

## **David R. Andes, M.D.**

### **Education**

1984-88 Undergraduate: St. Louis University, BA Biology  
1988-92 Medical School: University of Missouri, Columbia  
1992-95 Residency Training: University of Wisconsin, Madison, Internal Medicine  
1995-96 Chief Resident: University of Wisconsin, Madison, Internal Medicine  
1996-99 Clinical Fellowship: University of Wisconsin, Madison, Infectious Disease  
1999-2001 Postdoctoral Research Training: Antimicrobial Pharmacodynamics – Mentor:  
William Craig  
1999-2001 Postdoctoral Research Training: Molecular Biology/Mycology – Mentors:  
Bernard Weisblum/Bruce Klein  
2002 Marine Biological Laboratory, Wood's Hole – Molecular Mycology

### **Board Certification:**

Internal Medicine, 1995  
Infectious Diseases, 1999, 2008

### **Positions and Appointments**

2002-2007 University of Wisconsin, Madison, Assistant Professor,  
Department of Medicine, Section of Infectious Diseases  
2003-2007 University of Wisconsin, Madison, Assistant Professor  
Department of Medical Microbiology and Immunology  
2006-2014 Infectious Diseases Fellowship Director  
2007-2013 Associate Professor with Tenure, University of Wisconsin,  
Department of Medicine and Medical Microbiology and Immunology  
2009-present Division Head – Infectious Diseases, University of Wisconsin  
2013-present Professor with Tenure, University of Wisconsin,  
Department of Medicine and Medical Microbiology and Immunology

### **Current Appointment**

Professor  
Departments of Medicine, Division Infectious Diseases and  
Medical Microbiology and Immunology  
Head Division of Infectious Diseases  
University of Wisconsin and William S Middleton VA Hospital

### **Professional Societies**

1. Mycosis Study Group - Chair education committee and member steering committee
2. Infectious Diseases Society of America, Fellow 2014, Vice-Chair program committee
3. American Society for Microbiology
4. International Society of Antimicrobial Pharmacology – Treasurer 2002-2006, President 2008-10
5. American College of Physicians
6. European Society of Clinical Microbiology and Infectious Diseases, Abstract Review Committee 2014
7. Central Society for Clinical Research
8. Faculty of 1000 – Mycology Section
9. American Society for Clinical Investigation 2010
10. EORTC/MSG Working Group
11. American Board of Internal Medicine - Infectious Diseases 2013-present

## 12. USCAST National Antimicrobial Susceptibility Testing Executive Committee

### **Honors and Awards**

- 1994** - American College of Physicians Clinical Vignette Award
- 1995-96** - Chief Medicine Resident University of Wisconsin  
- Department of Medicine Teacher of the Year Award University of Wisconsin
- 1998** - ASM/ICAAC George McCracken Research Fellow Award
- 2001** - National Institutes of Health Mentored Clinical Scientist Development Award
- 2002** - Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC) – Young Investigator Award
- 2003** - International Society for Human and Animal Mycology – Poster Prize
- 2006** - Puestow Award – Young Investigator Basic Science Research, University of Wisconsin, Dept of Medicine  
- Invited Faculty – Molecular Mycology Course, Marine Biological Institute, Woods Hole, MA  
- Infectious Diseases Society of America – Candidiasis Treatment Guideline Committee
- 2007** - Clinical Laboratory Standards Institute – Antifungal Testing Committee  
- Co-Chair, Mycosis Study Group Education Committee
- 2008** - Top Ten Infectious Diseases Publication of the Year 48<sup>th</sup> ICAAC Association of Fluconazole Pharmacodynamics with Mortality in Candidemia. Antimicrob Agents Chemother.
- 2009** - 2009-2010 Best Doctors in America
- 2010** - American Society for Clinical Investigation  
- University of Missouri School of Medicine Alumni Award  
- Top Ten Most Influential Papers of the Year at Advances Against Aspergillosis 2010 Antifungal Therapeutic Drug Monitoring – Established and Emerging Indications. Antimicrob Agents Chemother. 2009;53:24-34.
- 2010-2016** - Infectious Diseases Society of America Annual Meeting Program Committee
- 2011** - 2011-2012 Best Doctors in America  
- Invited Faculty – Molecular Mycology Course, Marine Biological Institute, Woods Hole, MA  
- Nakano Citation from the CDC for publication: Invasive fungal infections among organ transplant recipients: results of the transplant associated infection surveillance network. Clin Infect Dis 2010;50:1101.
- 2012** - 2012-2013 Best Doctors in America  
- Clinical Infectious Diseases – Editor’s Choice: Impact of Treatment Strategy on Outcomes in Patients with Candidemia and Other Forms of Invasive Candidiasis: A Patient-Level Quantitative Review of Randomized Trials. Andes DR, et al. Clin Infect Dis. 2012 Apr;54:1110-1122.  
- Selected Editor - Antimicrobial Agents and Chemotherapy  
- Top Ten Publications of the Year 52<sup>nd</sup> ICAAC Impact of Treatment Strategy on Outcomes in Patients with Candidemia and Other Forms of Invasive Candidiasis: A Patient Level Analysis of Randomized Trials. Clin Infect Dis 2012  
- Annual Biomedical Research Conference for Minority Students - Best poster award. Student: Miguel Cuevas
- 2013** - American Board of Internal Medicine - Infectious Diseases  
- 2013-2014 Best Doctors in America  
- National Antimicrobial Susceptibility Testing Committee (US-CAST)  
- American College of Physicians Abstract Review Committee
- 2014** - Rankin Research Award - University of Wisconsin, Dept of Medicine

- Infectious Diseases Society of America – Candidiasis Treatment Guideline Committee
- Fellow - Infectious Diseases Society of America
- Editors Choice mBio, Zarnowski et al. MBio. 2014 Aug 5;5(4):e01333-14.
- Editors Choice Infection and Immunity, Nett et al. Infect Immun. 2014 Dec;82(12):4931-40
- Mycosis Study Group - Steering Committee
- 2015** - Top Ten Publication - International Society for Human and Animal Mycology - Impact of Treatment Strategy on Outcomes in Patients with Candidemia and Other Forms of Invasive Candidiasis: A Patient Level Analysis of Randomized Trials
- Selected NIH Antimicrobial Resistance Leadership Group
- Selected as Vice-Chair – Infectious Diseases Society of America – ID Week
- Top Reviewer Award, Journal of Antimicrobial Chemotherapy
- 2015-2016 Best Doctors in America

**Editor:** Antimicrobial Agents and Chemotherapy, Mayo Clinic Proceedings, PLoS One

**Editorial Boards:**

Journal of Infectious Diseases, Eukaryotic Cell 2013-present, Faculty of 1000, Infection and Immunity, Diagnostic Microbiology and Infectious Diseases, Virulence, Medical Mycology, Pharmaceutics, Frontiers in Mycology

