

Updated: October 31<sup>st</sup>, 2019

CURRICULUM VITAE (since 1995)

**MICHAEL A. SAUBOLLE, Ph.D., D(ABMM), F(AAM), F(IDSA)**

**Chronology of Education:**

- Sept 1966-June 1968      Transfer (no degree). College of San Mateo, San Mateo, California.  
Science curriculum in a pre-med program.
- Sept 1968- June 1970      University of California, Davis, California  
Biological Sciences; Bachelor of Science degree in June, 1970.
- Sept 1970 – June 1976      University of California, Davis, California.  
Microbiology; Doctor of Philosophy degree in Sept, 1976.
- July 1976 – July 1978      University of Oregon Health Science Center, Portland, Oregon.  
Postdoctoral Fellowship in Public Health and Medical Laboratory  
Microbiology; graduated July, 1978.

**Chronology of Employment:**

Director, Infectious Diseases/Microbiology Curriculum, University of Arizona, College of Medicine – Phoenix Campus (10%; Jan 16<sup>th</sup>, 2017- present).

Medical Director, Infectious Disease Division, Laboratory Sciences of Arizona/Sonora Quest Laboratories, Banner Health System, Phoenix/Tempe, AZ (August 1<sup>st</sup>, 1996-July 31<sup>st</sup>, 2019).

Co-Director, Infectious Diseases Block, University of Arizona College of Medicine, Phoenix Campus, AZ (Sept, 2011-2013).

Director, Microbiology and Serology Section, Department of Pathology  
Good Samaritan Regional Medical Center, Phoenix, Arizona 85006  
(August 1978-August 1996).

Technical Director: Microbiology. Phoenix Medical Laboratory. AZ 1984-1996.

Consultant: Microbiology. Maryvale Samaritan Hospital. Maryvale, AZ.  
1987-1996.

Consultant: Microbiology. Thunderbird Samaritan Hospital. Glendale, AZ.  
1986-1996.

**Honors and Awards:**

Section Editor, Clinical Microbiology Procedures Handbook, section on Aerobic Actinomycetes, American Society for Microbiology Press, Washington DC. 2016.

Distinguished Lecturer, American Society for Microbiology, July, 2012-2015.

Fellow, American Academy of Microbiology (June, 1994-present).

Fellow, Infectious Disease Society of America (1995-present).

Clinical Associate Professor of Medicine Appointment, College of Medicine, University of Arizona, Phoenix/Tucson, AZ. (1994-present).

Adjunct Professor Appointment, Department of Microbiology, College of Liberal Arts and Sciences, Arizona State University, Tempe, AZ. (1992-2004)

Invited Colloquium Participant: "Clinical Microbiology and the Changing World of Health Care". American Academy of Microbiology, Washington, D.C. June, 1997.

Invited Colloquium Participant: Status of Clinical Microbiology and Infectious Diseases, Houston, TX. ASM, 2011.

Editorial Board - Cumulative Techniques and Procedures in Clinical Microbiology, American Society for Microbiology (1999-2009).

Editorial Board - Journal of Clinical Microbiology (2009-2014).

Editorial Board - Diagnostic Microbiology and Infectious Disease (1989-2016)

Section Editor, Manual of Clinical Microbiology, Sixth Edit, 1995, American Society for Microbiology, Washington, D.C.

Invited Reviewer for:

Clinical Infectious Disease

Clinical Microbiology Reviews

European Journal of Clinical Microbiology and Infectious Diseases

Emerging Infectious Diseases

American Public Health Association Press

**Board Certification:**

Diplomate of the American Board of Medical Microbiology (ABMM) in Public Health and Medical Microbiology. (July 1981-present; certificate #694).

**Medical License:** Not Applicable

**Service:**

**Local/State:**

Member, Arizona Infectious Diseases Society, Phoenix, AZ (1996-present).

Member, Arizona Society of Pathologists, Phoenix AZ (1998-2013).

Subcommittee on Antimicrobial Stewardship, Arizona State Department of Health Services. (2010-present).

Advisory Committee on Hospital-Acquired Infections, Arizona State Department of Health Services. (2010-present).

Lecturer, University of Arizona College of Medicine, Phoenix AZ (2009-2011)

Advisory Committee on Use of Antibiotics and Resistance Issues in the Community. Arizona State Dept. of Health Services (1998-2004).

Advisory Committee on Bioterrorism. Arizona State Dept. of Health Services, 2000-2004.

Advisory Committee on Emerging Microbial Resistance in the Community. State of Arizona Department of Health Services (1998).

Advisory Committee - Resistant Bacteria Working Group. Arizona Department of Health Services. 1996.

Arizona Tuberculosis Advisory Committee. Arizona Department of Health Services. 1987-1997.

**National/International:**

Member, Diagnostic Committee, Infectious Diseases Society of America (2017-2019).

Member, Diagnostic Policy Task Force, Infectious Diseases Society of America (2014-2016).

Member, Expert Panel for CDC Grant #OE13-1304-Improving the Impact of Laboratory Guidelines: A New Paradigm of Metrics (2013-. Five year \$100,000/year grant (2013-2018) from CDC to the American Society for Microbiology, Washington DC.

Member, Laboratory Medicine Best Practices Expert Panel on Blood Stream Infections (invited member by Centers for Disease Control, Center for Medicare and Medicaid Services, Food and Drug Administration and the American Society for Microbiology), (2011-2019).

Consultant, Microbiology Devices Panel, Medical Advisory Committee and General Hospital and Personal Use Devices Panel, Food and Drug Administration, Dept. of Health and Human Services (2012-present).

Invited Member: Judging Panel for the American Academy of Microbiology; The Intel International Science Fair for High Schools Students; Phoenix, AZ. May 15<sup>th</sup>, 2013.

Member, American Society for Microbiology, Washington DC. 1975-present).

