergidis P, **Patel R**. Staphylococcus aureus. In: Nina Singh, editor(s). Transplant Infections. 2012.
20. Del Poza JL, **Patel R**. A visual approach to biofilm related infections: from bench to bed. In: Almirante B, Pahissa A. Actualizacion en infecciones relacionadas con el uso de cateteres vasculares. 1st ed. Valencia: Marge Medica Books; 2013. p. 17-32.
21. Alatoon AA, **Patel R**. Molecular microbiology in transplantation. In: Molecular genetic pathology. Second Edition. 2013. p. 795-811.
22. Brinkman CL, **Patel R**. Molecular pathogenesis of infective endocarditis. In: Molecular medical microbiology. Second Edition. Volume 2-3. 2014. p. 811-22.
23. Ryu SY, **Patel R**. Microbiology of bone and joint infections. In: Bone and joint infections: from microbiology to diagnostics and treatment. 2015. p. 5-20.
24. Heaton P, **Patel R**. MALDI-TOF mass spectrometry applications in infectious diseases. In: Rifai N; Et al editors., Tietz textbook of laboratory medicine. Seventh Edition. Philadelphia: Saunders; 2023. p. 297.

Editorials

1. **Patel R**, Trampuz A. Infections transmitted through musculoskeletal-tissue allografts. N Engl J Med 2004 Jun 17; 350 (25):2544-6
2. Del Pozo JL, **Patel R**. Are antibiotics and surgery sufficient to treat biofilm-associated infections? Enferm Infecc Microbiol Clin. 2013; 31(10):641-2.
3. **Patel R**, Babady E, Theel ES, Storch GA, Pinsky BA, St George K, Smith TC, Bertuzzi S. Report from the American Society for Microbiology COVID-19 International Summit, 23 March 2020: Value of Diagnostic Testing for SARS-CoV-2/COVID-19. mBio 2020 Mar 26; 11 (2)

Commentaries

1. * Rajagopalan G, **Patel R**, Kaveri SV, David CS. Comment on: Human intravenous immunoglobulin for experimental streptococcal toxic shock: bacterial clearance and modulation of inflammation. J Antimicrob Chemother. 2007 Jan; 59(1):157-9; author reply 159-60. Epub 2006 Oct 28. PMID:17071954 DOI:10.1093/jac/dkl430
2. * Del Pozo JL, van de Beek D, Mandrekar JN, Daly RC, McGregor CG, Azanza JR, **Patel R**. High serum cholesterol levels are associated with herpes zoster infection after heart transplantation. Clin Infect Dis. 2010 Jan 1; 50(1):121-2. PMID:20001524 DOI:10.1086/649005
3. Shannon SK, Mandrekar J, Gustafson DR, Rucinski SL, Dailey AL, Segner RE, Burman MK, Boelman KJ, Lynch DT, Rosenblatt JE, **Patel R**. Anaerobic thioglycolate broth culture for recovery of Propionibacterium acnes from shoulder tissue and fluid specimens. J Clin Microbiol. 2013 Feb; 51(2):731-2. PMID:23355724 DOI:10.1128/JCM.02695-12

Abstracts

1. **Patel R**, Hughes RW. An unusual case of myxedema megacolon complicated by ischemic and pseudomembranous colitis American College of Physicians Minnesota Chapter Meeting, Minneapolis, Minnesota, 1991 - \$50.00 award
2. **Patel R**, Cockerill FR, Porayko MK, Keating MR. Lactobacillemia in liver transplant patients receiving selective oral bowel decontamination 7th International Symposium on Infection in the Immunocompromised Host; 1992, Boulder Colorado.
3. Portela D, **Patel R**, Keating MR, Steers JL, Porayko MK, Wiesner RH, Wilhelm MP, Marshall WF, Walker RC, Ilstrup DM, Paya CV. A randomized trial evaluating ganciclovir followed by high dose acyclovir in the prophylaxis of cytomegalovirus infection in liver transplantation International Liver Transplantation Society, Toronto, Canada. 1993
4. **Patel R**, Gustaferra CA, Krom RA, Wiesner RH, Roberts GD, Paya CV. Deep scopolariopsis in the immunocompromised host. Infectious Diseases Society of America, New Orleans, LA, 1993 6th International Interscience Symposium on Chemotherapy in the Compromised Host, Bratislava, Slovakia, 1993

5. **Patel R**, Cockerill FR, Porayko MK, Keating MR. Lactobacillemia in liver transplantation patients 6th International Interscience Symposium on Chemotherapy in the Compromised Host, Bratislava, Slovakia, 1993
6. **Patel R**, Keating MR, Cockerill FR III, Steckelberg JM. Enterococcus avium Bacteremia. 33rd Interscience Conference on Antimicrobial Agents and Chemotherapy, New Orleans, LA; 1993 Oct.
7. **Patel R**, Smith TF, Epsy MJ, Wiesner RH, Krom RAF, Portela D, Paya CV. A prospective comparison of molecular diagnostic techniques for detecting CMV viremia in liver transplant recipients Infectious Diseases Society of America, Orlando, Florida, 1994
8. Epsy MJ, **Patel R**, Paya CV, Smith TF. Comparison of three methods for the extraction of viral nucleic acids from blood cultures. Abstracts of the General Meeting of the American Society for Microbiology. 1994; 94:540.
9. **Patel R**, Smith TF, Epsy MJ, Wiesner RH, Krom RAF, Portela D, Paya CV. Detection of cytomegalovirus DNA in sera of liver transplant recipients. Abstracts of the General Meeting of the American Society for Microbiology. 1994; 94:522.
10. Wong Kee Song L, **Patel R**, Walker RC, Emslie-Smith AM. Efficacy of albendazole in high-grade neurocysticercosis American College of Physicians Minnesota Chapter Meeting, Minneapolis, Minnesota, 1994 -\$25.00 award
11. **Patel R**, Roberts GD, Keating MR, Paya CV. Non-tuberculous mycobacterial infections in solid organ transplant patients 8th International Symposium on Infections in the Immunocompromised Host, Davos, Switzerland, 1994
12. Portela D, **Patel R**, Larson-Keller J, Ilstrup D, Steers JL, Wiesner RH, Krom RAF, Paya CV. OKT3 treatment of steroid-resistant rejection as a risk factor for symptomatic CMV infection in liver transplantation. Program Abstr - Intersci Conf Antimicrob Agents Chemother. 1994; 34:9.
13. **Patel R**, Gustaferro CA, Krom RA, Wiesner RH, Roberts GD, Paya CV. Phaeohyphomycosis due to Scopulariopsis brumptii in a liver transplant recipient Focus on Fungal Infection IV, Houston, Texas, 1994
14. **Patel R**, Badley AD, Larson-Keller JJ, Harmensen WS, Ilstrup DM, Wiesner RH, Steers JL, Krom RAF, Protela D, Paya CV. Enterococcal bacteremia in liver transplantation recipients Infectious Disease Society of America, San Francisco, California, 1995
15. **Patel R**, Portela D, Harmsen WS, Larson-Keller JJ, Ilstrup DM, Badley AD, Paya CV. Invasive fungal infections following 465 liver transplantations: Description of cases and analysis of risk factors 64th Annual Meeting of the Royal College of Physicians and Surgeons of Canada, Montreal, Canada, 1995
16. Badley AD, **Patel R**, Portela D, Ilstrup D, Paya CV. Outcome of untreated CMV viremia in liver transplant recipients. Program Abstr - Intersci Conf Antimicrob Agents Chemother. 1995; 35:201.
17. Badley A, **Patel R**, Portela D, Ilstrup D, Paya C. Risk factors and prognostic significance of untreated CMV viremia in liver transplant recipients Controversies in Transplant Infection, Tucson, Arizona, 1995
18. **Patel R**, Osmon DR, Steckelberg JM, Dekutoski MB, Wilson WR. Shigella boydii vertebral osteomyelitis and epidural abscess Musculoskeletal Infection Society Annual Meeting, Snowmass, Colorado, 1995
19. **Patel R**, Smith T, Epsy M, Wiesner R, Krom R, Portela D, Paya CV. Detection of cytomegalovirus DNA in sera of liver transplant recipients First Annual Symposium on Controversies in Transplant Infection; Tucson, AZ; February 2-5, 1995
20. **Patel R**, Portela D, Harmsen WS, Larson-Keller JJ, Ilstrup D, Badley AD, Paya CV. Clinical outcome of and risk factors for invasive fungal infection following 405 liver transplantations. (Abstract 583). Clin Invest Med. 1995 Aug; 18(Suppl):B88.
21. **Patel R**, Klein DW, Epsy M, Harmsen WS, Ilstrup DM, Paya CV, Smith TF. Optimization of the detection of cytomegalovirus viremia in transplantation recipients 35th ICAAC; San Francisco, CA; September 17-20, 1995
22. **Patel R**, Portela D, Badley AD, Harmsen WS, Larson-Keller JJ, Ilstrup DM, Wiesner RH, Krom RAF, Paya CV. Clinical outcome of and risk factors for invasive fungal infections following 405 first liver transplantations. Liver Transpl Surg. 1995 Nov; 1:454.
23. Badley AD, Seaberg E, Portela D, Porayko M, **Patel R**, Keating M, Wiesner R, Krom R, Wilhelm M, Walker R, Marshall W, Zetterman R, Paya CV. A randomized trial of acyclovir (ACV) vs. Ganciclovir (GCV) as prophylaxis against CMV infection in liver transplant recipients. Program Abstr - Intersci Conf Antimicrob Agents Chemother. 1996; 36:167.
24. Kohner P, **Patel R**, Uhl J, Garin K, Wegener L, Cockerill FR III. Comparison of agar dilution, broth dilution, and E-test for susceptibility testing of enterococcus spp. against vancomycin. Abstracts of the General Meeting of

the American Society for Microbiology. 1996; 96:32.

25. **Patel R**, Badley AD, Larson-Keller JJ, Harmsen WS, Ilstrup DM, Wiesner RH, Steers JL, Krom RAF, Portela D, Paya CV. Enterococcal bacteremia in liver transplantation recipients 9th International Symposium on Infections in the Immunocompromised Host, Assisi, Italy, 1996
26. Rouse MS, Piper KE, **Patel P**, Wilson WR, Steckelberg JM. Extended spectrum cephalosporin treatment of penicillin-resistant pneumococcal experimental pneumonia in immunocompetent mice. Program Abstr - Intersci Conf Antimicrob Agents Chemother. 1996; 36:29.
27. Rouse MS, Piper KE, **Patel R**, Cockerill FR, Wilson WR, Steckelberg JM. In vitro activity of LY 333328 against vancomycin resistant (vanA, vanB, vanC-1, vanC-2) enterococci. Program Abstr - Intersci Conf Antimicrob Agents Chemother. 1996; 36:135.
28. Rouse MS, Piper KE, **Patel R**, Wilson WR, Steckelberg JM. In vitro and in vivo activity of BAY12-8039 or trovafloxacin against penicillin-resistant *Streptococcus pneumoniae* experimental pneumonia in immunocompetent mice. Program Abstr - Intersci Conf Antimicrob Agents Chemother. 1996; 36:29.
29. Rouse MS, **Patel R**, Wilson WR, Steckelberg JM. Levofloxacin plus cefotaxime treatment of methicillin-sensitive *Staphylococcus aureus* experimental osteomyelitis. Abstracts of the General Meeting of the American Society for Microbiology. 1996; 96:134.
30. **Patel R**, Uhl JR, Kohner P, Cockerill FR III. Multiplex polymerase chain reaction detection of vanA, vanB and vanC genes in enterococci. Abstracts of the General Meeting of the American Society for Microbiology. 1996; 96:32.
31. Piper KE, Rouse MS, **Patel R**, Wilson WR, Steckelberg JM. RU 004 treatment of beta-lactamase positive H. Influenzae type B experimental pneumonia in immunocompetent mice. Program Abstr - Intersci Conf Antimicrob Agents Chemother. 1996; 36:31.
32. Dockrell D, Prada J, **Patel R**, Jones M, Smith T, Wiesner R, Krom R, Paya C. Seroconversion to human herpesvirus 6 (HHV-6) following liver transplantation is a predictor of CMV disease. Program Abstr - Intersci Conf Antimicrob Agents Chemother. 1996; 36:165.
33. Rouse MS, Piper KE, **Patel R**, Cockerill FR, Wilson WR, Steckelberg JM. Treatment of group A streptococcal experimental necrotizing soft tissue infection with ampicillin alone, or in combination with clindamycin. Infectious Diseases Society of America 34th Annual Meeting. 1996;
34. Rouse MS, Piper KE, **Patel R**, Wilson WR, Steckelberg JM. A Model of Penicillin-Resistant Pneumococcal Pneumonia in Immunocompetent Mice (Abstracts). 2nd International Symposium on Infection Models in Antimicrobial Therapy, Reykjavik, Iceland. 1996 Jul.
35. Rouse MS, Piper KE, **Patel R**, Wilson WR, Steckelberg JM. Levofloxacin plus Cefotaxime Treatment of Methicillin-Sensitive *Staphylococcus aureus* Experimental Osteomyelitis (Abstracts). 2nd International Symposium on Infection Models in Antimicrobial Therapy, Reykjavik, Iceland. 1996 Jul.
36. Piper KE, Rouse MS, **Patel R**, Wilson WR, Steckelberg JM. Levofloxacin Treatment of Penicillin-Resistant Pneumococcal Pneumonia in Immunocompetent Mice. 2nd International Symposium on Infection Models in Antimicrobial Therapy, Reykjavik, Iceland. 1996 Jul.
37. Falagas M, Snyderman D, Paya CV, Badley AD, **Patel R**, Wiesner R, Ruthazer R, Griffith J, Freeman R, Rohrer R, the Boston center for liver transplantation (BCLT) CMV Immun. The impact of Cytomegalovirus (CMV) as an independent predictor for decreased long term survival after orthotopic liver transplantation (OLT). XVI International congress of the transplantation society, Barcelona August 25-30, 1996.
38. Piper KE, Rouse MS, **Patel R**, Wilson WR, Steckelberg JM. Azithromycin treatment of clarithromycin intermediately susceptible H. influenzae type B experimental pneumonia (Abstract 38). Abstracts of the General Meeting of the American Society for Microbiology. 1997; 97:7.
39. * Huddleston PM, Rouse MS, **Patel R**, Steckelberg JM, Hanssen AD. Ciprofloxacin inhibits experimental fracture healing Abstracts of the Musculoskeletal Infection Society. Snowmass CO. 1997.
40. **Patel R**, Uhl JR, Kohner P, Hopkins MK, Kline B, Cockerill FR III. DNA sequence variation within vanB and vanC-2 genes of clinical enterococcus spp. Isolates: implications for laboratory testing methods. Abstracts of the General Meeting of the American Society for Microbiology. 1997; 97:121.
41. * Mendez J, Espy M, Smith T, Wilson J, **Patel R**, Paya C. Evaluation of semiquantitative PCR for early diagnosis of CMV infection following liver transplantation. Abstracts of the General Meeting of the American Society for Microbiology. 1997; 97:153.
42. Rouse MS, Piper KE, **Patel R**, Wilson WR, Steckelberg JM. In vitro and in vivo activity of ciprofloxacin,

levofloxacin, sparfloxacin or BAY12-8039 against penicillin-resistant *Streptococcus pneumoniae*. Program Abstr - Intersci Conf Antimicrob Agents Chemother. 1997; 37:26.