**Publications**

1. Craig WA, **Andes D**. Oral versus parenteral antibiotic therapy. Med Clin of North Amer. 1995;79:479-509. PMID: 7752724. Policy exempt – Accepted for pub prior to 04/07/08.
2. Craig WA, Andes D. Pharmacokinetics and pharmacodynamics of antibiotics in otitis media. Pediatr Infect Dis J. 1996;115:255-259. PMID: 8852915. Policy exempt – Accepted for pub prior to 04/07/08.
3. Craig WA, **Andes D**. Aminoglycosides are useful for severe respiratory tract infections. Seminars in Resp Infect. 1997;12:271-277. PMID: 9436954. Policy exempt – Accepted for pub prior to 04/07/08. Review.
4. Andes D, Craig WA. Pharmacokinetics of fluoroquinolones in experimental endocarditis. Clin Infect Dis. 1998;27:47-50. PMID: 9675448. Policy exempt – Accepted for pub prior to 04/07/08. Review.
5. **Andes D.**, Craig W.A. Pharmacokinetics and pharmacodynamics of outpatient intravenous antimicrobial therapy. Infect Dis Clinics North Am 1998;12:849-859. PMID: 9888026. Policy exempt – Accepted for pub prior to 04/07/08. Review.
6. **Andes D**, Craig WA. In vivo activities of amoxicillin and amoxicillin-clavulanate against Streptococcus pneumoniae: application to breakpoint determinations. Antimicrob Agents Chemother. 1998;42:2375-2379. PMID: 9736566. PMCID: PMC105836
7. **Andes D**, Urban A, Acher CW, Maki DG. Septic thrombosis of the basilic, axillary, and subclavian veins caused by a peripherally inserted central venous catheter. Amer J Med. 1998;105:446-450. PMID: 9831430. Policy exempt – Accepted for pub prior to 04/07/08.

8. **Andes D**, van Ogtrop ML. Characterization and quantitation of the pharmacodynamics of fluconazole in a neutropenic murine model of disseminated candidiasis model. *Antimicrob Agents Chemother.* 1999;43:2116-2120. PMID: 10471550. PMCID: PMC89432
9. **Andes D**, Craig WA. Pharmacokinetics and pharmacodynamics of antibiotics in meningitis. *Infect Dis Clinics North Am* 1999;13:595-617. PMID: 10470557. Policy exempt – Accepted for pub prior to 04/07/08.
10. **Andes D**. Preclinical review of L-084, a new carbapenem. *Current Opinion in Anti-infective Investigational Drugs.* 1999;1:101-103. Policy exempt – Not resulting from NIH funding.
11. **Andes D**. Preclinical review of J-111225. *Current Opinion in Anti-infective investigational Drugs.* 1999;1:111-113. Policy exempt – Not resulting from NIH funding.
12. Mouton JW, van Ogtrop ML, **Andes D**, Craig WA. Use of pharmacodynamic indices to predict efficacy of combination therapy in vivo. *Antimicrob Agents Chemother.* 1999;43:2473-2478. PMID: 10508027. PMCID: PMC89503
13. **Andes D**, van Ogtrop ML. In-vivo characterization of the pharmacodynamics of flucytosine in a neutropenic murine candidiasis model. *Antimicrob Agents Chemother.* 2000;44:938-942. PMID: PMCID: PMC89795
14. van Ogtrop ML, **Andes D**, Stamstad TJ, Conklin B, Weiss WJ, Craig WA, Vesga O. In-vivo pharmacodynamic activity of two glycolcyclines (GAR-936 and WAY 152,288) against various gram-positive and gram-negative bacteria. *Antimicrob Agents Chemother.* 2000;44:943:949. PMID: 10722495. PMCID: PMC89796
15. **Andes D**, Bush R, Pasic T, Proctor R. Report of successful therapy with prolonged antifungal therapy of refractory allergic fungal sinusitis. *Clin Infect Dis.* 2000;31:202-4. PMID: 10913428. Policy exempt – Accepted for pub prior to 04/07/08.
16. **Andes D**, Stamstad T, Conklin R. In-vivo pharmacodynamics of amphotericin B against selected *Candida* species. *Antimicrob Agents Chemother* 2001;45:922-926. PMID: 11181381. PMCID: PMC90394
17. Drusano GL, Preston S, Hardalo C, Hare R, Banfield C, **Andes D**, Vesga O, Craig WA. Use of preclinical data for selection of a phase II-III dose for everninomycin and identification of a preclinical MIC breakpoint. *Antimicrob Agents Chemother* 2001;45:13-22. PMID: 11120938. PMCID: PMC90233
18. **Andes D**. Pharmacokinetic and pharmacodynamic properties of antimicrobials in the therapy of respiratory tract infections. *Curr Opin Infect Dis.* 2001;14:165-172. PMID: 11979128. Policy exempt – Accepted for pub prior to 04/07/08.
19. **Andes D**, Craig WA. Characterization of the Pharmacodynamics of the New Fluoroquinolone, Gatifloxacin, in Murine Thigh and Lung Infection Models. *Antimicrob Agents Chemother* 2002;46:1665-1670. PMID: 12019073. PMCID: PMC127205

20. **Andes D.**, Craig, W.A. A Critical Review of Animal Model Pharmacokinetics and pharmacodynamics. *International Journal of Antimicrobial Agents*. 2002;19:261-268. PMID: 11978497. Policy exempt – Review.
21. **Andes D**, Peng J, Craig WA. In-vivo characterization of the pharmacodynamics of a new oxazolidinone (linezolid). *Antimicrob Agents Chemother*. 2002;46:3484-3489. PMID: 12384354. PMCID: PMC128755
22. Jones R, **Andes D**, Mandell L, Gothelf S, Ehrhardt A, Nicholson S. Gatifloxacin used for therapy of outpatient community-acquired pneumonia caused by *Streptococcus pneumoniae*. *Diagn Microbiol Infect Dis*. 2002;44:93-100. PMID: 12376038. Policy exempt – Not resulting from NIH funding.
23. Crnich C, **Andes D**. Molecular characterization of community-acquired *Pseudomonas aeruginosa* pneumonia. *Clin Infect Dis*. 2003;36:55-7. PMID: 12539092. Policy exempt – Accepted for pub prior to 04/07/08.
24. **Andes, D**. Pharmacokinetics and pharmacodynamics in the development of antifungal compounds. *Current Opinion in Investigational Drugs* 2003;4:991-8. PMID: 14508883. Policy exempt – Accepted for pub prior to 04/07/08.
25. **Andes, D**. Clinical pharmacodynamics of antifungals. *Infect Dis Clin N Amer*. 2003;17:635-49. PMID: 14711081. Policy exempt – Accepted for pur prior to 04/07/08.
26. **Andes D**, Marchillo K, Lowther, J., Bryskier, A., Stamstad, T., Conklin, R. In vivo pharmacodynamics of HMR 3270, a glucan-synthase inhibitor, in a murine candidiasis model. *Antimicrob Agents Chemother*. 2003;47:1187-1192. PMID: 12654645. PMCID: PMC152480
27. **Andes D**, Marchillo, K., Stamstad, T., Conklin, R. In-vivo pharmacodynamics of a new triazole, ravuconazole, in a murine candidiasis model. *Antimicrob. Agents Chemother*. 2003;47:1193-1199. PMID: 12654646. PMCID: PMC152484
28. **Andes D**. In-vivo pharmacodynamics of antifungal drugs in treatment of candidiasis. *Antimicrob. Agents Chemother*. 2003;47:1179-1186. PMID: 12654644. PMCID: PMC152498
29. Christianson JC, **Andes D**. Primary cutaneous cryptococcosis: case report and review of the literature. *Medical Mycology*. 2003;41:177-188. PMID: 12964709. Policy exempt – Accepted for pub prior to 04/07/08.
30. Safdar N, Young, DK, **Andes D**. Autochthonous furuncular myiasis in the United States: case report and literature review. *Clin Infect Dis*. 2003;36:73-80. PMID: 12652404. Policy exempt – Accepted for pub prior to 04/07/08. Review.
31. Adams M., **Andes D.**, Kwon G. Amphotericin B encapsulated in micelles based on poly (ethylene oxide) – block – poly (L-amino acid) derivatives exerts reduced in vitro hemolysis but maintains potent in vivo antifungal activity. *Biomacromolecules*. 2003;4:750-757. PMID: 12741794. Policy exempt – Accepted for pub prior to 04/07/08.