Member, Infectious Diseases Society of America, Chicago (1978-present)

Member, International Immunocompromised Host Society, Chicago (1994-2008).

Member, European Society for Clinical Microbiology and Infectious Diseases, Basel, Switzerland (2015-present).

Member, Medical Mycological Society of the Americas, (2006-present). Western Regional Representative to the Board in 2008-2010, 2017-2019.

Subcommittee on Standard Procedures in Mycology. Clinical and Laboratory Standards Institute, Philadelphia, PA (2010-2012).

Subcommittee on Limited Resource Laboratories, Clinical and Laboratory Standards Institute Philadelphia, PA (2004-2008).

Committee on Professional and Laboratory Affairs. American Society for Microbiology / American Board of Medical Microbiology, Washington, D.C. (1997-2009).

Committee on Laboratory Practices. American Society for Microbiology / American Board of Medical Microbiology (ABMM), Washington, D.C. (1997-2003).

Nominating Committee for Division Chair, ASM, Washington D.C. (1997)

ABMM/ABMLI Liaison to Advisory Group to International Standards Organization. National Committee for Clinical Laboratory Standards, Wayne, PA (1997-2000).

**Other Committees:**

ABMM/ABMLI Professional Recognition Award Nominations Committee, American Board of Microbiology, Washington D.C. (2011-2013).

American Board of Medical Microbiology:

- Chairman Executive Committee (2000-2003)
- Vice Chairman Executive Committee (1997-2000)
- Member Executive Committee (1991-1996)
- Member of Award Selection Committee (1991-1996).

Banner Health System Committees and Consensus groups

- Samaritan Systems Medical Management Team (multidisciplinary, multi-hospital) (1998-2001)
- Banner Health Population Management Teams (System): a) Pneumonia working group; b) Antimicrobial Stewardship (2006-2011).
- Infectious Diseases Clinical Consensus Group (Banner Health System) (2012-present)
- Peri-Op Clinical Consensus Group (Banner Health System) (2013-present)

Banner- University Medical Center Phoenix Committees:

- Infection Control/Prevention Committee (1978-present)
- Antimicrobial Subcommittee (Chair; 1995-2014).
- Pharmacy and Therapeutics Committee (1984-present).
- Continuing Education Committee (1994-1996).
- Pediatric Committee (1996-2002).
- Orthopedic Surgical QA and Standardization Work Group (2010-2011)

Other Hospital Committees:

Banner Desert Medical Center

Infection Prevention Committee (1998-)

Pharmacy and Therapeutics Committee (1998-)

Banner Thunderbird Medical Center

Infection Prevention Committee (1998-)

Banner Estrella Medical Center

Infection Prevention Committee (2007-)

Banner Baywood Medical Center

Infection Prevention Committee (2008-)

Banner Boswell Medical Center  
Infection Prevention Committee (2008-)  
Banner Del Webb Medical Center  
Infection Prevention Committee (2010-)  
Banner Gateway Medical Center  
Infection Prevention Committee (2009-)  
Phoenix Children's Hospital  
Ancillary Support Utilization Committee (1996-1997)  
Infection Control Committee (1996-1997)

### **Publications/Creative Activity (RF: Refereed; PR: Peer Reviewed)**

1. **Saubolle, MA.** \*Antimicrobial Susceptibility of Yeasts. Chapter 11 in the The Antimicrobial Susceptibility Test: Principles and Practices. Barry, A.L. (author), Lea and Febiger, Philadelphia, PA. 1976. (Textbook)
2. Hoeplich, PD, **Saubolle, MA** and Hustin, AC. \*Susceptibility Testing of Fungi. In The Clinical Laboratory as an Aid in Chemotherapy of Infectious Disease, Bondi, A., Bartola, J.T. and Prier, J.E. (eds), University Park Press, Baltimore, MD, 1977. (Textbook)
3. **Saubolle, MA.** *In vitro* Susceptibility Testing of Medically Important Yeasts. Check Sample Series, Advanced Microbiology Section, No. AMB 23, Commission on Continuing Education, American Society of Clinical Pathologists, Chicago, Illinois, 1978. (PR)
4. **Saubolle, MA** and Hoeplich, PD. Disc, Agar-Diffusion Susceptibility Testing of Yeasts. Antimicrob. Ag. Chemother., 14:517-530, 1978.(RF)
5. **Saubolle, MA.** Editorial-Should Fungal Susceptibility Tests be Standardized. Clinical Microbiology Newsletter 2(18):3-4, 1980.(PR)
6. **Saubolle, MA.** Clinical Significance and Laboratory Identification of Yeasts. Lab Med., 15:98-103, 1984.(PR)
7. **Saubolle, MA:** Chromogenic Limulus amebocyte lysate assay as an aid in the diagnosis of meningitis. In: Bacterial Endotoxins: Structure, Biomedical Significance, and Detection with the Limulus Amebocyte Lysate Test. @ 1985 by Alan R. Liss, Inc. New York. (RF – Scholarly Work)
8. National Committee for Clinical Laboratory Standards. Antifungal susceptibility testing; Committee Report. NCCLS publication M20-CR. Villanova, PA: NCCLS; 1985. (RF)
9. Forseth, J, Rohwedder, JJ, Levine, BE and **Saubolle, MA.** Experience with needle biopsy for coccidioidal lung nodules. Arch. Intern. Med. 146:319-320, 1986. (RF)