43. Rouse MS, Piper KE, **Patel R**, Wilson WR, Steckelberg JM. In vitro and in vivo activity of trovafloxacin against methicillin-susceptible *Staphylococcus aureus* experimental endocarditis. Program Abstr - Intersci Conf Antimicrob Agents Chemother. 1997; 37:31.
44. * Brown ML, Rouse MS, Piper KE, Wilson WR, **Patel R**, Steckelberg JM. In vitro emergence of resistance of *Staphylococcus aureus* to ciprofloxacin or levofloxacin (Abstracts). International Society for Microbiology: Resistance to Antimicrobial Agents. Monte Carlo, Monaco. 1997;
45. Falagas ME, Paya CV, Ruthazer R, Badley A, **Patel R**, Wiesner R, Griffith J, Freeman R, Rohrer R, Werner BG, Snyderman DR. Significance of cytomegalovirus (CMV) for long-term survival of orthotopic liver transplant (OLT) recipients: A prospective derivation and validation cohort analysis 37th Interscience Conference on Antimicrobial Agents and Chemotherapy, Toronto, 1997
46. Rouse MS, Piper KE, **Patel R**, Cockerill FR, Wilson WR, Steckelberg JM. Treatment of group A streptococcal experimental soft tissue infection. 97th General Meeting of the American Society for Microbiology, Miami Beach, FL.. 1997;
47. Piper KE, Rouse MS, **Patel R**, Wilson WR, Steckelberg JM. Trovafloxacin treatment of *H. Influenzae* type B experimental pneumonia in immunocompetent mice (Abstract 34). Abstracts of the General Meeting of the American Society for Microbiology. 1997; 97:6.
48. Piper KE, Rouse MS, **Patel R**, Wilson WR, Steckelberg JM. Trovafloxacin treatment of viridans streptococcal experimental endocarditis. Program Abstr - Intersci Conf Antimicrob Agents Chemother. 1997; 37:30.
49. * Mendez J, Espy M, Smith T, Wilson J, **Patel R**, Paya CV. Evaluation of PCR Primers for Early Diagnosis of CMV Infection Following Liver Transplantation. 6th International Cytomegalovirus Workshop; Orange Beach, Alabama; 1997 Mar
50. Rouse M, Huddleston P, Hanssen A, Wilson W, **Patel R**, Steckelberg J. A novel model of total knee arthroplasty in rats. (Abstract 809). *Clinical Microbiology and Infection*. 1997 May; 3(Suppl 2).
51. * Huddleston P, Rouse M, Piper K, Wilson W, Hanssen A, **Patel R**, Steckelberg J. Fracture callus fibrosis and bone marrow necrosis associated with ciprofloxacin treatment of implant stabilized experimental fractures in a rat model. (Abstract 808) *Clinical Microbiology and Infection*. 1997 May; 3(Suppl 2).
52. Piper K, Rouse M, **Patel R**, Cockerill F, Henry N, Wilson W, Steckelberg J. In vitro activity of LY 333328 against vancomycin resistant (vanA or vanB) enterococci, methicillin-resistant *S.aureus* (MRSA), and penicillin-resistant pneumococci (PRSp) (Abstract P-173]. *Clinical Microbiology and Infection*. 1997 May; 3 (Suppl 2).
53. Rouse M, Piper K, Henry N, Wilson W, **Patel R**, Steckelberg J. RU 004 treatment of penicillin resistant pneumococcal experimental pneumonia in immunocompetent mice (Abstract P-1322). *Clinical Microbiology and Infection*. 1997 May; 3(Suppl 2).
54. **Patel R**, Uhl HR, Sloan LM, Piper KE, Steckelberg JM, Rouse MS, Facklam R, Cockerill FR. 16S and 23S ribosomal RNA gene (rRNA) sequences of *Enterococcus rattus* and *Enterococcus* species previously isolated from rats with diarrhea (Abstract 37) 36th Annual Meeting of the Infectious Diseases Society of America, Denver. 1998;
55. **Patel R**, Piper KE, Rouse MS, Steckelberg JM, Uhl JR, Kohner P, Hopkins MK, Cockerill FR III, Kline BC. 16S ribosomal RNA sequencing of *Enterococcus* species. Program Abstr - Intersci Conf Antimicrob Agents Chemother. 1998; 38:133.
56. * Rippere K, **Patel R**, Yousten AA. DNA sequence resembling vanA and vanB in the vancomycin-resistant biopesticide *Bacillus popilliae* The 98th General Meeting of the American Society for Microbiology, Atlanta, 1998
57. Gabriel S, Uhl J, Makhlina M, **Patel R**, Cockerill FR. Effects of supernatant from the diarrheal pathogen, *Enterococcus rattus* on ion transport of murine intestinal cells 36th Annual Meeting of the Infectious Diseases Society of America, Denver, 1998
58. Piper KE, Rouse MS, **Patel R**, Wilson WR, Steckelberg JM. HMR 3647 treatment of beta-lactamase positive *Haemophilus influenzae* type B experimental pneumonia in immunocompetent mice. Program Abstr - Intersci Conf Antimicrob Agents Chemother. 1998; 38:56.
59. **Patel R**, Campeau NG. Imaging Appearance of Opportunistic Infections in Liver Transplant Recipients. International Congress of Radiology. New Delhi, India, 1998.

60. Piper KE, Rouse MS, **Patel R**, Wilson WR, Steckelberg JM. In vitro activity of linezolid against vancomycin-resistant enterococci, methicillin-resistant *Staphylococcus aureus*, penicillin-resistant pneumococci. Program Abstr - Intersci Conf Antimicrob Agents Chemother. 1998; 38:205.
61. * Ronningen KL, Piper KE, Rouse MS, **Patel R**, Steckelberg JM. In vitro Activity of Trovafloxacin against Viridans Streptococci (Abstract 0-1) Abstracts of the 98th General Meeting of the 12th National Conference on Undergraduate Research, Salisbury, MD. 1998.
62. Rouse MS, Piper KE, **Patel R**, Wilson WR, Steckelberg JM. In vitro and in vivo activity of ciprofloxacin, levofloxacin or vancomycin against macrolide-resistant, penicillin-resistant *Streptococcus pneumoniae* (Abstract 05,S15). 6th International Symposium on New Quinolones and Related Antibiotics, Denver, CO. 1998.
63. Rouse MS, Piper KE, **Patel R**, Wilson WR, Steckelberg JM. In vitro and in vivo activity of ciprofloxacin, levofloxacin, or vancomycin against macrolide-resistant, penicillin-resistant *Streptococcus pneumoniae*. Program Abstr - Intersci Conf Antimicrob Agents Chemother. 1998; 38:56.
64. Rouse MS, Piper KE, **Patel R**, Wilson WR, Steckelberg JM. In vitro emergence of resistance among *Staphylococcus aureus* to ciprofloxacin, levofloxacin, moxifloxacin or trovafloxacin (Abstract 18, S03) 6th International Symposium on New Quinolones and Related Antibiotics, Denver CO. 1998;
65. * Brown ML, Rouse MS, Piper KE, Wilson WR, **Patel R**, Steckelberg JM. In vitro emergence of resistance of *S. aureus* to quinolone antimicrobials. Abstracts of the General Meeting of the American Society for Microbiology. 1998; 98:43.
66. * Florez MV, Rouse MS, Piper KE, **Patel R**, Cockerill FR, Wilson WR, Steckelberg JM. Penicillin and clindamycin and intravenous immune globulin against group A streptococci. Abstracts of the General Meeting of the American Society for Microbiology. 1998; 98:51.
67. **Patel R**, Campeau NG. Radiographic manifestations of invasive fungal infections following 405 liver transplantations 20th International Congress of Radiology, New Delhi, India, 1998
68. **Patel R**, Piper KE, Rouse MS, Steckelberg JM, Uhl JR, Kohner P, Hopkins MK, Cockerill FR, Kline BC. Use of 16S ribosomal DNA sequencing to differentiate *Enterococcus faecium*, *Enterococcus faecalis*, *Enterococcus gallinarum*, and *Enterococcus casseliflavus* (abstract 2D-06) ASM Conference on Streptococcal Genetics, Vichy, France. 1998;
69. * Huddleston PM, Rouse MS, Piper KE, Hanssen AD, **Patel R**, Steckelberg JM. Ciprofloxacin inhibits experimental fracture healing. (Abstract P-237). 9th European Congress of Microbiology and Infectious Diseases. 1999.
70. Piper KE, Rouse MR, **Patel R**, Wilson WR, Steckelberg JM. Comparison of four primer sets for the detection of 16S ribosomal RNA (rRNA) in joint fluid by polymerase chain reaction (PCR). 99th General Meeting of the American Society for Microbiology, Chicago, IL. 1999.
71. **Patel R**, Rouse MS, Piper KE, Duffy MC, Steckelberg JM, Osmon DR, Hanssen AD. Detection of human retrovirus-5 proviral DNA in synovial tissues of patients undergoing knee arthroplasty (Abstract T-5). Abstracts of the General Meeting of the American Society for Microbiology. 1999; 99:628.
72. * Reid KC, Cockerill FR III, **Patel R**. *Enterococcus gallinarum* and *Enterococcus casseliflavus* bacteremia: a review of 19 cases. Program Abstr - Intersci Conf Antimicrob Agents Chemother. 1999; 39:644.
73. **Patel R**, Rouse MS, Piper KE, Steckelberg JM, Yousten AA. Identification of genes encoding homologs of enterococcal vanH, vanA, and vanX genes in the vancomycin-resistant biopesticide *Bacillus popilliae*. Program Abstr - Intersci Conf Antimicrob Agents Chemother. 1999; 39:128.
74. Piper KE, Rouse MS, **Patel R**, Wilson WR, Steckelberg JM. In vitro activity of linezolid with or without aminoglycosides against vancomycin-resistant enterococci (Abstract P-180). 9th European Congress of Clinical Microbiology and Infectious Diseases, Berlin. 1999;
75. Rouse MS, Piper KE, **Patel R**, Wilson WR, Steckelberg JM. In vitro and in vivo emergence of resistance among *S. aureus* to ciprofloxacin, levofloxacin, moxifloxacin or trovafloxacin (Abstract P-806) 9th European Congress of Clinical Microbiology and Infectious Diseases, Berlin. 1999;
76. Allen SA, Manahan JM, Thompson RP, Wright AJ, Krom RAF, Wiesner RH, **Patel R**. Natural history of vancomycin resistant enterococcal colonization in liver and kidney transplant patients 9th Annual Scientific Meeting of the Society for Healthcare Epidemiology of America, San Francisco, 1999
77. * Prpa B, Rouse M, Piper KE, Hanssen AD, **Patel R**, Steckelberg JM, Wilson WR. The effect of ciprofloxacin or trovafloxacin on experimental fracture healing. Program Abstr - Intersci Conf Antimicrob Agents Chemother.

1999; 39:40.