32. **Andes D.**, Craig WA. Characterization of the pharmacodynamics of the new des-F(6) quinolone, garenoxacin (BMS 284756) in a murine thigh infection model. *Antimicrob Agents Chemother.* 2003;47:3935-394. PMID: 14638504. PMCID: PMC296207
33. **Andes D.**, Marchillo K, Conklin R. In vivo characterization of the pharmacodynamics of voriconazole in a murine model of disseminated candidiasis. *Antimicrob. Agents Chemother.* 2003;47:3165-9. PMID: 14506026. PMCID: PMC201151
34. Safdar N, **Andes D**, Craig WA. In-vivo pharmacodynamic activity of daptomycin. *Antimicrob Agents Chemother.* 2004;48:63-8. PMID: 14693519. PMCID: PMC310158
35. **Andes D.** Clinical Utility of Antifungal Pharmacokinetics and Pharmacodynamics. *Curr Opin Infect Dis* 2004;17:533-40. PMID: 15640707. Policy exempt – Accepted for pub prior to 04/07/08.
36. **Andes D.** Antifungal pharmacokinetics and pharmacodynamics: understanding the implications for antifungal drug resistance. *Drug Resistance Updates.* 2004;7:185-194. PMID: 15296860. Policy exempt – Accepted for pub prior to 04/07/08.
37. **Andes D.**, Marchillo K, Stamstad T., Conklin R. Pharmacodynamics of a new triazole, posaconazole, in a murine model of disseminated candidiasis. *Antimicrob Agents Chemother.* 2004;48:137-42. PMID: 14693531. PMCID: PMC310197
38. Agger W., **Andes D**, Burgess JW. Exophiala jeanselmei infection in a heart transplant recipient successfully treated with oral terbinafine. *Clin Infect Dis* 2004;38:e112-115. PMID: 15156466. Policy exempt - Accepted for pub prior to 04/07/08
39. **Andes D.**, Anon J, Jacobs MR, Craig WA. Application of pharmacokinetics and pharmacodynamics to antimicrobial therapy of respiratory tract infections. *Clin Lab Med* 2004;24:477-502. PMID: 15177850. Policy exempt – Accepted for pub prior to 04/07/08.
40. **Andes D**, J Nett, P. Oschel, R. Albrecht, K. Marchillo, A. Pitula. Development and characterization of an in vivo central venous catheter Candida albicans biofilm model. *Infect Immun.* 2004;72:6023-6031. PMID: 15385506. PMCID: PMC517581
41. Ulijasz AT, **D Andes**, JD Glasner, B Weisblum. Regulation of iron uptake and oxidative stress responses in Streptococcus pneumoniae by RitR, an orphan response regulator. *J Bacteriol.* 2004;186:8123-36. PMID: 15547286. PMCID: PMC529065
42. Safdar N, Slattery WR, V Knasinski, RE Gangnon, JD Pirsch, **D Andes**. Epidemiology, risk factors, and outcome of candiduria in renal transplant recipients: a nested case-control study. *Clin Infect Dis.* 2005;151413-21. PMID: 15844063. Policy exempt – Accepted for pub prior to 04/07/08.
43. **Andes D**, Woods JP, Mejicano G. Meeting Report: Fungal Pathogenesis: Bridging the Gap Between the Bedside and the Bench. *Mycopathologia* 2005;159:2-6. PMID: 15770460. Policy exempt – Accepted for pub prior to 04/07/08.
44. **Andes D.** Use of an animal model of disseminated candidiasis in the evaluation of antifungal therapy. *Methods Mol Med.* 2005;118:111-28. PMID: 15888938. Policy exempt – Accepted for pub prior to 04/07/08.

45. **Andes D**, Safdar N. Efficacy of Micafungin for the Treatment of Candidemia. *Eur J Clin Microbiol Infect Dis*. 2005;25::1-3 PMID: 16247615. Policy exempt – Accepted for pub prior to 04/07/08.
46. Bhavnani SM, **D Andes**. Gemifloxacin for the treatment of respiratory tract infections: in vitro susceptibility, pharmacokinetics-pharmacodynamics, clinical efficacy, and safety. *Pharmacotherapy*.2005;25:717-40. PMID: 15899734.
47. **Andes, D.**, Lepak, A., Pitula, A., Weisblum, B. A simple approach for estimating gene expression in *Candida albicans* directly from a systemic infection site. *J. Infect Dis* 2005;192:893-900. PMID: 16088840. Policy exempt – Accepted for pub prior to 04/07/08.
48. Bok JW, Balajee SA, Marr KA, **Andes D**, Nielsen FJ, Frisvad JC, Keller NP. *LaeA*, a regulator of morphogenetic fungal virulence factors. *Euk Cell*. 2005;4:1574-82. PMID: 16151250. PMCID: PMC1214197
49. Gauthier G, Nork TM, Prince R, **Andes D**. Subtherapeutic Ocular Penetration of Caspofungin and Associated Treatment Failure in *Candida albicans* Endophthalmitis. *Clin Infect Dis* 2005;41:27-8. PMID: 16007519. Policy exempt – Accepted for pub prior to 04/07/08.
50. Cirz RT, Chin JK, **Andes D**, Crecy-Lagard, Craig WA, Romesberg FE. Inhibition of mutation and combating the evolution of antibiotic resistance. *PLOS Biology*. 2005;3:176. PMID: 15869329. PMCID: PMC1088971
51. Tsitsigiannis DI, Bok JW, **Andes D**, Nielsen KF, Frisvad JC, Keller NP. *Aspergillus* cyclooxygenase-like enzymes are associated with prostaglandin production and virulence. *Infect Immun*. 2005;73:4548-59. PMID: 16040966. PMCID: PMC1201276
52. **Andes D.**, Craig WA. Treatment of ESBL Producing Organisms: Pharmacokinetic and Pharmacodynamic Considerations. *Clin Microbiol Infect* 2005;11:10-17. PMID: 16209701. Policy exempt – Accepted for pub prior to 04/07/08.
53. Nett J, **Andes D**. Imaging of the development and therapeutic response of an *in vivo* fungal catheter biofilm. *Microbiology Today* 2005;13.1-2. Policy exempt – Accepted for pub prior to 04/07/08.
54. **Andes D.**, Safdar N. Pharmacokinetic-Pharmacodynamic Comparison of Amphotericin B (AMB) and Two Lipid-Associated AMB Preparations, Liposomal AMB and AMB Lipid Complex, in Murine Candidiasis Models. *Antimicrob Agents Chemother* 2006; 50:674-84. PMID: 16436726. PMCID: PMC1366906
55. Smith J, **Andes D**. Tissue penetration of antifungal drugs: implications for drug selection: Methodology, Similarities, Differences, Relevance. *Infections in Medicine* 2006;28:328-33. Policy exempt – Accepted for pub prior to 04/07/08.
56. Smith J, Safdar N, Knasinski V, **Andes D**. Voriconazole therapeutic drug monitoring. *Antimicrob Agents Chemother* 2006;50:1570-2. PMID: 16569888. PMCID: PMC1426935