10. Doern, GV, **Saubolle, MA** and Sewell, DL. Screening for bacteriuria with the LN Strip test. *Diagn. Microbiol. Infect. Dis.* 4:35-358, 1986. (RF)
11. Adam, RD, Paquin, ML, Petersen, EA, **Saubolle, MA**, Rinaldi, MG, Corcoran, JG, and Sobonya, RE. Phaeohyphomycosis caused by the fungal genera *Bipolaris* and *Exserohilum*: A report of nine cases and review of the literature. *Medicine.* 65:230-217, 1986. (RF)
12. **Saubolle, MA**. Editorial: Are assays for serum levels of antifungal agents routinely needed? *Clinical Microbiol Newsletter*, 9:113,1987. (PR)
13. Doern, GV and **Saubolle, MA**: Antimicrobial resistance patterns of *Haemophilus* in the U.S.A. In: *Proceedings of the International Symposium on the Pathogenicity of Haemophilus - Egham, England.* Royal Society of Medicine. @ Medi-Cine, England. 1987. (PR))
14. **Saubolle, MA**, and Jorgensen, JH: Limulus amebocyte lystate assay of CSF as a cost-effective screen for etiologic agents of meningitis. *Diagn Microbiol Infect Dis* 7:177-183, 1987. (RF)
15. **Saubolle, MA**: Leptospirosis. In: *Diagnostic Procedures for Bacterial Infections.* 7th Edition. Wentworth, BB (ed.) @ 1987 by American Public Health Association. Washington, D.C. (RF Textbook)
16. **Saubolle, MA**. The Limulus amebocyte lysate test as a laboratory aid in the diagnosis of infectious diseases. *Infectious Disease Newsletter.* 7:27-29, 1988. (PR)
17. **Saubolle, MA** and Doern, GV. Current Technology in the Automation of Antimicrobial Susceptibility Testing Systems. In: *Proceedings of the Fifth International Symposium on Rapid Methods and Automation in Microbiology and Immunology.* International Union of Microbiologic Societies. 1989. (RF)
18. **Saubolle, MA**. Nontuberculous mycobacteria as agents of human diseases in the United States. *Clin. Microbiol. Newsletter*, 11:113-117, 1989. (PR)
19. **Saubolle, MA**, Sewell, DA, Holland, MD, and Golper, TA. Comparison of two commercial broth-culture systems for microbial detection in dialysates of patients on continuous ambulatory peritoneal dialysis. *Diagn Microbiol Infect Dis*, 12:457-461, 1989. (RF)
20. **Saubolle, MA**. Serology of fungal infections. Contribution to chapter in *Laboratory Medicine: Test Selection and Interpretation*, Howanitz PJ and Howanitz JH (eds), Churchill Livingstone, Inc., New York, NY (1991). (PR Textbook)
21. **Saubolle, MA**. Microbiological analysis of specimens from the lower respiratory tract. Chapter in *Clinical Laboratory Medicine*, Tilton RC, Balows A, Hohnadel D, and Reiss R

- (eds), C.V. Mosby, St. Louis, MO (1992). (PR Textbook)
22. Naidu, LS, Bakerman, P, **Saubolle, M**, and Lewis, K. *Vibrio cholerae* non-01: meningitis in an infant. *Ped Infect Dis J*, 1993;12:879-880. (RF)
  23. **Saubolle, MA**. 1993. In vitro susceptibility testing of clinical isolates of *Nocardia*. *Clin Microbiol Newsletter*, 15:169-172. (PR)
  24. **Saubolle, MA**. Aerobic actinomycetes. Chapter in *Clinical Laboratory Medicine*, McClatchey KD (ed), Williams and Wilkins, Baltimore, MD (1994). (PR Textbook)
  25. Fuller, DD, Davis, TE, Kibsey, PC, Rosmus, L, Ayers, LW, Ott, M, **Saubolle, MA**, and Sewell, DL. 1994. Comparison of BACTEC Plus 26 and 27 Media with and without fastidious organism supplement with conventional methods for culture of sterile body fluids. *J Clin Microbiol*, 32:1488-1491. (RF)
  26. Biehle, JR, Cavalieri, SJ, **Saubolle, MA**, and LJ Getsinger. Comparative evaluation of the E test for susceptibility testing of *Nocardia* species. *Diagn Microbiol Infect Dis*, 1994; 19:101-110. (RF)
  27. **Saubolle, MA** and J. Sutton. 1994. Coccidioidomycosis: centennial year on the North American Continent. *Clin Microbiol Newsletter*, 16:137-144. (PR)
  28. Cernoch, PL, RK Enns, **MA Saubolle**, and RJ Wallace, Jr. 1994 Cumitech Weissfeld. American Society for Microbiology, Washington, D.C. (PR)
  29. Blue, SR, VR Singh, and **MA Saubolle**. *Bacillus licheniformis* bacteremia: five cases associated with indwelling central venous catheters. *Clin Infect Dis*, 1995; 20:629-633. (RF)
  30. Beaman, BL, **MA Saubolle**, and RJ Wallace. *Nocardia, Rhodococcus, Streptomyces, Oerskovia*, and other aerobic actinomycetes. Chapter in *Manual of Clinical Microbiology*, Sixth Edition, American Society for Microbiology, Washington, D. C. 1995. (RF)
  31. Lewis, K, **MA Saubolle**, FC Tenover, MF Rudinsky, SD Barbour, and JD Cherry. Whooping-cough caused by an erythromycin resistant *Bordetella pertussis*. *Pediatr Infect Dis J*. 1995;14:388-91. (RF)
  32. Biehle, JR, SJ Cavalieri, **MA Saubolle**, and LJ Getsinger. Evaluation of Etest for susceptibility testing of rapidly growing mycobacteria. *J Clin Microbiol*. 1995;33:1760-4. (RF)
  33. **Saubolle, MA**, and J Sutton. The dematiaceous fungal genus *Bipolaris* and its role in human disease. *Clin Microbiol Newsletter*, 1996;8:1-6. (PR)
  34. **Saubolle, MA**, TE Kiehn, MH White, MF Rudinsky, and D Armstrong. *Mycobacterium haemophilum*: its microbiology and expanding clinical and