78. Piper KE, Rouse MS, Wilson WR, Steckelberg JM, **Patel R**. Treatment of methicillin-sensitive Staphylococcus aureus experimental osteomyelitis with linezolid or cefazolin. Program Abstr - Intersci Conf Antimicrob Agents Chemother. 1999; 39:41.
79. * Fanning C, Wilson J, Mendez J, Espy M, Daniels J, Brown R, Jenkins G, Harmsen W, Sia I, **Patel R**, Smith T, Wiesner R, Paya C. A double-blinded placebo controlled randomized trial evaluating preemptive therapy with oral ganciclovir based on the detection of cytomegalovirus DNA post liver transplantation. Program Abstr - Intersci Conf Antimicrob Agents Chemother. 2000; 40:275.
80. Hughes JG, Vetter EA, **Patel R**, Cockerill FR. Comparison of the BACTEC Peds Plus/F bottle with conventional culture methods for detection of bacteria in synovial fluid. Abstracts of the General Meeting of the American Society for Microbiology. 2000; 100:190.
81. **Patel R**, Rippere-Lampe K, Yousten AA. Detection of two new cry genes in Paenibacillus popilliae. Abstracts of the General Meeting of the American Society for Microbiology. 2000; 100:476.
82. Rouse MS, Piper KE, Steckelberg JM, **Patel R**. Frequency of isolation of Staphylococcus lugdunensis among isolates of staphylococci causing endocarditis, a 20 year experience. Abstracts of the General Meeting of the American Society for Microbiology. 2000; 100:152.
83. Piper KE, Rouse MS, Wilson WR, Steckelberg JM, **Patel R**. In vitro activity of GAR-936 against vancomycin resistant enterococci, methicillin-resistant Staphylococcus aureus, and penicillin-resistant pneumococci. Program Abstr - Intersci Conf Antimicrob Agents Chemother. 2000; 40:169.
84. Piper KE, Thompson BF, Rouse MS, Steckelberg JM, **Patel R**. In vitro activity of linezolid in combination with other antimicrobials against vancomycin resistant enterococci (Abstract 97). First International Conference on Enterococci: Pathogenesis, Biology, and Antibiotic Resistance, Banff. 2000
85. Rouse MS, Piper KE, Wilson WR, Steckelberg JM, **Patel R**. In vitro and in vivo activity of linezolid against vancomycin resistant enterococci (Abstract 75). First International Conference on Enterococci: Pathogenesis, Biology, and Antibiotic Resistance. 2000;
86. Rouse MS, Piper KE, **Patel R**, Temesgen Z, Wilson WR, Steckelberg JM. In vitro emergence of resistance among methicillin-resistant Staphylococcus aureus to ciprofloxacin, levofloxacin, moxifloxacin, trovafloxacin or vancomycin (Abstract WeP 119). 10th European Congress of Clinical Microbiology and Infectious Diseases, Stockholm, Sweden. 2000.
87. * Perry A, Rouse M, Piper KE, Steckelberg JM, **Patel R**. In vitro Matrix III vancomycin and amikacin release kinetics. Program Abstr - Intersci Conf Antimicrob Agents Chemother. 2000; 40:16.
88. **Patel R**. Infectious challenges in solid organ and bone marrow transplant recipients. Program Abstr - Intersci Conf Antimicrob Agents Chemother. 2000; 40:537.
89. Rouse MS, Bruce C, Steckelberg JM, **Patel R**. Transesophageal echocardiographic detection of endocarditis valve lesions in experimental endocarditis (Abstract 3.51). Program & Abstracts of the 7th Western Pacific Congress of Chemotherapy and Infectious Diseases, Hong Kong. 2000.
90. Piper KE, Rouse MS, Wilson WR, Steckelberg JM, **Patel R**. Treatment of methicillin-resistant Staphylococcus aureus experimental osteomyelitis with linezolid or vancomycin (Abstract Mo 016). 10th European Congress of Clinical Microbiology and Infectious Diseases, Stockholm, Sweden. 2000.
91. Wilson JA, Espy MJ, Sia IG, Brown RA, Daniels JA, Mendez JC, Groettum CM, Fanning C, Jenkins GD, Harmsen WS, **Patel R**, Smith TF, Wiesner R, Paya CV. Polymerase chain reaction (PCR) monitoring and its clinical value for CMV prevention in liver transplant recipients American Association for the Study of Liver Diseases (AASLD), New Orleans, LA. 2000 Oct 1.
92. Wilson JA, Espy MJ, Sia IG, Brown RA, Daniels JA, Mendez JC, Groettum CM, Fanning C, Jenkins GD, Harmsen WS, **Patel R**, Smith TF. Polymerase chain reaction (PCR) monitoring and its clinical value for CMV prevention in liver transplant recipients. Hepatology. 2000 Oct; 32(4 Pt. 2):243A.
93. * Johnston PB, Litzow MR, Elliott MA, Ansell SM, Dispenzieri A, Gastineau DA, Gertz MA, Inwards DJ, Lacy MQ, Micallef IN, Tefferi A, **Patel R**, Thompson RL. Colonization with vancomycin-resistant enterococcus correlates with poor outcome in patients undergoing allogeneic blood and marrow transplants. Blood. 2000 Nov 16; 96(11 Part 1):786a.
94. Rouse MS, Piper KE, Hanssen AD, Steckelberg JM, **Patel R**. A novel model of chronic osteomyelitis to compare treatment efficacy of polymer delivered antimicrobials. 11th Annual Open Scientific Meeting of the Musculoskeletal Infection Society, Aspen, CO.. 2001;

95. * Bell C, **Patel R**. A real-time multiplex PCR assay for the rapid detection and differentiation of human ehrlichioses. 39th Annual Meeting of the Infectious Diseases Society of America. 2001.
96. * Khaliq Y, Rouse M, Piper KE, Steckelberg JM, **Patel R**. Amikacin or clindamycin release kinetics from polymethylmethacrylate or Matrix III beads in a continuous flow chamber. Abstracts of the Interscience Conference on Antimicrobial Agents & Chemotherapy. 2001; 41:37.
97. Rouse MS, Perry A, Piper KE, Hanssen AD, Osmon D, **Patel R**. Antibiotic release kinetics from polymethylmethacrylate bone cement in a continuous flow chamber. 11th Annual Open Scientific Meeting of the Musculoskeletal Infection Society, Aspen, CO.. 2001;
98. Germer JJ, Charlton MR, Ishitani MB, **Patel R**. Characterization of surface and polymerase gene mutations in hepatitis B virus (HBV) obtained from liver transplant (LT) recipients using the TRUGENE (TM) HBV genotyping kit. 39th Annual Meeting of the Infectious Diseases Society of America, San Francisco, CA.
99. * O'Sullivan CE, Mitchell PS, **Patel R**. Clinical and laboratory characteristics of Herpes simplex virus type 2 (HSV-2) CNS infection diagnosed by cerebrospinal fluid (CSF) PCR. Abstracts of the General Meeting of the American Society for Microbiology. 2001; 101:181-2.
100. Brenengen VJ, Sloan LM, Mitchell PS, Cockerill FR, **Patel R**. Comparison of two extraction methods for the detection of Bordetella pertussis and Bordetella parapertussis in nasopharyngeal (NP) swabs by real-time PCR. Abstracts of the General Meeting of the American Society for Microbiology. 2001; 101:257-8.
101. Wold AD, Espy MJ, Rys PN, Uhl JR, Sloan LM, Jenkins GD, Ilstrup DM, Cockerill FR III, **Patel R**, Rosenblatt JE, Smith TF. Detection of herpes simplex virus DNA in genital and dermal specimens by LightCycler PCR after extraction by IsoQuick, MagNA Pure, and BioRobot 9604. Abstracts of the Clinical Virology Symposium; 2001, Clearwater Beach, Florida.
102. Sloan LM, Mitchell PS, **Patel R**, Rosenblatt JE. Detection of Toxoplasma gondii in cerebrospinal fluid (CSF) and amniotic fluid (AF) by LightCyclerTM PCR. Abstracts of the General Meeting of the American Society for Microbiology. 2001; 101:223.
103. Hopkins MK, Vetter EA, Uhl JR, Rys PN, Lynch DL, Mitchell PS, **Patel R**. Identification of "difficult-to-identify" aerobic bacteria using 16S rRNA sequencing in a clinical microbiology laboratory. Abstracts of the General Meeting of the American Society for Microbiology. 2001; 101:157.
104. * Perry A, Rouse MS, Piper KE, Hanssen AD, Steckelberg JM, **Patel R**. Levofloxacin inhibits fracture healing in a rat model of implant stabilized experimental fractures. Abstracts of the General Meeting of the American Society for Microbiology. 2001; 101:32-3.
105. * Khaliq Y, Piper K, Razonable RR, Rouse MS, Steckelberg JM, Litzow MR, **Patel R**. Mutations in gyrA and parC in quinolone-resistant blood isolates of viridans streptococci (VS) from autologous peripheral blood stem cell transplant recipients (APBSCTR) receiving levofloxacin (LEVO) prophylaxis (Abstract 522). Clin Infect Dis. 2001; 33(7):1177.
106. * Herrero IA, Issa N, Piper K, Rouse M, Manahan J, Kohner P, Yegge J, Wright A, Thompson R, Cockerill F, **Patel R**. Nosocomial spread of linezolid-resistant vancomycin-resistant Enterococcus faecium (LRVREF) - a new threat. Abstracts of the Interscience Conference on Antimicrobial Agents & Chemotherapy.. 2001; 41:
107. Espy MJ, **Patel R**, Paya CV, Smith TF. Quantification of Epstein-Barr virus (EBV) viral load in transplant patients by LightCycler PCR. Abstracts of the General Meeting of the American Society for Microbiology. 2001; 101:182.
108. Rouse MS, Piper K, Osmon D, Steckelberg J, **Patel R**. Release kinetics of amikacin, gentamicin, tobramycin, or vancomycin from polymethylmethacrylate beads in a continuous flow chamber. Abstracts of the General Meeting of the American Society for Microbiology. 2001; 101:32.
109. Rys PN, Lynch DT, Gustafson DR, Hall L, Wohlfel SL, Mitchell PS, **Patel R**. Single capillary vs. new 16 capillary instrument for 16S rDNA sequencing in a clinical microbiology laboratory. Abstracts of the General Meeting of the American Society for Microbiology. 2001; 101:157-8.
110. Razonable RR, Litzow M, Khaliq Y, Piper K, **Patel R**. The emergence of levofloxacin (LEVO)- and gatifloxacin (GATI)- resistant viridans streptococcal bacteremia (VSB) among autologous peripheral blood stem cell transplant (APBSCT) recipients (Abstract 517). Clin Infect Dis. 2001; 33(7):1176.
111. Rouse MS, Piper KE, Khaliq Y, Steckelberg JM, **Patel R**. Treatment of S. aureus experimental osteomyelitis with Matrix III delivered amikacin or clindamycin. Abstracts of the Interscience Conference on Antimicrobial Agents & Chemotherapy. 2001; 41:59.
112. * Trampuz A, Hanssen A, Osmon DR, Piper KE, Rouse MS, Steckelberg JM, Cockerill FR, Pankratz VS, **Patel**

- R.** A prospective comparative study of culture of joint fluid, periprosthetic tissue and explant ultrasonicate for the diagnosis of total knee arthroplasty infection. Abstracts of the 40th Annual Meeting of the Infectious Diseases Society of America, Chicago, IL. 2002.
113. Germer JJ, Forehand CD, Ishitani MB, Charlton MR, **Patel R.** Comparative evaluation of the TRUGENE (TM) HBV Genotyping Kit (TRUGENE), INNO-LiPA (TM) HBV DR Kit (INNO-LiPA), and direct sequence analysis (DSA) for the characterization of hepatitis B virus (HBV) genotype and clinically significant surface (S) antigen and polymerase gene mutations in liver transplant recipients (LTR). Digestive Disease Week, San Francisco, CA.
 114. * Christiansen DC, **Patel R,** Thomas K. Epstein-Barr virus hepatitis. American College of Physicians - American Society of Internal Medicine. 2002 Minnesota Chapter Scientific Meeting, Bloomington, MN.
 115. Sloan LM, Kohner P, Vetter EA, Rosenblatt JE, Cockerill FR III, **Patel R.** Evaluation of a combined LightCycler assay for the detection of vanA, vanB, and vanB-2/3 genes in enterococci. Abstracts of the General Meeting of the American Society for Microbiology. 2002; 102:143.
 116. * Herrero IA, Fraimow H, Knob C, Piper KE, **Patel R.** Identification of a putative transposase homologous to a *Bacillus halodurans* transposase upstream of the vancomycin-resistance gene cluster in *Paenibacillus popilliae* ATCC 14706. Abstracts of the General Meeting of the American Society for Microbiology. 2002; 102:224.
 117. Piper KE, Rouse MS, Verma V, Steckelberg JM, **Patel R.** In vitro activity of ABT-773 against penicillin-resistant pneumococci (Abstract 2001-A-284-ASM). Program and Abstracts of the 3rd International Symposium on Pneumococci and Pneumococcal Diseases, Anchorage, AK.
 118. * Fanning C, Rouse MS, Piper KE, Steckelberg JM, **Robin P.** In vitro and in vivo activity of ABT-773 against ermA/mefE positive, penicillin-resistant *Streptococcus pneumoniae*. Abstracts of the Interscience Conference on Antimicrobial Agents & Chemotherapy. 2002; 42:37.
 119. * Christiansen DC, Roberts GD, **Patel R.** *Mycobacterium celatum*, an emerging pathogen. American College of Physicians - American Society of Internal Medicine. 2002 Minnesota Chapter Scientific Meeting, Bloomington, MN.
 120. Yegge JA, Wright AJ, Thompson RL, **Patel R,** Manahan J. Nosocomial transmission of a linezolid resistant *Enterococcus faecium* (LRVRE) during a VRE outbreak in solid organ transplant patients (SOTP). 12th Annual Scientific Meeting for SHEA, Salt Lake City. 2002.
 121. Benson C, Mitchell P, Vandenameele J, Majewski D, Forehand C, **Patel R.** Performance of the TruGene HIV-1 genotyping assay (visible genetics) in a clinical microbiology laboratory: Analysis of HIV genotyping success rates correlated with HIV viral load. Abstracts of the General Meeting of the American Society for Microbiology. 2002; 102:137.
 122. * Alyaseen SA, Herrero IA, Rouse MS, Piper KE, Steckelberg JM, **Patel R.** Re-evaluation of *Streptococcus bovis* endocarditis cases from 1975-1985 using 16S ribosomal DNA (rDNA) sequence analysis. Abstracts of the Interscience Conference on Antimicrobial Agents & Chemotherapy. 2002; 42:353.
 123. * Alyaseen SA, Rouse M, Steckelberg JM, Piper KE, **Patel R.** Patterns of ciprofloxacin-induced resistance in *Pseudomonas aeruginosa*. *Int J Infect Dis.* 2002 Jun; 6(Suppl 2):2S32.
 124. Germer JJ, Zein NN, Metwally MA, Smith TF, Harmsen WS, Hoskin TL, **Patel R.** Comparison of detection of hepatitis C virus (HCV) by transcription-mediated amplification (TMA) versus COBAS AMPLICOR (TM) HCV test, version 2.0 (AMPLICOR) in patients undergoing antiviral therapy. *Hepatology.* 2002 Oct; 36(4 Part 2):290A.
 125. Razonable RR, **Patel R.** *Cryptococcus neoformans* infection in solid organ transplant (SOT) recipients. *Focus on Fungal Infections* 13, Maui, Hawaii. 2003.
 126. Rouse M, Aguita-Alonso P, Steckelberg J, **Patel R.** BAL 9141/5788 treatment of beta-lactamase positive *Haemophilus influenzae* type b experimental pneumonia in immunocompetent mice. Abstracts of the Interscience Conference on Antimicrobial Agents & Chemotherapy. 2003; 43:232.
 127. * Prabhu RM, Piper KE, Litzow MR, Steckelberg JM, **Patel R.** Emergence of fluoroquinolone (FQ)-resistance in oropharyngeal viridans group streptococci (BGS) during gatifloxacin-penicillin (GAT-PCN) prophylaxis for bone marrow transplantation (BMT). 41st Annual Meeting of the Infectious Diseases Society of America, San Diego, CA. 2003.
 128. Germer JJ, Lines MM, Jensen ME, Harmsen WS, Ilstrup DM, Mitchell PS, Cockerill FR, **Patel R.** Evaluation of the MAGNA PURE LC instrument for use with the COBAS AMPLICOR (TM) Hepatitis C Virus Test, version 2.0. 19th Annual Clinical Virology Symposium, Clearwater, FL, 2003.