57. **Andes, D.**, Forrest A, Lepak, A., Nett, J., Smith, J., Marchillo, K., Pitula, A., Impact of Antimicrobial Dosing Regimen on Evolution of Drug Resistance In Vivo: Fluconazole and *Candida albicans*. *Antimicrob Agents Chemother.* 2006 ;50:2374-83. PMID: 16801415. PMCID: PMC1489796
58. **Andes D**, Craig WA. Characterization of the Pharmacodynamics of a New Streptogramin, XRP 2868, in the Murine Thigh and Lung Infection Models. *Antimicrob Agents Chemother* 2006;50:243-9. PMID: 16377693. PMC1346813.
59. Pappas PG, **Andes D**, Schuster M, Hadley S, Rabkin J, Merion RM, Kauffman CA, Huckbee C, Dismukes WE, Karchmer AW. Invasive fungal infections in low risk liver transplant recipients: a multicenter prospective observational study. *Amer J Transplant* 2006;6:386-91. PMID: 16426325. Policy exempt – Accepted for pub prior to 04/07/08.
60. Lepak A, L Lincoln, K. Marchillo, **Andes D**. Time Course Microbiologic Outcome and Gene Expression During and Following Fluconazole Exposure In vitro and In vivo. *Antimicrob Agents Chemother.* 2006;50:1311-9. PMID: 16569846. PMCID: PMC1426956
61. M.A. Pfaller, D.J. Diekema, J.H. Rex, A. Espinel-Ingroff, E.M. Johnson , **D. Andes** M.A. Ghannoum, , F.C. Odds, M.G. Rinaldi, D.J. Sheehan, L. Steele-Moore, P. Troke, T.J. Walsh, and D.J. Warnock. Correlation of MIC with Outcome for *Candida* Species Tested Against Voriconazole: Analysis and Proposal for Interpretive Breakpoints. *J Clin Microbiol* 2006;44:819-26. PMID: 16517860. PMCID: PMC1393146
62. **Andes D**, Craig W. Pharmacodynamics of a New MRSA Active Cephalosporin, PPI-0903 (TAK-599), in the Murine Thigh and Lung Infection Models – Identification of an In vivo PK/PD Target. *Antimicrob Agents Chemother.* 2006;50:1376-83. PMID: 16569855. PMCID: PMC1426945
63. **Andes D**, Lepak A., Marchillo K, Nett J, In vivo fluconazole pharmacodynamics and resistance development in a previously susceptible *Candida albicans* population examined by microbiologic and transcriptional profiling. *Antimicrob Agents Chemother.* 2006;50:2384-94. PMID: 16801416. PMCID: PMC1489797
64. Nobile CJ, **Andes D**, Nett J, Filler S, Mitchell AP. Critical role of Bcr1-dependent adhesins in *C. albicans* biofilm formation in vitro and in vivo. *PLoS Pathogens* 2006; Jul;2(7):e63. PMID: 16839200. PMCID: PMC1487173
65. Bok JW, Chung D, Balajee SA, Marr KA, **Andes D**, Nielsen KF, Frisvad JC, Keller NP. GliZ, a transcriptional regulator of gliotoxin biosynthesis, contributes to *Aspergillus fumigatus* virulence. *Infect Immun.* 2006;74:6761-68. PMID: 17030582. PMCID: PMC1698057
66. Nobile CJ, Nett JE, **Andes D**, Mitchell AP. Function of *C. albicans* adhesion Hwp1 in biofilm formation. *Eukaryot Cell* 2006;5:1604-1610. (Journal Cover Image) PMID: 17030992 PMCID: PMC1595337
67. Mukherjee PK, Mohamed S, Chandra J, Kuhn D, Liu S, Antar OS, Munyon R, Mitchell AP, **Andes D**, Chance MR, Rouabhia M, Ghannoum MA. Alcohol dehydrogenase restricts the ability of the pathogen *Candida albicans* to form a biofilm on catheter



- surfaces through an ethanol-based mechanism. *Infect Immun.* 2006;74:3804-16. PMID: 16790752. PMCID: PMC1489753
68. Nett J, **Andes D.** *Candida albicans* Biofilm Development, Modeling of a Host Pathogen Interaction. *Curr Opin Microbiol.* 2006;9:1-6. PMID: 16815078. Policy exempt – Accepted for pub prior to 04/07/08.
  69. Dodds AES, Lewis RE, Lewis JS, Martin C, **Andes D.** Clinical pharmacology of antifungals. *Clin Infect Dis* 2006;43:28-39. Policy exempt – Accepted for pub prior to 04/07/08.
  70. **Andes D.** Clinical Antifungal Pharmacokinetics and Pharmacodynamics. *Infect Dis Clin N Amer* 2006;30 :679-97. PMID: 16984875. Policy exempt – Accepted for pub prior to 04/07/08. Review.
  71. Gauthier G, Safdar N, Klein BS, **Andes D.** Blastomycosis in solid organ transplant recipients. *Transplant Infect Dis* 2007;9:310-7. PMID: 17428278. Policy exempt – Accepted for pub prior to 04/07/08.
  72. Nett J, Lincoln L, Marchillo K, Van Handel M, **Andes D.** Putative role of beta-1,3 glucans in *Candida albicans* biofilm resistance. *Antimicrob Agents Chemother.* 2007;51:510-520. PMID: 17130296. PMCID: PMC1797745
  73. Nett J, Lincoln L, **Andes D.** Use of secreted Beta 1,3 glucan to diagnose *Candida* catheter biofilm infections. *J Infect Dis.* 2007;195:1705-12. PMID: 17471441. Policy exempt – Accepted for pub prior to 04/07/08.
  74. Li F, Wagner J, Marchillo K, Oshel P, **Andes D,** Palecek S. Eap1p, an adhesin that mediates *Candida albicans* biofilm formation in vitro and in vivo. *Eukaryot Cell* 2007;6:931-9. PMID: 17416898. PMCID: PMC1951519
  75. **Andes D,** Craig WA. In vivo pharmacodynamic characterization of the new lipoglycopeptide, dalbavancin. *Antimicrob Agents Chemother.* 2007;51:1633-42. PMID: 17307987. PMCID: PMC1855559
  76. Kethireddy S, **Andes D.** CNS pharmacokinetics of antifungal agents. *Expert Opin Drug Metab Toxicol.* 2007;3:573-81. PMID: 17696807. Policy exempt – Accepted for pub prior to 04/07/08.
  77. Rosenfeld RM, **Andes D,** Bhattacharyya N, Cheung D, Eisenberg S, Ganiats TG, Gelzer A, Hamilos D, Haydon RC 3rd, Hudgins PA, Jones S, Krouse HJ, Lee LH, Mahoney MC, Marple BF, Mitchell CJ, Nathan R, Shiffman RN, Smith TL, Witsell DL. Clinical practice guideline: adult sinusitis. *Otolaryngol Head Neck Surg.* 2007;137(3 Suppl):S1-31. PMID: 17761281. Policy exempt – Accepted for pub prior to 04/07/08.
  78. LaPlante KL, Rybak MJ, **Andes D,** Craig WA. Activity of clindamycin inducible community associated methicillin resistant *Staphylococcus aureus* versus daptomycin, clindamycin, doxycycline, linezolid in in vitro and in vivo pharmacodynamic models. *Antimicrob Agents Chemother* 2008;52:2156-62. PMID: 18411321. PMCID: PMC2415789