- geographic spectra of disease in humans. Clin Microbiol Rev. 1996;9:435-447. (RF)
35. Peters, BR, **MA Saubolle**, and JM Costantino. Disseminated and Cerebral Infection due to *Nocardia farcinica*: diagnosis by blood culture and cure with antibiotics alone. Clin Infect Dis. 1996;23:1165-1167. (RF)
  36. Barnett, NDP, AM Kaplan, RJ Hopkin, **MA Saubolle**, and MF Rudinsky. Primary amoebic meningoencephalitis with *Naegleria fowleri*: clinical review. Pediatr Neurol. 1996;15:230-234. (RF)
  37. **Saubolle, MA**. Life cycle and epidemiology of *Coccidioides immitis*. In "Coccidioidomycosis", Proceedings of the 5th International Conference – Stanford University. Einstein, HE, and A Catanzaro (eds). National Foundation Infectious Disease, Bethesda MD, 1996. (PR)
  38. Wieden, MA and **MA Saubolle**. 1996. The histopathology of coccidioidomycosis. In "Coccidioidomycosis", Proceedings of the 5th International Conference – Stanford University. Einstein, HE, and A Catanzaro (eds). National Foundation for Infectious Disease, Bethesda MD. (PR)
  39. Cage, GD and **MA Saubolle**. Infrequently isolated and unusual mycobacterial species as agents of human disease. Rev Med Microbiol. 1997;8(3):125-137. (RF)
  40. Doern, GV, AB Brueggemann, R Perla, J Daly, D Halkias, RN Jones, and **MA Saubolle**. Multicenter laboratory evaluation of the bioMerieux Vitek antimicrobial susceptibility testing system with 11 antimicrobial agents versus members of the family *Enterobacteriaceae* and *Pseudomonas aeruginosa*. J Clin Microbiol, 1997;35:2115-2119. (RF)
  42. Burrell, SR, DJ Ostlie, **MA Saubolle**, M Dimler, and SD Barbour. *Apophysomyces elegans* infection associated with cactus spine injury in an immunocompetent pediatric patient. Pediatr Infect Dis J. 1998;17:663-664. (RF)
  43. **Saubolle, MA**. The clinical microbiology laboratory in the diagnosis and monitoring of opportunistic infections in HIV-infected persons. In, Proceedings of the 1998 Conference on the Laboratory Science of HIV, Atlanta, Georgia: Centers for Disease Control and Prevention, Health Care Financing Administration, National Institutes of Health. 1999. (PR)
  44. **Saubolle, MA**. Mycology and the clinical microbiology laboratory in the diagnosis of respiratory mycoses. In, Fungal Diseases of the Lung, 3<sup>rd</sup> edition; Sarosi G, Davies SF (eds); Lippincott Williams and Wilkins, Phil. 2000. (PR)
  45. **Saubolle MA**. Fungal pneumonias. Seminars in Respiratory Infections: Laboratory Diagnosis of Respiratory Infections (Sarosi GA, Carroll KC [eds]),

2000;15(2):162-177. (PR)

46. **Saubolle MA**, and McKellar P. Laboratory diagnosis of community-acquired lower respiratory tract infection. *Infectious Disease Clinics of North America*. 2001;15:1025-1045. (RF)
47. **Saubolle, MA**. Aerobic actinomycetes, In, *Clinical Laboratory Medicine*, 2<sup>nd</sup> edition, McClatchey KD (ed), Lippincott, Williams & Wilkins, Philadelphia. 2002. (PR Textbook)
48. Bartkus JM, Juni BA, Ehresman K, **Saubolle M**, et al. Identification of a mutation associated with erythromycin resistance in *Bordetella pertussis*: implications for surveillance of antimicrobial resistance. *J Clin Microbiol* 2003;41:1167-1172.(RF)
49. **Saubolle MA**, and Sussland D. Nocardiosis: Clinical and Laboratory Experience. *J Clin Microbiol* 2003;41:4497-4501. (RF)
50. Katsaras R, Khalsa A, Smith RA, and **Saubolle MA**. Principles of Preanalytical and Postanalytical Test Management. Chapter 24 in: *Clinical Laboratory Management*, Garcia L, Baselski VS, Burke MD, et. al. (eds), 2004, ASM Press, Washington DC. (PR Textbook)
51. Sharp SE, Robinson A, **Saubolle MA**, et. al. Lower respiratory tract infections. *Cumulative Techniques and Procedures in Clinical Microbiology*, 2004, ASM Press, Washington, D.C. (PR)
52. **Saubolle MA**. Antimicrobial Resistance: Current Status and Future Direction. *Am J Rhinol* 2006;20(6):667-71. (RF)
53. **Saubolle MA**, McKellar PP, Sussland D. Epidemiologic, clinical and diagnostic aspects of Coccidioidomycosis. *J Clin Microbiol* 2007;45:26-30. (RF)
54. **Saubolle MA**. Laboratory aspects in the diagnosis of Coccidioidomycosis. *Ann N Y Acad Sci* 2007;1111:301-314. (RF)
55. Richter SS, Howard WJ, Weinstein MP, Bruckner DA, Hindler JF, **Saubolle MA**, and Doern GV. Multicenter evaluation of the BD Phoenix Automated Microbiology System for Antimicrobial Susceptibility Testing of *Streptococcus* species. *J Clin Microbiol* 2007;45:2863-2871. (RF)
56. Gray GC, McCarthy T, Lebeck MG, Schnurr DP, Russell KL, Kajon AE, Landry ML, Leland DS, Storch GA, Ginocchio CC, Robinson CC, Demmler GJ, **Saubolle MA**, Kehl SC, Selvarangan R, Miller MB, Chappell JD, Zerr DM, Kiska DL, Halstead DC, Capuano AW, Setterquist SF, Chorazy ML, Dawson JD, Erdman DD. Genotype Prevalence and Risk Factors for Clinical Adenovirus Infections, United States 2004 to 2006. *Clin Infect Dis* 2007;45:1120-1131. (RF)