129. * Rotger M, Rouse MS, Scholz M, Andrews J, Piper KE, Steckelberg JM, **Patel R**. In vitro activity and emergence of resistance to mupirocin (MPC), and alkyl ester (AE) 128774-23A and 128774-23B in *Staphylococcus aureus* (SA). Abstracts of the Interscience Conference on Antimicrobial Agents & Chemotherapy. 2003; 43:270.
130. * Issa NC, Rouse MS, Piper KE, Steckelberg JM, **Patel R**. In vitro activity of BAL9141 against U.S. clinical isolates of gram-negative bacteria. Abstracts of the Interscience Conference on Antimicrobial Agents & Chemotherapy. 2003; 43:232-3.
131. Piper KE, Rouse MS, Steckelberg JM, **Patel R**. In vitro activity of daptomycin against vancomycin-resistant enterococci, linezolid-resistant vancomycin-resistant enterococci, methicillin-resistant *Staphylococcus aureus* and penicillin-resistant pneumococci. Abstracts of the 13th European Congress of Clinical Microbiology and Infectious Diseases, Glasgow, Scotland. 2003.
132. Rouse M, Anguita-Alonso P, Piper K, Steckelberg J, **Patel R**. In vitro activity of garenoxacin against viridans group streptococci. Program and Abstracts of the 43rd Interscience Conference on Antimicrobial Agents and Chemotherapy Chicago, IL. 2003.
133. * Alyaseen SA, Rouse MS, Piper KE, Steckelberg JM, **Patel R**. In vitro and in vivo activity of garenoxacin against *Pseudomonas aeruginosa*. Swiss Medical Weekly Swiss: Annual Joint Meeting of the Swiss Society for Microbiology, Infectious Diseases, Tropical Medicine, and Parasitology. 2003(Suppl 134):S37.
134. Rouse M, Rotger M, Piper K, Steckelberg J, **Patel R**. Mupirocin efficacy for and emergence of resistance after treatment of experimental murine methicillin resistant *Staphylococcus aureus* (MRSA) nasal colonization. Abstracts of the Interscience Conference on Antimicrobial Agents & Chemotherapy. 2003; 43:45.
135. * Christiansen DC, Roberts GD, **Patel R**. *Mycobacterium celatum*, an emerging pathogen and cause of false positive Amplified mycobacterium tuberculosis test. Abstracts of the General Meeting of the American Society for Microbiology. 2003; 103:U-043.
136. * Rotger M, Piper KE, Rouse MS, Steckelberg JM, **Patel R**. Phenotypic and genotypic mupirocin (MUP) resistance in staphylococci associated with prosthetic joint infection (PJI). Abstracts of the Interscience Conference on Antimicrobial Agents & Chemotherapy. 2003; 43:143.
137. * Trampuz A, Piper KE, Hanssen AD, Osmon DR, Steckelberg JM, **Patel R**. Proposed criteria for interpretation of synovial fluid (SF) cell count and differential in patients with aseptic implant failure (AIF) and prosthetic joint infection (PJI). Abstracts of the Interscience Conference on Antimicrobial Agents & Chemotherapy. 2003; 43:352-3.
138. * Haleem AA, Rouse MS, Lewallen DG, Hanssen AD, Steckelberg JM, **Patel R**. The effect of gentamicin or vancomycin on experimental fracture healing. Abstracts of the Scientific Program of the 13th Annual Musculoskeletal Infection Society. 2003.
139. * Trampuz A, Hanssen AD, Osmon DR, Piper KE, Rouse MS, Steckelberg JM, **Patel R**. The role of preoperative antimicrobial therapy on culture sensitivity of joint fluid, periprosthetic tissue, and explant sonicate in the diagnosis of prosthetic joint infection. Abstracts of the Scientific Program of the 13th Annual Musculoskeletal Infection Society. 2003.
140. * Prabhu RM, Piper KE, Baddour LM, Steckelberg JM, **Patel R**. Viridans group streptococci (BGS) infective endocarditis (IE) isolates: Comparison of susceptibility patterns of antibiotics used for endocarditis prophylaxis between years 1971-1989 and 1994-2001. 43rd Annual Interscience Conference on Antimicrobial Agents and Chemotherapy, Chicago, IL, 2003.
141. * Prabhu RM, Piper KE, Rouse MS, Steckelberg JM, Baddour LM, **Patel R**. Viridans group streptococci (BGS) isolates causing infective endocarditis: Comparison of antimicrobial susceptibility patterns between years 1971-1989 and 1994-2001. Swiss Medical Weekly Swiss: Annual Joint Meeting of the Swiss Society for Microbiology, Infectious Diseases, Tropical Medicine, and Parasitology. 2003(Suppl 134):S37.
142. * Prabhu RM, Piper KE, Baddour LM, Steckelberg JM, **Patel R**. Viridans group streptococci (VGS) infective endocarditis (IE) isolates: Comparison of susceptibility patterns of antibiotics used for endocarditis prophylaxis between years 1971-1989 and 1994-2001. Abstracts of the Interscience Conference on Antimicrobial Agents & Chemotherapy. 2003; 43:163.
143. Razonable RR, Brown RA, Litzow MR, Schwartz L, Wilson JA, Mitchell PS, Rutledge B, **Patel R**, Paya CV. Prospective surveillance of cytomegalovirus (CMV), human herpesvirus (HHV)-6 and HHV-7 infection in allogeneic bone marrow transplant (BMT) recipients. Program and abstracts of the 9th International CMV Workshop and 1st International γ -herpesvirus Conference (Maastricht, The Netherlands) 2003 May 20-25.
144. Rouse M, Anguita-Alonso P, Hein M, Steckelberg JM, **Patel R**. Activity of BAL5788 in *Haemophilus influenzae*,

- Enterobacter cloacae or Klebsiella pneumoniae experimental murine pneumonia (Abstract 502). 44th Annual Interscience Conference on Antimicrobial Agents and Chemotherapy, Washington DC. 2004.
145. * Anguita-Alonso P, Rouse MS, Piper KE, Steckelberg JM, **Patel R**. Activity of garenoxacin in viridans group streptococcal endocarditis (Abstract 2958). 44th Annual Interscience Conference on Antimicrobial Agents and Chemotherapy, Washington DC. 2004.
 146. Germer JJ, Uhl JR, Cockerill FR, Bell CA, **Patel R**, Yao JDC. An automated rapid multiplex PCR assay for the detection and differentiation of agents of human ehrlichioses. Program abstr. no. C-70, 104th General Meeting American Society for Microbiology, New Orleans, Louisiana, May 23-27, . 2004;
 147. Pappas PG, **Patel R**, Hadley S, Zaas A, Pankey GA, Judson MA, Flanigan C, Perfect JR. Cryptococcosis in transplant recipients: An analysis of 102 subjects. 42nd Annual Meeting of the Infectious Diseases Society of American, Boston, MA. 2004.
 148. * Shuford JA, Steckelberg JM, **Patel R**. Effect of fresh garlic extract (FGE) on *Candida albicans* biofilms. 44th Annual Interscience Conference on Antimicrobial Agents and Chemotherapy, Washington DC. 2004.
 149. Rouse M, Scholz M, Steckelberg J, **Patel R**. Evaluation of lauric acid monoester compounds in a Staphylococcus aureus nasal decolonization model (Abstract P900). 14th European Congress of Clinical Microbiology and Infectious Diseases, Prague, Czech Republic. 2004.
 150. * Anguita-Alonso P, Hanssen AD, Osmon DR, Trampuz A, Piper KE, Steckelberg Jm, **Patel R**. Gentamicin and tobramycin susceptibility of staphylococci causing prosthetic joint infection. The 104th General Meeting of the American Society for Microbiology, New Orleans, LA. 2004.
 151. Piper KE, Steckelberg JM, **Patel R**. In vitro activity of daptomycin against viridans group streptococci (BGS) collected from patients with infective endocarditis over three decades. 44th Annual Interscience Conference on Antimicrobial Agents and Chemotherapy, Washington DC. 2004.
 152. Piper K, Hanssen A, Lewallen D, Matteson E, Hagan R, Steckelberg J, **Patel R**. Lack of detection of human retrovirus-5 (HRV-5) proviral DNA in synovial tissue and blood specimens from individuals with rheumatoid arthritis or osteoarthritis. 14th European Congress of Clinical Microbiology and Infectious Diseases, Prague, Czech Republic. 2004.
 153. * Shuford JA, Rouse MS, Kavros SJ, Steckelberg JM, **Patel R**. Lack of effect of an ultrasound-assisted wound treatment (UAW) device on Candida albicans biofilms. 42nd Annual Meeting of the Infectious Diseases Society of American, Boston, MA. 2004.
 154. Mahale AS, Khamash HA, Buehrig CK, Espy M, Scwhab TR, Gloor JM, Lager DJ, Fidler ME, Cosio FC, **Patel R**, Stegall MD, Larson TS, Griffin MD. Limited benefits from cidofovir therapy combined with reduced immunosuppression in clinically-evident BK nephropathy in renal transplants (Abstract 153). Am J Transplant. 2004; 4(Suppl 8):201.
 155. * Hall EW, Rouse M, Jacofsky D, Osmon D, Hanssen A, Steckelberg J, **Patel R**. Release of daptomycin from polymethylmethacrylate (PMMA) beads in a continuous flow chamber. 42nd Annual Meeting of the Infectious Diseases Society of America, Boston, MA. 2004.
 156. Rouse M, Velasquez D, Bernatchez S, Steckelberg J, **Patel R**. Resorbable hydrogel polymer as an antimicrobial delivery system in the treatment of Staphylococcus aureus experimental osteomyelitis (Abstract O106). 14th European Congress of Clinical Microbiology and Infectious Diseases, Prague, Czech Republic. 2004.
 157. * Trampuz A, Piper KE, Steckelberg JM, **Patel R**. The effect of gamma irradiation on *Staphylococcus epidermidis* bacteria and DNA. 44th Annual Interscience Conference on Antimicrobial Agents and Chemotherapy, Washington DC. 2004.
 158. * Frank KL, **Patel R**. Activity of sodium metabisulfite against planktonic, sessile *Staphylococcus* species (Abstract K-1911). 45th Interscience Conference on Antimicrobial Agents and Chemotherapy. 2005.
 159. * Frank KL, **Patel R**. Characterization of biofilm formation and a novel ica locus in *Staphylococcus lugdunensis*. 105th General Meeting American Society for Microbiology. 2005.
 160. Rouse MS, Piper KE, Jacobson MJ, Steckelberg JM, **Patel R**. Daptomycin treatment of Staphylococcus aureus experimental chronic osteomyelitis (Abstract B-2008). 45th Interscience Conference on Antimicrobial Agents and Chemotherapy.. 2005;
 161. * Trampuz A, Piper KE, Hanssen AD, Osmon DR, Steckelberg JM, **Patel R**. Erythrocyte sedimentation rate and C-reactive protein are useful preoperative predictors of the absence of prosthetic hip and knee infection. 15th European Congress of Clinical Microbiology and Infectious Diseases. 2005.