79. Lepak A, **Andes D**. Pharmacodynamics of Antifungal Drugs: A Strategy to Optimize Efficacy. *Current Fungal Infection Reports*, 2008. Policy exempt - Not resulting from NIH funding.
80. Smith J, **Andes D**. Antifungal Therapeutic Drug Monitoring – Pharmacokinetic and Pharmacodynamic Considerations. *Therapeutic Drug Monitoring*. 2008 Apr;30(2):167-172. PMID: 18367976. Policy exempt – Review.
81. **Andes D**, Diekema DJ, Pfaller MA, Prince RA, Marchillo K, Ashbeck J, Hou J. In vivo Pharmacodynamic Characterization of Anidulafungin in a Neutropenic Murine Candidiasis Model. *Antimicrob Agents Chemother*. 2008 Feb;52(2):539-50. Epub 2007 Dec 10. PMID: 18070979. PMCID: PMC2224754
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145. Kano R, Perrone G, Peterson S, Baddley JW, Marr KA, Alexander B, **Andes D**, Kontoyiannis D, Pappas PG, Balajee SA. Comparative sequence analyses of multiple loci reveal rare *Aspergillus* species in transplant recipients. *Advances in Aspergillosis*. 2008
146. Nett J, **Andes D**. The role of *Fks1* in biofilm formation and drug resistance. 9<sup>th</sup> ASM Candida and Candidiasis Meeting 2008.
147. Nett J, **Andes D**. *C. albicans* biofilm infection of an *in vivo* denture model. 9<sup>th</sup> ASM Candida and Candidiasis Meeting 2008.
148. Uppuluri P, Nett J, Heitman J, **Andes D**. Synergistic effect of calcineurin inhibitors and fluconazole against *Candida albicans* biofilms. 9<sup>th</sup> ASM Candida and Candidiasis Meeting 2008.
149. **Andes D**. Pharmacodynamics of antifungal drugs: a strategy to optimize efficacy. 13<sup>th</sup> International Congress on Infectious Diseases. Abstr 12.002. 2008
150. **Andes D**. Clinical relevance of pharmacokinetics and pharmacodynamics of antifungal agents. 48<sup>th</sup> Interscience Conference on Antimicrobial Agents and Chemotherapy. Abst 48-06
151. **Andes D**. Marchillo K, Bohrmueller. In vivo pharmacodynamic characterization of a new echinocandin, micafungin, against *Candida albicans* and *Candida glabrata* in the neutropenic murine disseminated candidiasis model. 48<sup>th</sup> Interscience Conference on Antimicrobial Agents and Chemotherapy. Abst A-009
151. **Andes D**. Craig WA. In vivo pharmacodynamic activity of the carbapenem, ME1036, in a murine thigh infection model. 48<sup>th</sup> Interscience Conference on Antimicrobial Agents and Chemotherapy. Abst A-032
152. Craig WA, Kethireddy S, Jones, R, Stamstad T, Ashbeck J, Marchillo K, **Andes D**. Impact of KPCs on the in vivo activity of three carbapenems in the neutropenic mouse thigh infection model. 48<sup>th</sup> Interscience Conference on Antimicrobial Agents and Chemotherapy. Abst A-029

153. Regules JA, **Andes D**, Akers KS, D'avignon LC, Murray CK, Chung KC, Hospenthal DR. Pharmacokinetics of voriconazole in patients with severe burns. 48<sup>th</sup> Interscience Conference on Antimicrobial Agents and Chemotherapy. Abst A-021
154. Craig WA, Lee D, Kethireddy S, **Andes DR**. Comparison of in vitro and in vivo activity of vancomycin against MRSA at 10exp5 and 10exp7 inocula. 48<sup>th</sup> Interscience Conference on Antimicrobial Agents and Chemotherapy. Abst A-986
155. Hsu J, **Andes D**, Knasinski V, Safdar N. Statins are associated with improved outcomes of bloodstream infection in solid organ transplant recipients. 48<sup>th</sup> Interscience Conference on Antimicrobial Agents and Chemotherapy. Abst K-1455.
156. Balasubramanian P, Safdar N, **Andes D**. Outcomes of osteomyelitis in solid organ transplant recipients. 48<sup>th</sup> Interscience Conference on Antimicrobial Agents and Chemotherapy. Abst L-1504.
157. Nett JE, Marchillo K, Bohrmueller J, **Andes D**. Antifungal resistance in an in vivo oral *Candida albicans* biofilm model. 48<sup>th</sup> Interscience Conference on Antimicrobial Agents and Chemotherapy. Abstr M-1565.
158. Weerawat M, Chetchotisakd P, Nolen TL, Wallace D, Sungkanuparph S, Anekthananon T, Supparatpinyo K, Pappas PG, Larsen RA, Filler SG, **Andes D**. Serum and cerebrospinal fluid concentration monitoring for high-dose fluconazole in HIV-associated cryptococcal meningitis infected patients. 2009 CROI
159. **Andes D**. Lepak A, Diekema D, Pfaller M, Marchillo K, Bohrmuller J. Identification of the in vivo pharmacodynamic target for echinocandins against *C. albicans*, *C. glabrata*, and *C. parapsilosis* in the neutropenic murine disseminated candidiasis model. 49<sup>th</sup> Interscience Conference on Antimicrobial Agents and Chemotherapy. Abstr A1-419
160. **Andes D**, Ambrose P, Hammel JP., Van Wart SA, Buell D, Kovanda L, Bhavnani SM. Exposure response relationships of micafungin in patients with invasive candidiasis. Interscience Conference on Antimicrobial Agents and Chemotherapy. Abstr M-1565
161. Pichereau S, Marchillo K, Stamstad T, Bohrmuller J, Craig W, **Andes D**. In vivo pharmacodynamic investigation of six oral antibiotics against community acquired MRSA in a soft tissue infection model. Interscience Conference on Antimicrobial Agents and Chemotherapy. Abstr A1-556.
162. **Andes D**. Antifungal pharmacokinetics/pharmacodynamics: past, present, future. Interscience Conference on Antimicrobial Agents and Chemotherapy. Abstr 1186.
163. Pfaller MA, Diekema DJ, Ghannoum MA, Rex JH, Alexander BD, **Andes D**, Brown SD, Chaturvedi V, Espinel-Ingroff A, Fowler CL, Johnson EM, Knapp CC, Motyl MR, Ostrosky-Zeichner L, Sheenan DJ, Walsh TJ for the CLS Antifungal Testing Subcommittee. Abstr M-1716
164. Craig WA, **Andes D**, Ivezic-Schoenfeld Z, Wicha WW, Novak R. In vivo pharmacodynamic activity of BC-3205, a novel pleuromutilin derivative. Interscience Conference on Antimicrobial Agents and Chemotherapy. Abstr F1-1504.