57. Mendes RE, Desphande LM, Castanheira M, DiPersio J, **Saubolle M**, and Jones RN. First report of *cfr*-mediated resistance to linezolid in human staphylococcal clinical isolates recovered in the United States. *Antimicrob Ag Chemother* 2008;52:2244-2246. (RF)
58. **Saubolle, Michael A.** Aerobic Actinomyces. Chapter 13 in *Diagnostic Microbiology of the Immunocompromised Host*. Hayden RD, Carroll KC, Tang YW, Wolk DM (eds), Copyright 2008 by ASM Press, Washington D.C. (PR Textbook)
59. Gaidici A, and **Saubolle MA**. Transmission of Coccidioidomycosis to a human via a cat-bite. *J. Clin Microbiol* 2009;47:505-506. (RF)
60. Kioski C, Montefour K, **Saubolle M**, et. al. Pseudo-outbreak of Legionnaires Disease among patients undergoing bronchoscopy- Arizona 2008. *MMWR* 2009;58:849-854. (RF)
61. Wolfsohn J, Sussland D, and **Saubolle MA**. Developments in the diagnosis and therapy of human nocardiosis. *Check Sample: Microbiology MB* 2009;09-6 (MB-363):73-85, American Society for Clinical Pathology. (PR)
62. McLaren AC, **Saubolle MA**, Yu E, Feltis JT. The microbiologic and histopathologic diagnosis of orthopaedic infections. pp73-83, in Cierney G, McLaren AC, Wongworawat (eds). *Orthopaedic Knowledge Update: Musculoskeletal Infection*, American Academy of Orthopaedic Surgeons, 2009, Rosemont, IL. (PR)
63. **Saubolle MA**. Pertussis (Whooping Cough). Chapter 60 in: *Antimicrobial drug resistance; vol 2: clinical and epidemiologic aspects*. Mayers DL(ed), 2009, Humana Press, New York. (PR Textbook)
64. Minani TJC, **Saubolle MA**, Yu E, and Sussland D. *Mycobacterium haemophilum* as a novel etiology of cervical lymphadenitis in an otherwise healthy adult patient. *J Clin Microbiol* 2010;48:2636-2639. (RF)
65. Diekema DJ and **Saubolle MA**. Clinical microbiology and infection prevention. *J Clin Microbiol* 2011;49:S57-S60. (RF)
66. Brown-Elliott BA, Biehle J, Conville PS, Cohen S, **Saubolle M**, Sussland D, Wengenack, Kriel K, Bridge L, McNulty S, Vasireddy R, and Wallace, Jr. RJ. Sulfonamide resistance in isolates of *Nocardia* spp. from U.S. multicenter survey. *J Clin Microbiol* 2012;50:670-672. (RF)
67. Bowers JR, Driebe EM, Nibecker JL, Wojack BR, Sarovich DS, Wong AH, Broszka PM, Hubert N, Knadler A, Watson LM, Wagner DM, Furtado MR, **Saubolle M**, Engelthaler DM, and Keim PS. Dominance of multidrug resistant CC271 clones in macrolide-resistant *Streptococcus pneumoniae* in Arizona. *BMC Microbiology* 2012;12:12. (<http://www.biomedcentral.com/1471-2180/12/12>) (RF)

68. Khalsa AK, Santa Cruz M, **Saubolle MA**. Preanalytic and Postanalytic Test management. Chapter 26 in *Clinical Laboratory Management*. Lynne Garcia (Editor in Chief), American Society for Microbiology Press, Washington D.C. 2013 (PR Textbook)
69. Buehler SS, Madison B, Snyder SR, Derzon JH, Cornish NE, **Saubolle MA**, Weissfeld AS, Weinstein MP, Liebow EB, Wolk DM. 2016. Effectiveness of practices to increase timeliness of providing targeted therapy for inpatients with bloodstream infections: a laboratory medicine best practices systematic review and meta-analysis. *Clin Microbiol Rev* 29:59-103. doi:10.1128/CMR.00053-14. (PR)
70. **Saubolle MA (Section Editor)**, Sussland D, Mochon B. Aerobic Actinomycetes. Section 6 in: *Clinical Microbiology Procedure Handbook*. Leber A (Editor in Chief), American Society for Microbiology Press, Washington D.C. 2016 (PR Textbook).
71. Mochon B, Sussland D, **Saubolle MA**. Aerobic Actinomycetes of Clinical Significance. Chapter in: *Diagnostic Microbiology of the Immunocompromised Host*. Edited by Randall T. Hayden, Karen C. Carroll, Yi-Wei Tang, and Donna M. Wolk. ASM Press, Washington, D.C. 2016 (PR Textbook).
72. Girard V, Mailler S, Welker M, Arzac M, Celliere B, Cotte-Pattat P-J, Chatellier S, Durand G, Beni A-M, Schrenzel J, Miller E, Dussoulier R, Dunne WM Jr, Butler-Wu S, **Saubolle MA**, Sussland D, Bell, van Belkum A, Deol P. Identification of *mycobacterium* spp. and *nocardia* spp. from solid and liquid cultures by matrix-assisted laser desorption ionization-time of flight mass spectrometry (MALDI-TOF MS). *Diagn Microbiol Infect Dis*, 2016.
73. Khan S, **Saubolle MA**, Oubsuntia T, Heidari A, Barbian K, Goodin K, Eguchi M, McCotter OZ, Komatsu K, Park BJ, Geiger MC, Mohamed A, Chiller T, Sunenshine RH. 2018. Interlaboratory agreement of coccidioidomycosis enzyme immunoassay from two different manufacturers. *Medical Mycology*, 2018, 0, 1–6 (doi: 10.1093/mmy/myy059 Advance Access Publication Date: 02018).
74. **Saubolle MA**, Weissfeld AS, Kraft CS. Title: Designing studies acceptable for abstraction and inclusion in evidence-based laboratory practice guidelines. *J. Clin. Microbiol.* Posted online October 2018. Doi:10.1128/JCM.00842-18.