162. Jacobson MJ, Rouse M, Piper KE, Steckelberg JM, **Patel R**. In vitro activity of daptomycin against methicillin-resistant coagulase negative Staphylococcal biofilms. 43rd Annual Infectious Diseases Society of America Meeting, San Francisco CA. 2005.
163. Rouse MS, Hall E, Piper KE, Jacobson MJ, Hanssen AD, Jacofsky DJ, **Patel R**. In vitro and in vivo release of daptomycin or vancomycin from polymethylmethacrylate beads (Abstract 2247). 15th European Congress of Clinical Microbiology and Infectious Diseases. 2005.
164. * Anguita Alonso P, Rouse MS, Piper KE, Jacofsky DJ, Hanssen AD, Osmon DR, Steckelberg JM, **Patel R**. Kinetics of linezolid release from polymethylmethacrylate beads (Abstract P1585). 15th European Congress of Clinical Microbiology and Infectious Diseases. 2005.
165. Piper KE, Trampuz A, Mickenzie T, Jacobson MJ, Gong G, **Patel R**. Separation of mixed 16S ribosomal DNA (rDNA) PCR products prior to sequencing by denaturing high performance liquid chromatography (dHPLC) using the WAVE microbial analysis system. (Abstract D-1674). 45th Interscience Conference on Antimicrobial Agents and Chemotherapy.. 2005;
166. * Frank KL, **Patel R**. *ica* Locus sequence variability and poly-N-Acetylglucosamine (PNAG) expression in *Staphylococcus lugdunensis* biofilm formation. 46th Interscience Conference on Antimicrobial Agents and Chemotherapy.. 2006; B-663 *42.
167. Rouse MS, Steckelberg JM, **Patel R**. A novel murine model of superficial *Staphylococcus aureus* skin infection. 46th Interscience Conference on Antimicrobial Agents and Chemotherapy.. 2006; B-406 *38.
168. **Patel R**, Mendrick CA, Knapp CC, Grist R, McNicholas PM. Clinical evaluation of the Sensititre YeastOne plate for susceptibility testing of filamentous fungi to Posaconazole. 46th Interscience Conference on Antimicrobial Agents and Chemotherapy. 2006:M-1577 *418.
169. Piper KE, Trampuz A, Jacobson MJ, Hanssen AD, Osmon DR, **Patel R**. Comparison of 16S Ribosomal DNA (rDNA) RCR and Culture to Detect Hip and Knee Prosthetic Joint Infections (PJI). 46th Interscience Conference on Antimicrobial Agents and Chemotherapy. 2006:D-1714 *167.
170. Piper KE, Alonso PA, Jacobson MJ, Trampuz A, Cofield RH, Sperling JW, Sotelo JS, Osmon DR, **Patel R**. Diagnosis and microbiology of prosthetic shoulder infection. ECCMID. 2006.
171. * Frank KL, **Patel R**. Elucidation of the mechanism of *Staphylococcus lugdunensis* biofilm formation. Virulence Mechanisms of Bacterial Pathogens.. 2006;
172. Rouse MS, Nguyen GV, Steckelberg JM, **Patel R**. In vitro activity of ceftibiprole against staphylococci recovered from patients with endocarditis (Abstract E-118). 46th Interscience Conference on Antimicrobial Agents and Chemotherapy, San Francisco CA. 2006.
173. Rouse MS, Nguyen GV, **Patel R**, Steckelberg JM. In vitro activity of ceftobiprole against staphylococci recovered from patients with bone and joint infection (Abstract E-119). 46th Interscience Conference on Antimicrobial Agents and Chemotherapy, San Francisco CA. 2006.
174. * Frank KL, Reichert EJ, **Patel R**. Planktonic and biofilm antibiotic susceptibilities and the effect of subinhibitory antibiotic concentrations on biofilm formation of *Staphylococcus lugdunensis*. 106th General Meeting of the American Society for Microbiology Orlando Florida., 2006.
175. Kijpittayarit S, Eid AJ, Kremers WK, Dierkhising RA, **Patel R**, Razonable RR. Clinical features and outcomes of delayed onset primary cytomegalovirus (CMV) disease in cardiac allograft recipients. (Abstract #1775). World Transplant Congress Meeting, Boston, MA. 2006 Jul.
176. Eid AJ, Brown RA, Kijpittayarit S, **Patel R**, Razonable RR. Parvovirus B19 infections in transplant patients. (Abstract #2310). World Transplant Congress, Boston, MA. 2006 Jul.
177. * Eid AJ, Kijpittayarit S, Deziel P, **Patel R**, Razonable RR. A hybrid approach of antiviral prophylaxis followed by preemptive therapy to prevent delayed onset primary cytomegalovirus (CMV) disease (V-2018). 46th Interscience Conference on Antimicrobial Agents and Chemotherapy San Francisco CA. September 27-30, 2006.
178. * Kijpittayarit S, Eid AJ, **Patel R**, Razonable RR. Delayed onset primary cytomegalovirus (CMV) disease after kidney transplantation (KT): risk factors and outcome (V-1090). 46th Interscience Conference on Antimicrobial Agents and Chemotherapy San Francisco CA. September 27-30, 2006.
179. * Fernandez-Sampredo M, Piper KE, Rouse MS, Steckelberg JM, **Patel R**. Distribution of Propionibacterium acnes Types I and II on Orthopedic Implants (Abstract K-1061). 47th Interscience Conference on Antimicrobial Agents and Chemotherapy Chicago, IL. 2007.
180. * Del Pozo JL, Rouse MS, Fernandez-Sampredo M, Steckelberg JM, **Patel R**. Electrode Composition and

Electrical Enhancement of Rifampin Activity against Methicillin-Resistant *Staphylococcus aureus* (MRSA) Biofilms (Abstract B-73). 47th Interscience Conference on Antimicrobial Agents and Chemotherapy Chicago, IL. 2007.

181. Piper KE, Jacobson MJ, Cofield RH, Sperling JW, Sanchez-Sotelo J, Osmon DR, Steckelberg JM, **Patel R**. Improved microbiologic diagnosis of prosthetic shoulder infection (PSI) by explanted shoulder prostheses sonication followed by concentration and prolonged incubation of anaerobic cultures of sonicate fluid. 47th Interscience Conference on Antimicrobial Agents and Chemotherapy Chicago, IL. 2007.
182. Rouse MS, Afessa B, Talsma SS, **Patel R**. In Vitro Assessment of Microbial Colonization and Biofilm Formation on Silver-Coated Endotracheal Tubes Post Extubation. *Chest*. 2007; 132:576S-7S.
183. Rouse M, Hawser S, Lowe R, Lociuo S, Steckelberg J, **Patel R**. Initial Efficacy Studies of AR-2474, a Novel 1,3-Diphenyl Urea, in MRSA Skin Infection and Nasal Decolonization Mouse Models (Abstract F1-2100). 47th Interscience Conference on Antimicrobial Agents and Chemotherapy Chicago, IL. 2007.
184. Piper KE, Jacobson MJ, Frank KL, **Patel R**. MIST ultrasounds therapy device removal of *in vitro* bacterial biofilms. 4th ASM Conference on Bacterial Biofilms. 2007.
185. Piper KE, Cofield RH, Sperling JW, Sanchez-Sotelo J, Osmon DR, Steckelberg JM, **Patel R**. Molecular diagnosis of prosthetic shoulder infection (PSI). 47th Interscience Conference on Antimicrobial Agents and Chemotherapy Chicago, IL. 2007.
186. * Del Pozo JL, Rouse MS, Nguyen G, Steckelberg JM, **Patel R**. The Effect of Electrical Current on Antimicrobial Activity against Methicillin-Resistant *Staphylococcus aureus* (MRSA) Biofilms (Abstract B-72). 47th Interscience Conference on Antimicrobial Agents and Chemotherapy Chicago, IL. 2007.
187. * Fernandez-Sampedro M, Piper KE, Rouse MS, **Patel R**. Evaluation of the optimal duration of batch sonication for dislodging *in vitro Staphylococcus epidermidis* biofilm. 4th ASM Conference on Biofilms. 2007 Mar.
188. **Patel R**, Frank KL. Poly-*N*-Acetylglucosamine is not a major component of the *Staphylococcus lugdunensis* biofilm extracellular matrix. 4th ASM Conference on Biofilms. 2007 Mar.
189. * Kijpittayarit S, Dierkhising R, Colby C, Kremers W, **Patel R**, Razonable RR. Age and gender as predictors of delayed onset primary cytomegalovirus (CMV) disease after liver transplantation. *Am J Transplant*. 2007 May; 7(Suppl 2):505-6.
190. * Amess TL, Pedersen RA, Kremers WK, Dierkhising RA, **Patel R**. Varicella zoster virus-associated disease in adult kidney transplant recipients: Epidemiology and risk factors. *Am J Transplant*. 2007 May; 7(Suppl 2):500-1.
191. * Kang C, **Patel R**, Rouse MS, Kita H, Juhn YJ. Allergic Airway Inflammation and Susceptibility to Invasive Pneumococcal Disease in a Murine Model Assessed Using Real-Time In Vivo Evaluation (Abstract B 4172). 48th Interscience Conference on Antimicrobial Agents and Chemotherapy, San Francisco CA. 2008.
192. * Mook-Kanamori BB, Rouse MS, Kang C, VanDeBeek D, Steckelberg JM, **Patel R**. Daptomycin in Experimental Murine Pneumococcal Meningitis (Abstract B 058). 48th Interscience Conference on Antimicrobial Agents and Chemotherapy, San Francisco CA. 2008.
193. Jacobson M, Piper KE, Steckelberg JM, Mandrekar JN, **Patel R**. Evaluation of sonication for removal of *Propionibacterium acnes* biofilm. ICCAC/IDSA. 2008.
194. * Lappinga PJ, Abraham SC, Murray JA, Vetter EA, **Patel R**, Wu TT. Histopathologic features and clinical correlates of small intestinal bacterial overgrowth. *Mod Pathol*. 2008 Jan; 21(Suppl 1):125A.
195. * Lappinga PJ, Abraham SC, Murray JA, Vetter EA, **Patel R**, Wu TT. Histopathologic features and clinical correlates of small intestinal bacterial Overgrowth. *Lab Invest*. 2008 Jan; 88(Suppl 1):125A.
196. Piper KE, Jacobson, MJ, Steckelberg JM, **Patel R**. Microbiologic diagnosis of hip and knee prosthetic joint infection (PJI) using explanted prostheses sonication followed by concentration of sonicate fluid. ICCAC/IDSA. 2008.
197. Hirano Y, Kroening P, **Patel R**, Vassallo R. Oxidative constituents in cigarette smoke extract induce macrophage heme-oxygenase-1 protein. *Clin Immunol*. 2008; 127(Suppl S):S46-7.
198. * Grys TE, Rosenblatt J, **Patel R**, Sloan L. Rapid detection of Shiga toxin directly from stool specimens by LightCycler real-time PCR. ICAAC/IDSA. 2008.
199. Piper K, Fernandez Sampedro M, Jacobson M, Steckelberg JM, **Patel R**. Sensitivity of preoperative C-reactive protein (CRP) and erythrocyte sedimentation rate (ESR) to detect orthopedic implant infection (OII). 2008

ICAAC/IDSA. 2008.

200. * Leekha S, Irish CL, Schneider SK, Fernholz EC, Espy MJ, Cunningham SA, **Patel R**, Juhn YJ, Smith TF, Sampathkumar P. Viral Detection by Multiplex PCR in Upper Respiratory Infection. ICAAC/IDSA. 2008.
201. * Verdoorn BP, Orenstein R, Wilson JW, Estes LL, Wendt RF, Schleck CD, Harmsen WS, Nyre LM, Rosenblatt JE, Sloan LM, **Patel R**. Lack of Correlation Between Clinical and Laboratory Algorithms for Detecting Toxin Hyper-Producing *Clostridium difficile* Society for Healthcare Epidemiology of America Meeting, Orlando, FL. 2008 Apr.
202. * Verdoorn BP Orenstein R, Wilson JW, Estes LL, Wendt RF, Schleck CD, Harmsen WS, Nyre LM, **Patel R**. Telephone Notification of Positive *Clostridium difficile* Stool Toxin Results Decreases Time to Ordering of Metronidazole or Oral Vancomycin Society for Healthcare Epidemiology of America Meeting, Orlando, FL. 2008 Apr.
203. **Patel R**, Cunningham SA, Sloan LM, Uhl JR, Nyre LM, Vetter EA, Cockerill, III. Clinical validation of a LightCycler™ assay for the rapid detection of *Staphylococcus aureus* in blood culture bottles American Society for Microbiology 108th General Meeting, Boston, MA. 2008 Jun.
204. * van de Beek D, **Patel R**, Campeau N, Badley A, Parisi J, Rabinstein A, Manno E, Wijdsicks E. Insidious sinusitis leading to catastrophic cerebral aspergillosis in transplant recipients. J Neurol. 2008 Jun; 255(Suppl 2):130.
205. * Verdoorn BP, Orenstein R, Rosenblatt JE, Sloan LM, Schleck CD, Harmsen WS, Nyre LM, **Patel R**. Prevalence of *tcdC* deletion-positive *Clostridium difficile* and correlation with clinical course and outcome. American Society of Microbiology Meeting, Boston, MA. 2008 Jun.
206. Buckley AR, Borsheim SK, Nyre LM, Vetter EA, Rouse MS, **Patel R**. Visualization of bacterial contamination during routine practice in a clinical microbiology laboratory. American Society for Microbiology 108th General Meeting, Boston, MA. 2008 Jun.
207. * Robberts FJL, Kohner PC, **Patel R**. ESBL obfuscation by concomitant expression of plasmid-mediated AmpC beta-lactamases in *Escherichia coli*. National Foundation for Infectious Diseases. 2008 Jun 24.
208. Orenstein R, Miller V, Manahan J, Buchta W, Venier Y, Nyre L, Vetter E, **Patel R**, Griffith J. Electronic Symptom Watch to track laboratory associated infections 48th Annual ICAAC/IDSA 46th Annual Meeting Washington DC. 2008 Oct.
209. Piper KE, Jacobson MJ, Steckelberg JM, **Patel R**. *In vitro* Activity of Micafungin against Planktonic and Biofilm *Candida albicans*. 109th General Meeting of the American Society of Microbiology, Philadelphia, PA.. 2009;
210. * Neel NB, Barbari EF, **Patel R**, Fadel HJ, Osmon DR, Mabry TM. Beta-1 lactam therapy is superior to vancomycin for *Staphylococcus lugdensis* prosthetic joint infections. IDSA. 2009.
211. Dailey A, Nyre L, Piper KE, Jacobson MJ, Hanssen AD, Steckelberg JM, Osmon DR, Mandrekar JN, **Patel R**. Hip or knee prosthesis sonicate cultures have a shorter time to positivity compared to periprosthetic tissue cultures. 49th Annual ICAAC. 2009.
212. Piper KE, Fernandez Sampedro M, Jacobson MJ, Steckelberg KE, Mandrekar JN, Osmon DR, Steckelberg JM, **Patel R**. Poor performance of preoperative C-reactive protein (CRP) and erythrocyte sedimentation rate (ESR) in detecting shoulder implant infection. MSIS. 2009.
213. * Euba G, Rouse MR, Del Pozo JL, Jacobson MJ, Steckelberg JM, **Patel R**. Linezolid Treatment of *Staphylococcus aureus* Experimental Foreign Body Osteomyelitis Chemotherapy (Abstract B1322). 49th Interscience Conference on Antimicrobial Agents and Chemotherapy, San Francisco CA. 2009 Sep.
214. Jacobson MJ, Ramos A, Rouse MS, Del Pozo JL, Piper KE, Steckelberg JM, **Patel R**. The Electricidal Effect against *Candida albicans*, *Escherichia coli*, and *Streptococcus mutans* Species Group Biofilms Chemotherapy (Abstract E1473). 49th Interscience Conference on Antimicrobial Agents and Chemotherapy, San Francisco CA. 2009 Sep.
215. * Del Pozo JL, Rouse MS, Euba G, Kang C, Mandrekar JN, Steckelberg JM, **Patel R**. The Electricidal Effect Is Active in an Experimental Model of *Staphylococcus epidermidis* Chronic Foreign Body Osteomyelitis (Abstract B1337). 49th Interscience Conference on Antimicrobial Agents and Chemotherapy, San Francisco CA. 2009 Sep.
216. * Leekha S, Aronhalt KC, Shelerud MM, Siska MJ, Sloan LM, Rosenblatt JE, **Patel R**, Orenstein R. Asymptomatic *Clostridium Difficile* colonization among hospitalized patients at a tertiary care center. IDSA 47th Annual Meeting Philadelphia, PA. 2009 Nov.
217. * Shah NB, Osmon DR, Fadel H, **Patel R**, Steckelberg JM, Mabry T, Barbari EF. Beta-lactam therapy is

superior to vancomycin for *Staphylococcus lugdunensis* prosthetic joint infections. IDSA 47th Annual Meeting. Philadelphia. PA. 2009 Nov.