165. Craig WA, **Andes D**. In vivo activity of CXA-101 plus a 2:1, 4:1, or 8:1 ratio of tazobactam against various *Enterobacteriaceae* producing extended spectrum beta-lactamase in the thighs of neutropenic mice. Interscience Conference on Antimicrobial Agents and Chemotherapy. Abstr F1-1999.
166. Craig WA, **Andes D**. In vivo activity of CSA-101, a new cephalosporin, against *Pseudomonas aeruginosa* and other *Enterobacteriaceae* in the thighs of neutropenic mice.. Interscience Conference on Antimicrobial Agents and Chemotherapy. Abstr F1-2002.
167. Pichereau S, Marchillo K, Bohrmuller J, Stamstad T, Craig W, **Andes D**. Comparative pharmacodynamics of a novel oxazolidinone, TR-701, against *S. aureus* in a neutropenic murine pneumonia model. Interscience Conference on Antimicrobial Agents and Chemotherapy. Abstr A1-1939.
168. **Andes D**, Safdar N, Baddley J, Pappas P. Mortality associated with antifungal use in transplant recipients with invasive candidiasis. 47<sup>th</sup> Infectious Diseases Society of America
169. Alexander BD, **Andes D**, Harrison J, Dubberke ER, Kontoyiannis DP, Pappas PG, Baddley JB. Computed tomography findings of invasive aspergillosis in solid organ transplant recipients. . 47<sup>th</sup> Infectious Diseases Society of America
170. Baddley JB, Kauffman C, Ito JI, Kontoyiannis DP, Lyon GM, Oster RA, Schuster MG, Marr KA, Boekh M, **Andes D**, Patterson TF, Perl T, Pappas PG. Invasive aspergillosis in transplant patients: description of treatment outcomes. 3<sup>rd</sup> Advances Against Aspergillosis. 2010
171. Nett JE, Crawford K, Marchillo K, **Andes D**. Role of Fks1p and matrix glucan on *C. albicans* biofilm resistance to an echinocandin, pyrimidine, and polyene. 10<sup>th</sup> ASM Conference on Candida and Candidiasis. 2010
172. Nett JE, Cain M, K, **Andes D**. Optimizing an XTT Assay for Measurement of Antifungal Drug Activity. 10<sup>th</sup> ASM Conference on Candida and Candidiasis. 2010
173. Pfaller M, Diekema, **Andes D**, Arendrup M, Brown S, Motyl M, Perlin D. Clinical breakpoints for the echinocandins and *Candida*, revisited. Abstract M-369 Interscience Conference on Antimicrobial Agents and Chemotherapy, 2010
174. Pfaller M, **Andes D**, Diekema D, Espinel Ingroff A, Hogan P, Sheehan D. Harmonizing CLSI and EUCAST clinical breakpoints for fluconazole and *Candida* Abstract M-370 Interscience Conference on Antimicrobial Agents and Chemotherapy, 2010
175. **Andes D**, Okusanya OO, Forrest A, Bhavnani SM, Fernandez P, Ambrose PG. Pharmacokinetic-pharmacodynamic analysis of CEM-101 against *Streptococcus pneumoniae* using data from a murine-lung infection model. Abstract A-688 Interscience Conference on Antimicrobial Agents and Chemotherapy, 2010
176. **Andes D**, Safdar N, Baddley J, Pappas P. Impact of therapy on mortality across *Candida* spp in patients with invasive candidiasis from randomized clinical trials: a

- patient level analysis. Abstract M-1312 Interscience Conference on Antimicrobial Agents and Chemotherapy, 2010
177. Lepak A, Sanchez H, Marchillo K, **Andes D.** Comparative pharmacodynamics (PD) of triazole and echinocandin for invasive pulmonary aspergillosis (IPA). Abstract A-40 Interscience Conference on Antimicrobial Agents and Chemotherapy, 2010
  178. Meletiadis J, Chaturvedi V, **Andes D.**, Brandt ME, Ghannoum MA, Knapp C, Ostrosky-Zeichner L, Pfaller MA, Walsh TJ. Multicenter collaborative study of the interaction of antifungal combinations against *Candida* spp. Abstract M-371 Interscience Conference on Antimicrobial Agents and Chemotherapy, 2010
  179. Craig WA, **Andes D.** Pharmacodynamics of ceftaroline plus 1:1 and 2:1 ratios of NXL-104 against *Enterobacteriaceae* containing ESBLs and carbapenemases in neutropenic mouse thighs. Abstract A-1378 Interscience Conference on Antimicrobial Agents and Chemotherapy, 2010
  180. Craig WA, **Andes D.** In vivo pharmacodynamic activity of BC-3781. Abstract F-2108 Interscience Conference on Antimicrobial Agents and Chemotherapy, 2010
  181. Nett JE, Spiegel CA, **Andes D.** Host Components of a *Candida albicans* Biofilm. Gordon Conference – Fungal Immunology, Galveston, TX 2011
  182. Robbins N, Uppuluri P, Nett J, Rajendran R, Ramage G, **Andes D.**, Cowen LE. Hsp90 Governs Drug Resistance and Dispersion of Fungal Biofilms. [The 26th Fungal Genetics Conference at Asilomar](#)
  183. **Andes D.** Role of *C. albicans* glucan matrix in biofilm associated antifungal resistance. Biofilms in Nosocomial Fungal Infections, Institute Pasteur, Paris, France, Jan 2011.
  184. Lepak A, Marchillo K, **Andes, D.** In vivo Pharmacodynamic (PD) Characterization of the Novel Lantibiotic, NAI-107, in the Neutropenic Murine Thigh Model Against *S. aureus*. Abstract 1338. ASM Interscience Conference on Antimicrobial Agents and Chemotherapy, 2011
  185. Lepak A, Arendrup M, Hope W, **Andes D.** Comparison of the in vivo Pharmacodynamics (PD) of An Echinocandin and Triazole Based Upon Use of Clsi and Eucast Susceptibility Methods. Abstract 1161 ASM Interscience Conference on Antimicrobial Agents and Chemotherapy, 2011
  186. Lepak A, Marchillo K, **Andes D.** In-vivo Pharmacodynamic (PD) Target for the Oral Glucan Synthase Inhibitor (GSI), MK-3118 (MK) Against *C. albicans* (CA), *C. glabrata* (CG), and *C. parapsilosis* (CP) in the Neutropenic Murine Disseminated Candidiasis Model. Abstract A2 579 ASM Interscience Conference on Antimicrobial Agents and Chemotherapy, 2011.
  187. Lepak A, Sanchez H, Marchillo K, **Andes D.** Comparative Pharmacodynamics (PD) of a Triazole and Echinocandin for Invasive Pulmonary Aspergillosis (IPA). Abstract A2-580. ASM Interscience Conference on Antimicrobial Agents and Chemotherapy, 2011.