#### **POSTER ABSTRACTS (since 1999 only):**

Jestila CM, Gershman N, and **Saubolle MA**. Comparison of enzyme linked virus inducible system “ELVIS” (Hybrid Diagnostics) and the Premier enzyme immunoassay (Meridian Diagnostics) for detection of Herpes simplex virus. Poster at Annual Meeting of the Pan American Society for Clinical Virology. Clearwater Beach, FLA. May, 1999 (PR)

Jestila CM, Gershman N, and **Saubolle MA**. Wampole toxin A and B enzyme immunoassay versus Bartels Prima enzyme immunoassay for the detection of *C. difficile* toxin. Poster at Annual Meeting of the Pan American Society for Clinical Virology. Clearwater Beach, FLA. May, 1999 (PR)

**Saubolle MA**, Mayfield DC, Heller B, et. al. Comparison of antimicrobial susceptibility profiles among three community hospitals using an electronic surveillance system, 1995-1998. Poster C285. Annual Meeting of the American Society for Microbiology, Chicago, IL, May, 1999. (PR)

Bartkus JM, Juni BA, Ehresman K, **Saubolle M**. et. al. Proposed mechanism of erythromycin resistance in *Bordetella pertussis*. Abstract at 41<sup>st</sup> ICAAC, Chicago, IL. Dec, 2001 (PR)

Spratling L, Sweeny A, Bandell A, Stander P, **Saubolle M**, Schreiber L, Palmer D. 2003. Partnering with your Providers: Implementation of an Inpatient Community-Acquired Pneumonia Guideline. 2003 NAIP Meeting, San Diego, CA. (PR)

Jestila CM, Richardson P, and **Saubolle MA**. Serologic diagnosis of coccidioidomycosis using commercially prepared reagents: discrepancies between EIA screening and immunodiffusion confirmatory studies. Annual Meeting of the Coccidioidomycosis Working Group, Scottsdale, AZ, 2003. (PR)

Johnson J, Murray P, Denys GA, Hazen KC, and **Saubolle MA**. Multicenter evaluation of the BD Phoenix System for detection of oxacillin resistant *Staphylococcus aureus*. Abstract at 2003 Annual Meeting of the American Society for Microbiology, Washington DC, May 2003. (PR)

Richter SS, Howard W, Weinstein MP, Bruckner D, Hindler J, **Saubolle M**, Doern GV. Multisite evaluation of BD Phoenix<sup>TM</sup> automated microbiology system for antimicrobial susceptibility testing (AST) of *Streptococcus* spp. Abstract D215 at 43<sup>d</sup> ICAAC, Chicago, IL. Sept, 2003. (PR)

Driebe E, Bowers J, Nibecker J, Cope E, Lester R, Furtado M, Brzoska P, Petrauskene O, Wong A, Wojack B, **Saubolle M**, Leid J, Engelthaler D, and Keim P. Tracking the Potential Genetic Basis for Macrolide Resistance in *Streptococcus pneumoniae* in Arizona Isolates Using Real-Time PCR. Paper #C-276, Annual Meeting of the American Society for Microbiology, Philadelphia, PA. May, 2009. (PR)

Wojack B, **Saubolle M**, Keim P, Engelthaler D. Evaluation of Cell Lysis and DNA Extraction Methods for Real-time PCR Detection of *Coccidioides* in Clinical Specimens. Abstract at Annual Meeting of the Coccidioidomycosis Study Group, Surprise, AZ, March 2010. (PR)

Kweon C, McLaren A, Vernon TJ, Bingham J, Koeneman B, **Saubolle M**, McLemore R.; Xylitol has no Antimicrobial Activity Against Commonly Encountered Orthopaedic Bacteria. University of Arizona Academic Excellence Day. Phoenix AZ. May 2010.

Koeneman BA, Silverberg JM, Khalsa A, Fisher H, McCabe K, **Saubolle MA**, Mochon AB. Rapid identification of methicillin-sensitive *Staphylococcus aureus* from positive blood cultures using the Verigene System: a system-wide impact on patient treatment and physician compliance. Poster #146 presented at Annual meeting of the American Society for Microbiology, Denver CO. May 2013. (PR)

Sunenshine R, Khan S, **Saubolle M**, Barbian K; Eguchi M, McCotter O, Komatsu K, Park BJ,

Mohamed A, Lancaster MV. Reproducibility of Coccidioidomycosis EIA in A Multicenter Investigation Using Confirmed Cases and Controls. Reproducibility of Coccidioidomycosis EIA in A Multicenter Investigation Using Confirmed Cases and Controls. Poster 1458 presented at Annual Meeting of the Infectious Diseases Society of America, San Diego CA. October 2014. (PR)

Stohs E, **Saubolle MA**, O'Malley C. Improved clinical outcomes after implementation of molecular detection of blood culture contaminants. Poster #148 presented at Annual Meeting of the Infectious Diseases Society of America, San Diego CA. October 2015. (PR)

Koster SI, Mochon AB, **Saubolle MA**, Koeneman BA. Evaluation of female urine and swabs/urine from pregnant women for detection of *Chlamydia trachomatis* and *Neisseria gonorrhoeae* using Aptima collection devices- comparison between two laboratories. Poster #ID70 presented at the Annual Meeting of the Association of Molecular Pathology, San Antonio TX. November 2015. (PR)

**Saubolle MA**, Wojack BR, Wertheimer A, Fuayagem AZ, Young S, Koeneman BA. Multicenter clinical validation of a cartridge-based real-time PCR system for detection of *Coccidioides* spp in lower respiratory specimens. Poster #58 presented at the International Symposium on Coccidioidomycosis, Stanford University, Palo Alto, CA. August 2017. (PR)

Gaidici A, **Saubolle MA**, Dodge A. Coccidioidomycosis presenting as temporomandibular joint septic arthritis. Poster #8 presented at the International Symposium on Coccidioidomycosis, Stanford University, Palo Alto, CA. August 2017. (PR)

Wheat LJ, Albers A, Durkin MA, Holbrook E, Dermeyer L, **Saubolle M**. A split specimen study evaluating the MVista anti-Coccidioides antibody enzyme immunoassay (EIA) for detection of antibodies in cerebrospinal fluid (CSF). Poster # 36 presented at the International Symposium on Coccidioidomycosis, Stanford University, Palo Alto, CA. August 2017. (PR)

Ravikumar R, **Saubolle M**, Sussland D, Gerkin R, Kang P. Rapid PCR TB testing results in 66% reduction in total isolation days in smear positive patients. Poster presented at 15<sup>th</sup> Annual American Medical Association Research Symposium, Honolulu, HI. November 2017.