218. * Malekzadeh D, Osmon D, Lahr B, Hanssen AD, Eckel-Passow JE, Sia IG, Duffy MC, Steckelberg JM, **Patel R**, Berbari EF. Outcome and factors associated with culture negative prosthetic joint infection: A Case-Control Study. IDSA 47th Annual Meeting. Philadelphia, PA.. 2009 Nov;
219. Cunningham SA, Sloan LM, Uhl JR, Nyre LM, Vetter EA, Cockerill FR, **Patel R**. Validation of a real-time PCR assay for the detection of legionella species in respiratory samples. J Mol Diagn. 2009 Nov; 11(6):642.
220. Piper KE, Karau MJ, Briska AM, Zentz EB, Henkhaus JK, Steckelberg JM, **Patel R**. *Propionibacterium acnes* strain typing using optical mapping. ICAAC, Boston, MA. 2010.
221. Piper KE, Schmidt SM, Karau MJ, Steckelberg JM, **Patel R**. Development of a rapid real-time PCR assay to detect aerobic Gram-Negative bacilli that can cause prosthetic joint infection (PJI). 110th General ASM Meeting. 2010.
222. Karau MJ, Rouse MS, Heijink A, Steckelberg J, **Patel R**. in vitro Release of Anidulafungin and Voriconazole from Polymethylmethacrylate. 50th Interscience Conference on Antimicrobial Agents and Chemotherapy. Boston, MA.. 2010;
223. * Vergidis P, Rouse MS, Euba G, Karau MJ, Schmidt SM, Mandrekar J, Steckelberg JM, **Patel R**. Linezolid or Vancomycin Combination Therapy with Rifampin is Effective in an Animal Model of Methicillin-Resistant *Staphylococcus aureus* (MRSA) Foreign Body Osteomyelitis. 50th Interscience Conference on Antimicrobial Agents and Chemotherapy. Boston, MA. 2010.
224. Karau MJ, Steckelberg KE, Piper KE, Mandrekar J, Brady K, Ericson D, Steckelberg JM, **Patel R**. Rapid detection of bacteria using Globac™. 110th Annual ASM Meeting. 2010.
225. * Lough LE, Piper KE, Karau MJ, **Patel R**. Rapid Real-Time PCR Detection and Differentiation of Coagulase-negative staphylococci and *Staphylococcus aureus* associated with prosthetic joint infection (PJI). 110th Annual ASM Meeting. 2010.
226. Homme J, Greenwood C, Cronk L, **Patel R**, Weaver A, Nyre L. Effect of therapy for group A streptococcal pharyngitis on diagnostic PCR. Pediatric Academic Societies, Vancouver, BC.. 2010 May;
227. * Bruner B, Nehra A, McPhaill III EF, Higuchi T, Karau M, **Patel R**. Sonication of infected genitourinary prosthetics for detection of microorganisms in biofilms. Meeting of the American Urological Association Education and Research Inc.. 2010 May;
228. * Tsaras G, Snyder MR, Balsanek JG, Peters BE, Hanssen AD, **Patel R**, Steckelberg JM, Osmon DR, Berbari EF. The usefulness of 20 novel cytokines plasma levels in the diagnosis of prosthetic joint infection (PJI). Musculo Skeletal Infection Society. 2010 Aug.
229. * Vergidis P, Rouse MS, Steckelberg JM, **Patel R**. Activity of vancomycin or linezolid alone and with rifampin against methicillin-resistant *Staphylococcus aureus* (MRSA) biofilms. 48th Annual IDSA Meeting. 2010 Oct.
230. * Banerjee R, Fernandez MG, Enthaler N, Graml C, Piper KE, **Patel R**. Combinations of ceftiofur plus other β-lactams are synergistic in vitro against community associated methicillin-resistant *Staphylococcus aureus*. 48th Annual IDSA Meeting. 2010 Oct.
231. * Saffert R, Cunningham SA, Monson Jobe K, Ihde S, Cockerill III, F, **Patel R**. Comparison between the BD Phoenix Automated Identification System and Bruker MALDI Biotyper for identification of common Gram negative bacilli. 48th Annual IDSA Meeting. 2010 Oct.
232. Cunningham SA, Shannon SK, Rosenblatt J, **Patel R**. Comparison of culture and rapid polymerase chain reaction detection of *Mycoplasma hominis*, *Ureaplasma urealyticum* and *Ureaplasma parvum* from genitourinary specimens. 48th Annual IDSA Meeting. 2010 Oct.
233. * Gomez-Urena E, Gustafson DR, Colgrove R, Ly T, Santana R, Rosenblatt J, **Patel R**. Isolation of *Robinsoniella peoriensis* from four human specimens. 48th Annual IDSA Meeting. 2010 Oct.
234. * Vergidis P, Piper KE, Sanchez-Sotelo J, Morrey BF, Steinmann SP, Karau MJ, Osmon D, Steckelberg JM, **Patel R**. Microbiology of elbow implant infection. 48th Annual IDSA Meeting. 2010 Oct.
235. * Wu DY, **Patel R**, Orenstein R. Similar length of stay in metronidazole-treated non-ICU patients with mild-moderate and severe clostridium difficile infection - is oral vancomycin really needed? Am J Gastroenterol. 2010 Oct; 105(Suppl 1):329.
236. * Tsaras G, Snyder MR, Balsanek JG, Peters BE, Bryant SC, Ryu E, Hanssen A, **Patel R**, Steckelberg JM, Osmon D, Berbari EF. The usefulness of 20 novel cytokines plasma levels in the diagnosis of prosthetic joint

infection (PJI). 48th Annual IDSA Meeting. 2010 Oct.

237. * Banerjee R, Georgina Fernandez M, Enthaler N, Graml C, Piper KE, **Patel R**. Combinations of cefoxitin plus other beta-lactams are synergistic *in vitro* against community associated MRSA and VISA strains. ISAAR 2011, Seoul, Korea., 2011 Apr.
238. Scow JS, Hoskin TL, Boughey JC, Jakub JW, Miller J, Loprinzi M, **Patel R**, Baddour LM, Degnim AC. Randomized controlled trial to reduce bacterial colonization of surgical drains after breast and axillary operations. *Ann Surg Oncol*. 2011 Apr; 18(2):S180.
239. Luckey D, Karau M, **Patel R**, Rodriguez M, Murray J, David C, Taneja V, Mangalam A. Human commensal bacteria as a novel therapeutic agent for multiple sclerosis. *Microbiota and Mucosal Immunology: The Interface in Health and Disease*, San Francisco, CA. April 14-16, 2011.
240. Luckey D, Behrens M, Karau M, **Patel R**, Murray J, Mangalam A, Taneja V. Microbial mucosal modulation of arthritis. *Microbiota and Mucosal Immunology: The Interface in Health and Disease*, San Francisco, CA. April 14-16, 2011.
241. * Gomez EO, Gustafson DF, Rosenblatt JE, **Patel R**. *Actinobaculum* bacteremia: A report of 12 cases. ASM General Meeting 2011, New Orleans, LA. May 21-24, 2011.
242. Karau MJ, Schmidt SM, Steckelberg JM, **Patel R**. *in vitro* antimicrobial susceptibility of shoulder implant-associated bacteria. ASM General Meeting 2011, New Orleans, LA. May 21-24, 2011.
243. Vetter E, **Patel R**, Harmsen W, Schleck C, Fadel H, Cockerill III, F. Comparison of blood culture collection strategies to optimize yield. ASM General Meeting 2011, New Orleans, LA.. May 21-24, 2011;
244. Kohner P, Cockerill III, F, **Patel R**. Correlation between cefepime susceptibility using the 2010 Clinical and Laboratory Standards Institute (CLSI) guidelines and ESBL production. ASM General Meeting 2011, New Orleans, LA. May 21-24, 2011.
245. Rucinski S, Uhl J, Gustafson D, Cockerill, III F, **Patel R**. Detection of *Fusobacterium necrophorum* with throat swabs from patients with pharyngitis using culture and PCR. ASM General Meeting 2011, New Orleans, LA. May 21-24, 2011.
246. Cunningham SA, Saffert RT, **Patel R**. Effects of growth on selective media on identification of common Gram negative bacilli (GNB) using Matrix-Assisted Laser Desorption Ionization-Time of Flight mass spectrometry (MALDI-TOF MS). ASM General Meeting 2011, New Orleans, LA. May 21-24, 2011.
247. Marko DC, Saffert RT, Cunningham SA, Hyman J, Walsh J, Arbefeville S, Howard W, Pruessner J, Safwat N, Cockerill, F, Bossler A, **Patel R**, Richter SS. Evaluation of the Bruker Biotyper and Axima SARAMIS Matrix-Assisted Laser Desorption Ionization-Time of Flight Mass Spectrometry (MALDI-TOF MS) Systems for the identification of nonfermenting Gram-negative rods from cystic fibrosis patient cultures. ASM General Meeting 2011, New Orleans, LA. May 21-24, 2011.
248. * Saffert RT, Cunningham SA, **Patel R**. Identification of microorganisms directly from positive blood culture bottles using MALDI-TOF mass spectrometry. ASM General Meeting 2011, New Orleans, LA. May 21-24, 2011.
249. * Alatoon AA, Cunningham SA, Ihde SM, Mandrekar J, **Patel R**. Identification of staphylococci, streptococci and related genera by Bruker Biotyper MALDI-TOF mass spectrometry using direct colony and extraction methods. ASM General Meeting 2011, New Orleans, LA. May 21-24, 2011.
250. * Maduka-Ezeh A, Karau M, Kohner P, Piper K, Hanssen A, Berbari E, Steckelberg J, **Patel R**. Predominance of *Staphylococcus epidermidis* among small colony variants associated with prosthetic joint infection and description of a fluctuating phenotype. ASM General Meeting 2011, New Orleans, LA. May 21-24, 2011.
251. Schmidt SM, Albayati ZF, Karau MJ, Steckelberg JM, Sunkara M, Morris A, Merten KE, Crooks PA, **Patel R**. Rat plasma and bone concentrations of BT2-peg2-vancomycin and vancomycin via intraperitoneal administration. ASM General Meeting 2011, New Orleans, LA. May 21-24, 2011.
252. Seville MT, Kusne S, Arabia FA, Maduka-Ezeh AN, **Patel R**. Successful Treatment of Methicillin-Resistant *S. aureus* (MRSA) Small Colony Variant (SCV) Left Ventricular Assist Device (LVAD) Infection. 11th International Symposium on Modern Concepts in Endocarditis and Cardiovascular Infections (2011 ISCVID Symposium), Cairns, Australia. 2011 Jul 24-26.
253. * Maduka-Ezeh AN, Karau M, Greenwood-Quaintance K, Berbari E, Osmon DR, Hanssen AD, Steckelberg J, **Patel R**. *Staphylococcus epidermidis* small colony variants from prosthetic joint infection demonstrate variable biofilm formation *in vitro*. Musculo Skeletal Infection Society. August 5-6, 2011.
254. * Maduka-Ezeh A, Greenwood-Quaintance K, Karau M, Berbari E, Osmon D, Hanssen A, Steckelberg J, **Patel**