188. Huang D, Finkel JS, Xu W, Hill EM, Desai JV, Nett JE, **Andes DR**, Lanni F, Mitchell AP. *Candida albicans* Adherence Regulator *ACE2* is a Pivotal Target of *SNF5*. A59B. 11<sup>th</sup> ASM Candida and Candidiasis, San Francisco, 2012.
189. W. Xu, J. S. Finkel, D. Huang, E. M. Hill, J. V. Desai, C. A. Woolford, J. E. Nett, H. Taff, C. T. Norice, **D. R. Andes**, F. Lanni, A. P. Mitchell. Portrait of *Candida albicans* adherence regulators. S-10.1 11<sup>th</sup> ASM Candida and Candidiasis, San Francisco, 2012.
190. H. T. Taff, J. E. Nett, R. Zarnowski, K. Ross, H. Sanchez, **D. R. Andes**. Key enzymes for *Candida albicans* biofilm matrix delivery: Implications for drug resistance S-10.3 11<sup>th</sup> ASM Candida and Candidiasis, San Francisco, 2012.
191. L. Connolly, D. Lynch, S. Maguire, L. Holland, M. McBrien, A. Riccombeni, **D. Andes**, G. Butler. Regulation of biofilm formation in *Candida parapsilosis*. A-63C. 11<sup>th</sup> ASM Candida and Candidiasis, San Francisco, 2012.
192. J. E. Nett, R. Zarnowski, K. Marchillo, C. Spiegel, D. Mosher, **D. R. Andes**. Host proteins and cells associated with *Candida albicans* biofilms from three *in vivo* niches. A-76A. 11<sup>th</sup> ASM Candida and Candidiasis, San Francisco, 2012.
193. R. Zarnowski, J. E. Nett, H. Sanchez, **D. R. Andes**. Biofilm matrix proteomic analysis from *C. albicans* *in vitro* and *in vivo* models. A-81C. 11<sup>th</sup> ASM Candida and Candidiasis, San Francisco, 2012.
194. Lepak A, Marchillo K, Van Hecker J, **Andes D**, Isavuconazole (I) Pharmacodynamic (PD) Target Determination for *C. albicans* (CA) in an *in vivo* Neutropenic Murine Model of Invasive Candidiasis (IC). ASM Interscience Conference on Antimicrobial Agents and Chemotherapy, 2012.
195. Lepak A, Castanheira M, Diekema D, Pfaller M, **Andes D**. Pharmacodynamic (PD) evaluation of 3 Echinocandins (E) against *C. glabrata* (CG) with and without *Fks* mutations in the neutropenic disseminated candidiasis model. ASM Interscience Conference on Antimicrobial Agents and Chemotherapy, 2012
196. Lepak A, Craig WA, **Andes D**, Marchillo K, vanHecker J. Reduced Activity of Clindamycin against Various Streptococci with Clindamycin-Inducible Resistance in the Neutropenic Thigh Infection Model. ASM Interscience Conference on Antimicrobial Agents and Chemotherapy, 2012
197. Lepak A, Marchillo K, Cabezas J, Craig W, **Andes D**. *In vivo* Pharmacodynamic (PD) characterization of a new fluoroquinolone (FQ) antibiotic, KPI-10, against Gram-Positive (GP) and Gram-Negative (GN) bacteria. ASM Interscience Conference on Antimicrobial Agents and Chemotherapy, 2012
198. Lepak A, Marchillo K, Van Hecker J, **Andes D**. Pharmacodynamic (PD) of Posaconazole (P) in a Murine Invasive Pulmonary Aspergillosis (IPA) Model Against Wild Type and *Cyp51* mutant Isolates. ASM Interscience Conference on Antimicrobial Agents and Chemotherapy, 2012

199. Lepak A, Forrest A, **Andes D**. *In vivo* Pharmacodynamic (PD) Evaluation of Combination Triazole (T) and Echinocandin (E) Therapy against Susceptible and Resistant *A. fumigatus* (AF). ASM Interscience Conference on Antimicrobial Agents and Chemotherapy, 2012
200. Lepak A, Marchillo K, Van Hecker K, Craig W, **Andes D**. Dose-response activity and pharmacodynamic (PD) index evaluation of a novel carbapenemase inhibitor (CPI), RPX 7009, in combination with biapenem (BPN) against 2 KPC producing *K. pneumonia* (KP) in a neutropenic murine thigh model. ASM Interscience Conference on Antimicrobial Agents and Chemotherapy, 2012
201. Van Wart SA, Melhem S, Davenport JM, Ambrose PG, Bhavnani SM, **Andes D**, Craig WA, McIntyre GF, Rubino CM. Population Pharmacokinetic (PPK) and Pharmacokinetic-Pharmacodynamic (PK-PD) Target Attainment (TA) Analyses to Support JNJ-Q2 Dose Selection for Patients with Acute Bacterial Skin and Skin Structure Infections (ABSSSI). ASM Interscience Conference on Antimicrobial Agents and Chemotherapy, 2012
202. Bulik CC, Okusanya O, Bhavnani SM, Lepak A, Forrest A, Ambrose PG, Hoover JL, **Andes D**. Evaluation of the Pharmacokinetics-Pharmacodynamics (PK-PD) of GSK2251052 (GSK052) against Gram-negative Bacilli (GNB) in a Murine-Thigh Infection Model. ASM Interscience Conference on Antimicrobial Agents and Chemotherapy, 2012
203. **Andes D**, Okusanya O, Bulik CC, Lepak A, Bhavnani SM, Forrest A, Hoover JL, Ambrose PG. Evaluation of the Pharmacokinetics-Pharmacodynamics (PK-PD) of GSK2251052 (GSK052) against Gram-negative Bacilli (GNB) Using Data from a Neutropenic Murine Pneumonia Infection Model. ASM Interscience Conference on Antimicrobial Agents and Chemotherapy, 2012
204. Brennan M, Hess T, Smith J, **Andes D**, Safdar N. Case-control Study of Immunosuppressants and Comorbidities Associated with the Development of Osteomyelitis among Transplant Recipients. Infectious Diseases Society of America, 2013.
205. **Andes D**, Reynolds DK, Van Wart SA, Lepak A, Kovanda LK, Bhavnani SM. Clinical Pharmacodynamic (PD) Index Identification for Micafungin in Esophageal Candidiasis: Dosing Strategy Optimization. ASM Interscience Conference on Antimicrobial Agents and Chemotherapy, 2013.
206. Lepak A, Marchillo K, Van Hecker J, Diekema D, **D. Andes**. Impact of *Candida* species on the Isavuconazole (ISA) Pharmacodynamic (PD) Target in an *in vivo* Neutropenic Murine Model of Invasive Candidiasis (IC). ASM Interscience Conference on Antimicrobial Agents and Chemotherapy, 2013.
207. Lepak A, Marchillo K, Van Hecker J, **Andes D**. Pharmacodynamic (PD) of Isavuconazole (Isav) in a Murine Invasive Pulmonary Aspergillosis (IPA) Model Against Wildtype (WT) and *Cyp51* mutants. ASM Interscience Conference on Antimicrobial Agents and Chemotherapy, 2013.