Ravikumar R, **Saubolle M**, Sussland D, Gerkin R, Kang P. Rapid PCR TB testing results in 66% reduction in total isolation days in smear positive patients. Poster presented at 15<sup>th</sup> Annual American Medical Association Research Symposium, Honolulu, HI. November 2017.

Ravikumar R, **Saubolle M**, Sussland D, Gerkin R, Kang P. Rapid PCR TB testing results in 66% reduction in total isolation days in smear positive patients. Poster and oral presentation at University of Arizona College of Medicine, Scholarly Project Student Research Symposium, Phoenix AZ. March 7<sup>th</sup>, 2018.

**MEDIA**

**SCHOLARLY PRESENTATIONS:**

Invited Lecturer: Workshop: Understanding the Diagnostics of Coccidioidomycosis. 7<sup>th</sup> International Coccidioidomycosis Symposium, Stanford/Palo Alto, CA. August 10<sup>th</sup>-13<sup>th</sup>, 2017.

Invited Lecturer: Intravenous Access Ports and their Associated Microbial Infections. Infusion Nurse Society. Annual Meeting, Ft Lauderdale, FL. May 17<sup>th</sup>, 2016.

Co-convenor and invited lecturer, “Symposium on Evolution of Clinical Microbiology from Bench-Top to Role in Continuum of Patient Care”, American Society for Microbiology, 115<sup>th</sup> General Meeting, New Orleans LA, June 2<sup>nd</sup> 2015.

Saubolle M Lecture: Continuum of patient care using multidisciplinary consensus approach.

Invited Lecturer: Instructive Infectious Diseases Cases. New York City Branch of the American Society for Microbiology. Annual Spring Meeting, New York, NY. April 5<sup>th</sup>, 2013.

Invited Lecturer: Instructive Infectious Diseases Cases. Northern California Branch of the American Society for Microbiology. San Francisco, CA. March 8<sup>th</sup>, 2013.

Invited lecturer: Instructive Clinical Cases in Infectious Diseases. The Illinois Society for Microbiology. Chicago, Ill, Nov 14<sup>th</sup>, 2012.

Invited Lecturer: Design of Quality Studies for Identifying Laboratory Medicine Practices Associated with Improved Healthcare Outcomes. Special Interest Session Symposium, Annual Meeting of the American Society for Microbiology, San Francisco, CA. June 19, 2012

Invited lecturer: Clinical Cases and Issues from the SW Deserts. Southern California Branch of the American Society for Microbiology. San Diego, CA, March 31<sup>st</sup>, 2012.

Invited Lecturer: Mycologic Cases. Carlyn Halde Foundation Lecture, Northern California Branch of the American Society for Microbiology. March 12<sup>th</sup>, 2010

Invited lecturer: Clinical Cases from the Southwest Deserts. Southern California Branch of the American Society for Microbiology. San Diego, CA. April 4<sup>th</sup>, 2009.

Invited lecturer: Antimicrobial Resistance Issues in the Gram-negative Rods. Annual Meeting of the Arizona Infectious Diseases Society. Sedona, AZ. March 7-8<sup>th</sup>, 2009.

Invited lecturer: Coccidioidomycosis: Laboratory Diagnosis. Arizona Department of Health Services, Phoenix, AZ, and University of Arizona College of Medicine, Tucson, AZ. Phoenix, 15<sup>th</sup> 2008.

Invited lecturer: Coccidioidomycosis and other clinical cases from the Southwest deserts. Oregon Society for Microbiologists. Portland, OR. June 14<sup>th</sup>, 2007.

Invited lecturer: Wound infections. Annual Meeting of the Infusion Nurses Society, Orlando, Florida. June 2<sup>nd</sup>, 2007 (missed due to health issue).

Lecturer: Gram negative resistance issues. Annual Meeting of the AZ Infection Control Practitioners. Phoenix, Feb 15<sup>th</sup>, 2007.

Invited participant: A lecture and a workshop on “Laboratory Diagnosis of Coccidioidomycosis”. International Conference on Coccidioidomycosis held at Stanford University, Stanford. August 24-26<sup>th</sup>, 2006.

Lecturer: Update on the Clinical Laboratory Standards Institute’s Standards for Susceptibility Testing of Bacteria. Three locations in AZ: Phoenix, Flagstaff and Tucson. National Laboratory Training Network, 2005 and 2006.

Lecturer: Clostridium difficile; epidemiology and diagnosis. Annual Meeting of the AZ Infection Control Practitioners. Phoenix, Feb 8<sup>th</sup>, 2006.

Invited lecturer: Antimicrobial resistance: present status and future impact. Annual Meeting of the National Society of Rhinology. San Diego, CA. 2005

Invited annual participant: Clinical Case Presentations. At, Annual Meeting of the American Society for Microbiology. May, 2000 (Chicago), 2001 (San Diego), 2002 (Salt Lake City), 2003 (Washington, DC), 2004 (New Orleans), 2005 (Atlanta).