- R. *Staphylococcus epidermidis*** small colony variants (SCV) demonstrate variable aminoglycoside susceptibility. 51st ICAAC Chicago IL. September 17-20, 2011.
255. Karau MJ, Tran NV, Schmidt SM, Greenwood-Quaintance KE, Bite U, Clay RP, Jacobson SR, Petty PM, Johnson CH, Steckelberg JM, **Patel R**. Detection of infection in patients with explanted breast tissue expanders. 51st ICAAC, Chicago, IL. September 17-20, 2011.
256. * Cazanave CJB, Greenwood-Quaintance KE, Schmidt SM, Karau MJ, Steckelberg JM, **Patel R**. Development of real-time PCR assays to rapidly detect anaerobic bacteria which cause prosthetic joint infection (PJI). 51st ICAAC Chicago IL. September 17-20, 2011.
257. Karau MJ, Greenwood-Quaintance KE, Clark MS, Rouse MS, Merten KE, Pierce Jr WM, **Patel R**. In vitro activity of bone-targeted vancomycin against methicillin-resistant *Staphylococcus aureus*. 51st ICAAC Chicago IL. September 17-20, 2011.
258. Karau MJ, Tilahun AY, Clark CR, **Patel R**, Rajagopalan G. In vitro and in vivo evaluation of linezolid in the treatment of *Staphylococcus aureus*-induced pneumonia using HLA-DR3 transgenic mice. 51st ICAAC Chicago IL. September 17-20, 2011.
259. * Schmidt SM, Karau MJ, Mandrekar J, Steckelberg JM, **Patel R**. Telavancin in experimental pneumococcal pneumonia. 51st ICAAC Chicago, IL. September 17-20, 2011.
260. Greenwood-Quaintance K, Piper A, Lindsey M, Steckelberg J, **Patel R**. The electricidal effect against *Pseudomonas aeruginosa*, *Staphylococcus epidermidis*, *Staphylococcus aureus*, *Enterococcus faecalis* and *Escherichia coli* biofilms. 51st ICAAC, Chicago, IL. September 17-20, 2011.
261. Vergidis P, Frank KL, Dunny GM, Greenwood-Quaintance KE, Schlievert PM, Karau MJ, Schmidt SM, Mandrekar JN, **Patel R**. Evaluation of gene disruption mutants of *Enterococcus faecalis* in a rat model of foreign body osteomyelitis. 49th Annual IDSA Meeting, Boston, MA. 2011.
262. Estes L, **Patel R**, Kohner P, Banerjee R. Impact of cephalosporin and cabapenem breakpoint revisions on Enterobacteriaceae susceptibility rates. IDSA Annual Meeting, Boston, MA.. October 20-23, 2011;
263. * Hyner HL, Greenwood-Quaintance KE, Maduka-Ezeh A, **Patel R**. Auxotrophy and biofilm formation in *Staphylococcus aureus* small colony variant isolates from prosthetic joint infections. ASM General Meeting, San Francisco, CA.. June 16-19, 2012;
264. Cunningham SA, Mandrekar J, Saffert RT, Alatoon AA, **Patel R**. Comparison of the Bruker Biotyper and Vitek MS MALDI-TOF mass spectrometry systems for identification of Gram-negative and Gram-positive aerobic bacteria. ASM General Meeting, San Francisco, CA.. June 16-19, 2012;
265. Uhl J, Cockerill III F, **Patel R**. Detection of group A streptococcus from throat swabs by PCR using Roche and Focus ASRs. 112th General Meeting of the American Society of Microbiology, San Francisco, CA. June 16-19, 2012.
266. * Schmitt BH, Cunningham SA, Alatoon AA, Cazanave CJ, **Patel R**. Identification of *Corynebacterium* species by Bruker Biotyper Matrix Assisted Laser Desorption Ionization-Time of Flight mass spectrometry Using an on-plate extraction method. 112th General Meeting of the American Society of Microbiology, San Francisco, CA. June 16-19, 2012.
267. Schwab JJ, Cunningham, SA, Zomok CD, Roden AC, **Patel R**. Is *Tropheryma whipplei* or *Mycoplasma hominis* DNA present in bronchoalveolar lavage fluid from immunocompromised hosts? ASM General Meeting, San Francisco, CA.. June 16-19, 2012;
268. Greenwood-Quaintance KE, Piper AL, Cazanave C, Uhl JR, Hanssen AD, Steckelberg JM, **Patel R**. Rapid real-time PCR detection mecA gene in biofilm-associated methicillin-resistant Staphylococci (MRS) and sonicated implant clinical samples. ASM General Meeting, San Francisco, CA.. June 16-19, 2012;
269. Karau MJ, Schmidt SM, Greenwood-Quaintance KE, Mandrekar JN, Merten KE, Pierce Jr WM, **Patel R**. Treatment of methicillin-resistant *Staphylococcus aureus* experimental osteomyelitis with bone-targeted vancomycin. 112th General Meeting of the American Society of Microbiology, San Francisco, CA. June 16-19, 2012.
270. * Khare R, Barry MA, **Patel R**. Vaccination against *Staphylococcus aureus* antibiotic resistance factors with an adenoviral vector. ASM General Meeting, San Francisco, CA.. June 16-19, 2012;
271. Snyderman DR, McDermott LA, Jacobus NV, Goldstein EJC, Harrell L, **Patel R**, Jenkins SG, Johnson SJ, Gerding DN. A US based nation sentinel surveillance study for the susceptibility and epidemiology of *Clostridium difficile* associated diarrheal isolates. ICAAC 2012. San Francisco, CA. 2012 Sep 9-12.
272. Shannon SK, Mandrekar J, Gustafson DR, Rucinski SL, Dailey AL, Segner RE, Burman MK, Boelman KJ,

- Lynch DT, Rosenblatt JE, **Patel R**. Anaerobic thioglycollate broth culture for recovery of *Propionibacterium Acnes* (PA from shoulder fluid and tissue specimens. ICAAC 2012. San Francisco, CA.. Sept 9-12, 2012;
273. Vergidis P, Schmidt SM, Mandrekar JN, Steckelberg JM, **Patel R**. Comparative activities of vancomycin, tigecycline and rifampin in a rat model of methicillin-resistant *Staphylococcus aureus* (MRSA) foreign body osteomyelitis. 52nd ICAAC, San Francisco, CA.. 2012.
274. * Schmitt B, Cunningham S, Dailey A, Gustafson D, **Patel R**. Identification of anaerobic bacteria by Bruker Biotyper matrix assisted laser desorption ionization-time of flight mass spectrometry with on-plate formic acid preparation. ICAAC 2012 San Francisco, CA. 2012 Sep 9-12.
275. Luckey D, Marietta E, Luthra HS, **Patel R**, Murray JA, Mangalam A, Taneja V. Commensal gut-derived bacteria as therapy for systemic autoimmune disease. *Arthritis Rheum*. 2012 Oct; 64(10):S699.
276. Luckey D, Luo N, Wussow A, Karau M, **Patel R**, Rodriguez M, Murray J, David J, Taneja V, Mangalam A. Human commensal bacterium as probiotic for treatment of inflammatory and demyelinating disease of central nervous system. Individualized Medicine Conference, Transforming Patient Care with Genomics, Rochester, MN.. October 1-3, 2012;
277. Luckey D, Luo NL, Karau M, **Patel R**, Rodriguez M, Murray J, David C, Taneja V, Mangalam A. Human gut-derived commensal bacteria as therapy for autoimmune diseases. *J Neuroimmunol*. 2012 Dec 15; 253(1-2):172-3.
278. * Chung J, Karau M, Tilahun A, Rajagopalan G, **Patel R**. Catheter-associated *Staphylococcus aureus* biofilms producing staphylococcal enterotoxin B elicit a systemic inflammatory response in the absence of bacteremia ID Week 2013. 10/2013.
279. Nagpal A, Greenwood-Quaintance K, Sohail M, Baddour L, **Patel R**. Clinical and Laboratory Characteristics of Small Colony Variants of Coagulase Negative Staphylococci (CoNS) Associated with Cardiovascular Implantable Electronic Device (CIED) Infections ICAAC 2013, 53rd ICAAC, Denver, CO September 2013. 2013; CoNS).
280. * Melendez D, Osmon D, Greenwood-Quaintance K, Hanssen A, **Patel R**. Comparison of the Musculoskeletal Infection Society and Infectious Disease Society of America Diagnostic Criteria for Prosthetic Joint Infection ID Week 2013. 10/2013.
281. Theofilis AG, Cunningham SA, **Patel R**. Pertussis Outbreak, Southeastern Minnesota ICAAC 2013, 53rd ICAAC, Denver CO, September 2013. 2013.
282. * Madigan T, Vasoo S, Cunningham S, Tosh P, **Patel R**, Sampathkumar P, Banerjee R. Rectal colonization by drug resistant Enterobacteriaceae among international patients hospitalized at Mayo Clinic, Rochester, Minnesota ID Week 2013. 10/2013.
283. * Nagpal A, **Patel R**, Greenwood-Quaintance K, Maleszewski J, Friedman P, Hayes D, Baddour L, Sohail M. Sonication of Cardiovascular Implantable Electronic Devices to Enhance Microbial Detection. ID Week 2013. 10/2013.
284. Snyderman DR, McDermott LA, Jacobus NV, Stone SM, Mahoney I, Jenkins SG, Goldstein EJ, **Patel R**, Forbes BA, Thorpe C, Hecht DW. Two Years of Surveillance for Susceptibility and Epidemiology of *Clostridium difficile* Associated Diarrheal Isolates ICAAC 2013/53rd ICAAC; Denver, CO September 2013. 2013.
285. Cunningham S, Vasoo S, Vergidis P, Uhl JR, **Patel R**. *Coxiella burnetii* endocarditis? A retrospective study. 29th Annual Clinical Virology Symposium, Tampa, FL.. April 28 - May 1, 2013;
286. * Karau M, **Patel R**, Mandrekar J. Catalase and Superoxide Dismutase Production from Bacterial Biofilms Exposed to Electrical Current. American Society for Microbiology 113th General Meeting Denver, CO-21. 2013 May 18-21.
287. * Vasoo S, Cunningham SA, Kohner PC, Simner PJ, Mandrekar J, Lolans K, Hayden MK, **Patel R**. Comparison of the Modified Carba NP and the Modified Hodge Tests for Detection of Carbapenemase-Producing Gram-Negative Bacilli (GNB). American Society for Microbiology 113th General Meeting Denver, CO-21. 2013 May 18-21.
288. * Ryu S, Greenwood-Quaintance K, Hanssen A, **Patel R**. Evaluation of DNA Extraction Methods and Sensitivity of Tissue PCR Detection of *Staphylococcus aureus* and Coagulase Negative Staphylococci (CNS) Associated with Prosthetic Joint Infection (PJI). American Society for Microbiology General Meeting Denver, CO-21. 2013 May 18-21.
289. Contezac J, Monson Jobe K, Gebrehiwot S, Drake T, Vetter E, Melton P, Baisch M, **Patel R**. Improving Blood Culture (BC) Turnaround Time-A Quality Improvement Project. American Society for Microbiology 113th

General Meeting Denver, CO-21. 2013 May 18-21.

290. * Brinkman CL, Mandrekar J, **Patel R**. In vitro Analysis of the Electricidal Effect on Staphylococcal and Pseudomonal Biofilms Using Confocal Microscopy. ASM 113th General Meeting, Denver, CO.. 2013 May 18-21;
291. Cede J, Schmidt SM, Mandrekar J, **Patel R**. In vitro Treatment of Staphylococcal and Pseudomonal Biofilms Using Intermittent Low-intensity Electrical Current. American Society for Microbiology General Meeting Denver, CO-21. 2013 May 18-21.
292. * Melendez D, Uhl JR, Greenwood-Quaintance KE, Hanssen AD, Sampath R, **Patel R**. Molecular Microbiologic Detection of Prosthetic Joint Infection (PJI) Using the Abbott PLEX-ID System on Synovial Fluid. American Society for Microbiology 113th General Meeting Denver, CO-21. 2013 May 18-21.
293. * Chung J, Karau M, Greenwood-Quaintance K, Rajagopalan G, **Patel R**. Superantigen genes in Staphylococcus aureus causing endocarditis. American Society for Microbiology 113th General Meeting Denver, CO-21. 2013 May 18-21.
294. Khanna S, Mrazek M, Kammer P, **Patel R**, Pardi D. Kinetics of polymerase chain reaction testing in patients with clostridium difficile infection. Am J Gastroenterol. 2013 Oct; 108:S175.
295. Degnim AC, Brahmabhatt R, Hoskin TL, Peled AW, Boughey JC, Hieken TJ, Jacobson SR, Lemaine V, Jakub JW, Irwin C, Foster RD, Sbitany H, Saint-Cyr M, Loprinzi MD, Duralde E, Ramaker SA, Chin R, Scow JS, **Patel R**, Ballman K, Baddour L, Esserman LJ. Prospective randomized trial of drain antisepsis to reduce bacterial colonization of surgical drains after mastectomy with immediate expander/implant reconstruction. Ann Surg Oncol. 2014 Apr; 21:2.
296. Khanna S, Montassier E, Schmidt B, Lynch D, Bernam C, Lekatz H, Zodrow K, **Patel R**, Kammer P, Knights D, Pardi D, Kashyap P. Gut microbiota changes as predictors of treatment failure in primary clostridium difficile infection. Am J Gastroenterol. 2015 Oct; 110:S578.
297. Kvirgic Z, Cawcutt K, **Patel R**, Virk A, Michet CJ Jr, Matteson EL, Bongartz T. Whipple's disease: the diagnostic utility of synovial fluid Tropheryma whipplei polymerase chain reaction Arthritis & Rheumatology. 2015 Oct; 67: (Suppl 10).
298. Chen DJ, Cunningham SA, Druffel EM, **Patel R**, Pritt B. Investigation of potential misdiagnosis of corynebacteria as mycobacteria based on acid fast stains in surgical pathology specimens Laboratory Investigation. 2016 Feb; 96:389A.
299. Chen DJ, Cunningham SA, Druffel EM, **Patel R**, Pritt B. Investigation of potential misdiagnosis of corynebacteria as mycobacteria based on acid fast stains in surgical pathology specimens Modern Pathology. 2016 Feb; 29:389A.
300. Hefazi M, Alkhateeb HB, **Patel R**, Razonable R, Gastineau DA, Al-kali A, Hashmi SK, Hogan WJ, Litzow MR, Patnaik MS. Vancomycin-resistant enterococcus (vre) colonization and blood stream infection (bsi): prevalence, risk factors, and impact on early clinical outcomes after allogeneic hematopoietic cell transplantation Biology Of Blood And Marrow Transplantation. 2016 Mar; 22: (3)S322-3.
301. Rajagopalan G, Karau M, Krogman A, **Patel R**, David CS. Hla-dr3 transgenic mice expressing nur77-gfp reveal early and robust activation of t cells by superantigens during staphylococcus aureus pneumonia Journal Of Immunology. 2016 May 1; 196:
302. Crews N, Cawcutt K, Pritt B, **Patel R**, Virk A. Diagnostic approach and testing of Whipple's disease American Journal Of Gastroenterology. 2016 Oct; 111:S462.
303. Ramanan P, Gebrehiwot SA, Rucinski SL, Dylla BL, Wengenack NL, Hughes JG, Ihde SM, **Patel R**. Discrepancies Between Microbial Detection and Identification Using the Blood Culture Identification FilmArray Panel Assay and Standard Subculture of Positive Blood Culture Bottles IDWeek 2016, New Orleans, LA. October 26-30, 2016. 2016; Abstract no. 188.
304. Cunningham SA, Bhatti MM, **Patel R**. Validation of a real-time Kingella kingae pcr assay Journal Of Molecular Diagnostics. 2016 Nov; 18: (6)981.
305. Panaich S, Arora S, Maor E, Raphael C, Patel N, Shah H, Kumar V, Badheka A, Deshmukh A, Eleid M, **Patel R**, Rihal C. Transcatheter mitral valve repair (mitraclip) in United States: etiologies and predictors of readmission and in-hospital mortality from the nationwide readmission database Journal Of The American College Of Cardiology. 2017 Mar 21; 69: (11)1132.
306. Esquer Garrigos Z, Sohail MR, Cunningham SA, Vijayvargiya P, Thoendel MJ, Friedman PA, **Patel R**. Comparison of Primers Amplifying Two Different Regions of the 16S Ribosomal RNA Gene for Microbiologic

Diagnosis of Cardiovascular Implantable Electronic Device Infection Open Forum Infectious Diseases. 2018; Volume 5(Issue suppl_1):591.