Invited Lecturer: Laboratory experience with human nocardiosis in Arizona, USA. At 3<sup>rd</sup> International Conference on the Biology of the Nocardiae. Lyon, France, 2005.

Invited lecturer: Emerging infections, and Infections endemic to the southwest deserts. At 2004 Spring Conference of the Arizona Society of Pathologists. Tucson, AZ, 2004.

Invited lecturer: Rapid Diagnostic Lab Tests- Implications for Infection Control. APIC 2004; 31<sup>st</sup> Annual Conference and International Meeting. Phoenix, AZ.

Invited Lecturer: Mycology workshop. Annual Meeting of the American Society for Microbiology. May, 2004 (New Orleans).

Invited Participant: Mycology workshop. US-Romanian Alliance for Medical Education. October, 2003. Medical Centers in Bucharest, Sibiu, and Iasi, Romania.

Invited Speaker: Antimicrobial Resistance Update: the Good, the Bad, and the Ugly. At, Symposium on Antimicrobial Resistance. AZ State Dept. of Health Services. October, 2003, Scottsdale, AZ.

Invited speaker: Antimicrobial Resistance Issues- the Good, the Bad, and the Ugly. At, Pediatric Grand Rounds, Phoenix Children’s Hospital. July, 2003, Phoenix, AZ.

Invited Speaker: Antimicrobial Resistance Update: at, Annual Symposium on Critical Issues in Medicine. Banner Health System. May, 2003, Phoenix, AZ.

Invited Speaker: Clinical Cases from the SW Deserts. At, Spring Symposium of the Southern California ASM. April 2003, San Diego, CA.



Invited Participant: Workshop on the Use of Diagnostics and Antimicrobial Susceptibility Data in the Therapy of Infectious Diseases. Smolensk National Institute on Antimicrobial Chemotherapy. October, 2002. Omsk, Tomsk, and Novo-Sibirsk, Russia.

Invited Speaker: Potential for a Bioterrorism Event in the Southwest Deserts. At, The Interscience Conference on Antimicrobial Agents and Chemotherapy. Oct, 2002, San Diego, CA.

Invited Speaker: Clinical Microbiology and Diagnosis of Infectious Diseases; at, Seminar on Maximizing the Probability of Positive Patient Outcomes. International Center for Postgraduate Medical Education. April, 2002, Scottsdale, AZ.

Invited Speaker: Basidiobolomycosis. At, Focus on Fungal Infections 12. March, 2002, Scottsdale, AZ.

Invited Speaker: Clinical Cases from the Southwest Deserts; at the 11<sup>th</sup> Annual Southern California Chapter of American Society for Microbiology. March, 2002, Los Angeles, CA.

Invited Speaker: Antimicrobial Resistance: Truth and Consequences; at, 35<sup>th</sup> Annual SW Clinical Pharmacy Seminar, Feb, 2002, Tucson, AZ.

Invited Speaker: Update in Antimicrobial Resistance – Clinical and Laboratory Implications; at Symposium on Major Issues in Primary Care. University of New Mexico School of Medicine, August, 2001, Albuquerque, NM.

Invited workshop participant: Laboratory Detection of Antimicrobial Resistance. National Laboratory Training Network and AZ Dept of Health Services. Phoenix, AZ: 2000; Tucson, AZ: 2001; Flagstaff, AZ: 2001.

Antimicrobial Resistance Issues: Clinical and Laboratory Aspects. Invited Participant by the Bucharest University School of Medicine, July, 2000. Bucharest, Romania.

Aerobic Actinomycetes: Invited Participant at Symposium on Difficult to Identify Bacteria. Interscience Conference on Antimicrobial Agents and Chemotherapy, Sept, 1999. San Francisco.

Laboratory diagnosis of infections of the lower respiratory tract. Annual Meeting of the Montana Regional Osteopathic Society. June 12, 1999. Red Lodge, Montana.

Impact of microbiologic studies on diagnosis, therapy and outcomes in patient care: clinical efficacy and cost effectiveness. Invited workshop at the Annual Meeting of the American Society for Microbiology. May 29, 1999. Chicago, Illinois.

## **STUDENTS:**

Dr. Sky Blue (Resident-Banner Good Samaritan Medical Center): Nocardiosis: Five years of experience in a clinical setting- 2002.

Gary Cage (Master's Dissertation, Arizona State University, Tempe, AZ): High Pressure Liquid Chromatography (HPLC for identification of the non-tuberculous mycobacteria (NTM). 2001-2005.

Dr. Rebecca Stohs (Resident- banner Good Samaritan Medical Center): Outcomes studies: effect of rapid blood culture testing to increase antimicrobial compliance and decrease TAT as well as cost of stay. 2013-2015

Dr. Jennifer Hall (Pulmonary Fellow- Banner University Medical Center - Phoenix): Use of procalcitonin studies to effect earlier cessation of antimicrobial use and increase antimicrobial stewardship.  
2015 – 2017.

Ravi Patel (Medical Student-Scholarly Project; University of Arizona College of Medicine, Phoenix): Economic modeling of rapid detection of TB by PCR directly in sputums and its effect on Infection Prevention practices and days in isolation. 2014-2017.

Jolene Bowers (PhD Dissertation Candidate, Northern Arizona University): Second generation gene sequencing for the study of the epidemiology of carbapenemase producing *Klebsiella pneumoniae* and other Gram-negative rods in the AZ/USA. 2011- 2016.

Wesley Robertson (medical student). Validation/verification of new Coccidioidomycosis serological screening test for Valley Fever. 2018.

Daniel Hannon (3<sup>rd</sup> year Resident). Quality Improvement Project. Improved algorithm for *Clostridium difficile* diagnosis. 2018-2019.

Nicole Alissa Peters (Medical Student-Scholarly Project; University of Arizona College of Medicine, Phoenix). Nocardiosis: review of changes in epidemiology, susceptibility and patient demographics over a 13 year period.