307. Rucinski S, Murphy MP, Mainella JM, Kies KD, Cunningham SA, Schuetz AN, **Patel R**. Seasonality of positive results and experience with reflexive culture with a clinically-performed Legionella PCR assay. ASM Microbe Annual Meeting, Atlanta, GA. 2018.
308. Banerjee R, Dylla B, Komarow L, Lok J, Finnemeyer M, Schuetz AN, Kohner P, Ihde S, Cole N, Hines L, Reed K, Rajapakse N, Virk A, Doernberg S, **Patel R**. Accelerate Pheno System (AXDX) performance during a randomized clinical trial evaluating rapid identification and antimicrobial susceptibility testing for Gram-negative bacteremia (RAPIDS-GN). ASM Microbe Annual Meeting, Atlanta, GA. 2018.
309. Shannon S, Jung SA, La M, Greenwood-Quaintance K, Yan Q, Jenkins S, **Patel R**, Schuetz AN. Susceptibility testing of rifampin for Cutibacterium spp.: Is it time to establish a breakpoint? Anaerobe Society of the Americas Biennial Congress, Las Vegas, NV. 2018.
310. Bragin E, Cunningham SA, Rhodes PA, Peacock S, Parkhill J, Schuetz AN, **Patel R**. Accuracy of whole genome sequencing-based susceptibility prediction of Staphylococcus aureus using a commercial system compared to conventional phenotypic testing. ECCMID Annual Meeting, Amsterdam, Netherlands. 2019.
311. Banerjee R, Komarow L, Virk A, Rajapakse N, Schuetz AN, Dylla B, Earley M, Lok J, Kohner P, Ihde S, Cole N, Hines L, Reed K, Garner O, Chandrasekaran S, de St Maurice A, Kanatani M, Curello J, Arias R, Swearingen W, Doernberg SB, **Patel R**, Antibacterial Resistance Leadership Group. Randomized clinical trial evaluating clinical impact of RAPid IDentification and Antimicrobial Susceptibility testing for Gram-Negative bacteremia (RAPIDS-GN). ID Week, Washington, DC. 2019.
312. * Flurin L, **Patel R**, Carles M. Hydroxychloroquine combinée à l'azithromycine dans le traitement des pneumopathies hypoxémiantes à COVID-19 Médecine et Maladies Infectieuses. 2020; 50(6):S91. Abstract no. COVID-69.
313. Masters T, Bhagwate A, Dehankar M, Greenwood-Quaintance K, Abdel M, **Patel R**. Transcriptomic Activities of Human Hosts in Response to Periprosthetic Joint Infection IDWeek. 2020.
314. * **Patel R**, Wolf MJ, Flurin L. Increased Yield of 16S Ribosomal RNA Gene Polymerase Chain Reaction (PCR) with a Combination of Sanger and Next Generation Sequencing (NGS) World Microbe Forum 2021. 06/20/2021.
315. Flurin L, Wolf MJ, Mutchler M, Daniels M, **Patel R**. Increased Yield of 16S Ribosomal RNA Gene Polymerase Chain Reaction (PCR) with a Combination of Sanger and Next Generation Sequencing (NGS) World Microbe Forum. 2021.
316. Flurin L, Wolf MJ, Greenwood KE, Sanchez-Sotelo J, **Patel R**. Targeted Next Generation Sequencing for Elbow Periprosthetic Joint Infection Diagnosis ECCMID 2021. 2021.
317. Berent TE, Rothstein T, Buckwalter S, **Patel R**. Performance Comparison of Multiplexed Fluorescent Resonance Emission Transfer Hybridization Probes Across Roche LightCycler Real-Time PCR Systems for the Detection of Bartonella species ASCP. 2021.
318. Jentoft M , Edgar M , Dickson D , **Patel R** , Pritt B , Norgan A . Diagnosis of balamuthia mandrillaris by molecular detection of candidatus ameobophilus, a bacterial endosymbiont. Journal of Neuropathology and Experimental Neurology. 2022 May 20; 81(6):498

Letters

1. **Patel R**, Gustaferro CA, Krom RA, Wiesner RH, Roberts GD, Paya CV. Phaeohyphomycosis due to Scopulariopsis brumptii in a liver transplant recipient. Clin Infect Dis. 1994 Jul; 19(1):198-200. PMID:7948529 DOI:
2. * Herrero IA, Issa NC, **Patel R**. Nosocomial spread of linezolid-resistant, vancomycin-resistant Enterococcus faecium. N Engl J Med. 2002 Mar 14; 346(11):867-9. PMID:11893808 DOI:10.1056/NEJM200203143461121
3. **Patel R**, Germer JJ. Treatment of acute hepatitis C with interferon alfa-2b. N Engl J Med. 2002 Apr 4; 346(14):1091. PMID:11932480 DOI:
4. Riegert-Johnson DL, Sandhu N, Rajkumar SV, **Patel R**. Thrombotic thrombocytopenic purpura associated with a hepatic abscess due to Actinomyces turicensis. Clin Infect Dis. 2002 Sep 1; 35(5):636-7. PMID:12173147 DOI:10.1086/342327
5. Yao JDC, Germer J, **Patel R**. Need for procedural details in the protocol for specimen processing by the MagNA pure LC instrument. J Clin Microbiol. 2003 Oct; 41(10):4911. PMID:14532262 DOI:10.1128/JCM.41.10.4911-4912.2003

6. * Prabhuram RM, Elliott MA, **Patel R**. Apparent failure of moxifloxacin to prevent ciprofloxacin- and levofloxacin-susceptible *Pseudomonas aeruginosa* bacteremia in neutropenic patients undergoing peripheral blood stem cell transplantation. *Clin Infect Dis*. 2004 Apr 1; 38(7):1043-5. PMID:15034845 DOI:10.1086/382706
7. * Shuford JA, Steckelberg JM, **Patel R**. Effects of fresh garlic extract on *Candida albicans* biofilms. *Antimicrob Agents Chemother*. 2005 Jan; 49(1):473. PMID:15616341 DOI:10.1128/AAC.49.1.473.2005
8. * Frank KL, **Patel R**. Response to Dr. Charles J. Diskin's submission "Heparin, biofilm, and catheter-related sepsis". *Diagn Microbiol Infect Dis*. 2008 May; 61(1):80-1.
9. * Karre T, Vetter EA, Mandrekar JN, **Patel R**. Comparison of bacterial antigen test and gram stain for detecting classic meningitis bacteria in cerebrospinal fluid. *J Clin Microbiol*. 2010 Apr; 48(4):1504-5. Epub 2010 Feb 10. PMID:20147643 DOI:10.1128/JCM.00153-10
10. * Fadel HJ, **Patel R**, Vetter EA, Baddour LM. Clinical significance of a single *Staphylococcus lugdunensis*-positive blood culture. *J Clin Microbiol*. 2011 Apr; 49(4):1697-9. Epub 2011 Jan 26 PMID:21270222 DOI:10.1128/JCM.02058-10
11. Kloesel B, Beliveau M, **Patel R**, Trousdale RT, Sia IG. *Bulleidia extracta* periprosthetic hip joint infection, United States. *Emerg Infect Dis*. 2013 Jul; 19(7):1170-1. PMID:23764091 DOI:10.3201/eid1907.130078
12. Lee CS, Vasoo S, Hu F, **Patel R**, Doi Y. *Klebsiella pneumoniae* ST147 coproducing NDM-7 carbapenemase and RmtF 16S rRNA methyltransferase in Minnesota. *J Clin Microbiol* 2014 Nov; 52 (11):4109-10 Epub 2014 Aug 20 PMID:25143576 DOI:10.1128/JCM.01404-14
13. Uhl JR, Gustafson DR, Rucinski SL, **Patel R**. *Fusobacterium*-positive and streptococcal-positive pharyngitis. *Ann Intern Med*. 2015 Jun 16; 162(12):876-7.
14. Perez K, **Patel R**. Biofilm-like aggregation of *Staphylococcus epidermidis* in synovial fluid. *J Infect Dis* 2015 Jul 15; 212 (2):335-6 Epub 2015 Feb 23 PMID:25712965 DOI:10.1093/infdis/jiv096
15. Vasoo S, Cunningham SA, Greenwood-Quaintance KE, Mandrekar JN, Hanssen AD, Abdel MP, Osmon DR, Berbari EF, **Patel R**. Evaluation of the FilmArray Blood Culture ID Panel on Biofilms Dislodged from Explanted Arthroplasties for Prosthetic Joint Infection Diagnosis. *J Clin Microbiol* 2015 Aug; 53 (8):2790-2 Epub 2015 May 27 PMID:26019200 DOI:10.1128/JCM.01333-15
16. Cunningham SA, **Patel R**. Standard Matrix-Assisted Laser Desorption Ionization-Time of Flight Mass Spectrometry Reagents May Inactivate Potentially Hazardous Bacteria. *J Clin Microbiol* 2015 Aug; 53 (8):2788-9 Epub 2015 May 27 PMID:26019211 DOI:10.1128/JCM.00957-15
17. Daniels LM, Heaton PR, Desai SN, **Patel R**, Baddour L. Bovine Bioprosthetic Valve Endocarditis in a Cattle Rancher. *Am J Med Sci*. 2015 Sep; 350(3):235-6. PMID:26110746 DOI:10.1097/MAJ.0000000000000519
18. Banerjee R, Teng CB, Cunningham SA, Ihde S, Steckelberg JP, Moriarty JP, Shah ND, Mandrekar J, **Patel R**. Reply to Idelevich and Beck. *Clin Infect Dis* 2016 Jan 15; 62 (2):269-70 Epub 2015 Sept 22 PMID:26394668 DOI:10.1093/cid/civ826
19. Evans S, Kreiswirth B, Fowler V, Chambers H, **Patel R**, Hujer AM, Perez F, Bonomo RA. For rapid molecular detection, why not a whole genome approach? Reply *Clinical Infectious Diseases* 2016 Aug 15; 63 (4):571-2
20. Evans S, Kreiswirth B, Fowler V, Chambers H, **Patel R**, Hujer AM, Perez F, Bonomo RA. Reply to Lesho and Clifford. *Clin Infect Dis* 2016 Aug 15; 63 (4):571-2 Epub 2016 May 25 PMID:27225238 DOI:10.1093/cid/ciw336
21. Perez K, **Patel R**. *Staphylococcus epidermidis* Small-Colony Variants Are Induced by Low pH and Their Frequency Reduced by Lysosomal Alkalinization. *J Infect Dis* 2017 Feb 1; 215 (3):488-490 PMID:27974434 DOI:10.1093/infdis/jiw503
22. Fida M, Dylla BL, Sohail MR, Pritt BS, Schuetz AN, **Patel R**. Role of prolonged blood culture incubation in infective endocarditis diagnosis. *Eur J Clin Microbiol Infect Dis* 2019 Jan; 38 (1):197-198 Epub 2018 Oct 06 PMID:30293204 DOI:10.1007/s10096-018-3397-1
23. Wyles CC, Paradise CR, Masters TL, **Patel R**, van Wijnen AJ, Abdel MP, Trousdale RT, Sierra RJ. Response to Letter to the Editor on "Cobalt and Chromium Ion Release in Metal-on-Polyethylene and Ceramic-on-Polyethylene THA: A Simulator Study With Cellular and Microbiological Correlations". *J Arthroplasty* 2020 Apr; 35 (4):1167 Epub 2019 Dec 20 PMID:31911093 DOI:10.1016/j.arth.2019.12.028
24. Cho HK, Karau MJ, Greenwood-Quaintance KE, Hansford KA, Cooper MA, Blaskovich MAT, **Patel R**. In Vitro Activity of Vancaptin MCC5145 against Methicillin-Resistant *Staphylococcus aureus* from Periprosthetic Joint Infection. *Antimicrob Agents Chemother* 2021 Mar 8 Epub 2021 Mar 08 PMID:33685894 DOI:10.1128/AAC.02443-20
25. Karau MJ, Schmidt-Malan SM, Mandrekar J, Lehoux D, Schuch R, Cassino C, **Patel R**. Activity of Lysin CF-

296 Alone and in Addition to Daptomycin in a Rat Model of Experimental Methicillin-Resistant *Staphylococcus aureus* Osteomyelitis. *Antimicrob Agents Chemother* 2021 May 18; 65 (6) PMID:33722889 DOI:10.1128/AAC.00117-21

* Indicates the primary author was a mentee of this author.

Indicates the authors contributed equally.