208. Fanning S., Desai JV, Woolford CA, Xu W, Taff HT, Beaufort C, Suhan JP, Nantel A, **Andes D**, Lanni F, Mitchell AP. Signaling by a biofilm surface adherence protein. 12<sup>th</sup> ASM Conference on Candida and Candidiasis, New Orleans, LA 2014
209. Butler G, Schroeder M, Ames L, Haynes K, Taff H, **Andes D**, Grózer Z, Gácsér A, Holland I. Comparative phenotypic analysis of *Candida parapsilosis* and *Candida albicans* 12<sup>th</sup> ASM Conference on Candida and Candidiasis, New Orleans, LA 2014
210. Mitchell K, Reinicke E, Hatfield R, Sanchez H, Zarnowski R, **Andes D**. Characterization of extracellular matrix mannan production, secretion, and role in *Candida albicans* biofilm antifungal resistance. 12<sup>th</sup> ASM Conference on Candida and Candidiasis, New Orleans, LA 2014
211. Finkel JS, Horner S, Desai JV, Nett JE, **Andes D**, Lanni F, Mitchell AP. The role of Zfu2 in Yeast Cell Adherence and Biofilm Formation. 12<sup>th</sup> ASM Conference on Candida and Candidiasis, New Orleans, LA 2014
212. Zarnowski R, Sanchez H, Webster M, Hatfield R, **Andes D**. Complex and Cooperative Extracellular Matrix Components of *Candida albicans* Biofilms Impair Antifungal Drug Penetration. 12<sup>th</sup> ASM Conference on Candida and Candidiasis, New Orleans, LA 2014
213. Dominguez E, Edwards J, Sanchez H, Zarnowski R, **Andes D**.  $\beta$ 1,6 glucan in the *C. albicans* biofilm matrix cooperates with other matrix constituents to produce a drug resistance phenotype. 12<sup>th</sup> ASM Conference on Candida and Candidiasis, New Orleans, LA 2014
214. Taff H, Fontaine J, Lounes-Hadj Sahraoui A, **Andes D**. Moonlighting Transcription Factor: A biofilm-specific role for *C. albicans* UPC2 during biofilm growth. 12<sup>th</sup> ASM Conference on Candida and Candidiasis, New Orleans, LA 2014
215. Lepak A, Reda A, Marchillo K, VanHecker J, **Andes D** *In vivo* Pharmacodynamics of Ceftolozane against *Streptococcus pneumoniae* and *Pseudomonas aeruginosa* across a wide range of MICs in a Neutropenic Murine Thigh Infection Model ECCMID 2014, Barcelona, Spain
216. Bulik CC, Okusanya OO, Bhavnani SM, Lepak A, Forrest A, Ambrose PG, Hoover LJ, **Andes DR**. Evaluation of the Pharmacokinetics-Pharmacodynamics (PK-PD) of GSK2140944 (GSK944) Against *Staphylococcus aureus* (SA) and *Streptococcus pneumoniae* (SP) in a Murine Thigh-Infection Model A-680. Interscience Conference on Antimicrobial Agents and Chemotherapy 2014.
217. **Andes D**, Ghannoum M, Kovanda L, Huang W, Lu Q, Zeiher BG, Jones M, Hope W. M-1761 - Outcomes by Minimum Inhibitory Concentrations from Isavuconazole Phase 3 Trial of Invasive Aspergillosis (SECURE) M-1761. Interscience Conference on Antimicrobial Agents and Chemotherapy 2014.
218. Kang JY, Gao J, **Andes D**, Davies N, Kwon GS. Combinational therapy using amphotericin B micelle for enhanced antifungal effect. American Association of Pharmaceutical Scientists (AAPS). 2014

219. Amit D, Kovanda L, Hope W, Mouton J, **Andes D**, Kowalski D, Townsend R, Bonate P. Exposure response analysis of isavuconazole in patients with disease caused by *Aspergillus* species or other filamentous Abstract P0217. 25<sup>th</sup> ECCMID, Copenhagen, Denmark 2015
220. Debra D, **Andes D**, Hope W, Azie N, Shi Fei, K, Kovanda L, Schmitt-Hoffmann A, Gumbo T. Safety and outcomes in obese patients with invasive fungal disease treated with isavuconazole in the phase 3 randomized double-blind SECURE trial P0233 25<sup>th</sup> ECCMID, Copenhagen, Denmark 2015
221. Lepak A, Madison M, Marchillo K, Vanhecker, **Andes D**. Efficacy of Micafungin Extended Interval Dosing (EID) for Prophylaxis (PPX) and Treatment (TX) of Invasive Candidiasis (IC) in a Murine Model. Interscience Conference on Antimicrobial Agents and Chemotherapy 2015.
222. Lepak A, Seiler P, Surivet JP, Ritz D, Kohl C, **Andes D**. Pharmacokinetic/Pharmacodynamic Evaluation of a novel topo-isomerase inhibitor, ACT-292706, in a murine thigh and lung infection model against *Staphylococcus aureus* and *Streptococcus pneumoniae*. Interscience Conference on Antimicrobial Agents and Chemotherapy 2015.
223. Lepak A, Seiler P, Surivet JP, Ritz D, Kohl C, **Andes D**. Pharmacokinetic/Pharmacodynamic Evaluation of a novel topo-isomerase inhibitor, ACT-387042, in a murine thigh and lung infection model against *Staphylococcus aureus* (SA) and *Streptococcus pneumoniae* (SPN) . Interscience Conference on Antimicrobial Agents and Chemotherapy 2015.
224. Lepak A, Madison M, Marchillo K, Vanhecker, **Andes D**. In vivo Pharmacokinetic/Pharmacodynamic (PK/PD) Evaluation of a Novel Antibiotic compound TXA-709 and its active metabolite TXA-707 (TXA-709/707) against *Staphylococcus aureus* (SA) in the Murine Thigh Infection Model. Interscience Conference on Antimicrobial Agents and Chemotherapy 2015.
225. Lepak A, Madison M, Marchillo K, Vanhecker, **Andes D**. Evaluation of Prevalence of Potential Drug-Drug Interaction among Patients with Invasive Fungal Infections Receiving Mold-Active Triazoles. ID Week (IDSA) 2015.
226. Lepak A, Madison M, Marchillo K, Vanhecker, **Andes D**. Pharmacodynamic (PD) Activity of Dalbavancin against VISA *Staphylococcus aureus* (SA) isolates in the Neutropenic Murine Thigh Infection Model. ID Week (IDSA) 2015.

#### Invited Research Presentations

Years	Location	Title
<b>UNIVERSITY OF WISCONSIN</b>		
2001	Pharmaceutical Sciences Seminar	Antimicrobial Pharmacodynamics and

		Drug Resistance
2003	Medical Microbiology and Immunology Research Seminar	Resistance in <i>Candida albicans</i> : Pharmacodynamic and In vivo Considerations
2004	Meeting Co-Chair	Fungal Disease – Bridging the Gap Between the Bench and Bedside
2011	Perlman Symposium - Medical Microbiology and Immunology	Antimicrobial Drug Develops - Preclinical Development After the HTS
2011	Chair, Department of Medicine Research Day	
2014	Department of Medicine Grandrounds - Antimicrobial Resistance	Antimicrobial Resistance
2015	Raper Symposium – Department of Bacteriology	Biofilm Matrix Composition, Assembly, and Function
2015	UW Mini-Medical School	Antimicrobial Resistance and Drug Discovery
<b>NATIONAL</b>		
1998	International Society of Antimicrobial Pharmacology	Pharmacodynamics of Antifungals
2001	41 <sup>st</sup> Interscience Conference on Antimicrobial Agents and Chemotherapy	Use of pharmacodynamics as an alternative for human trials in the evaluation of antifungals?
2001	41 <sup>st</sup> Interscience Conference on Antimicrobial Agents and Chemotherapy	Session Chair – Topics in Pharmacokinetics and Pharmacodynamics
2002	Infectious Disease Society of America – 2002 Annual Meeting	Clinical Impact of Antibacterial and Antifungal Pharmacodynamics
2002	University of Missouri School of Medicine – Alumni Lecture	Advances in Anti-Infective Therapy
2003	43 <sup>rd</sup> Interscience Conference on Antimicrobial Agents and Chemotherapy	Clinical relevance of antifungal pharmacokinetics and pharmacodynamics
2003	International Forum on Antibiotic Resistance Colloquium Outcomes, Resistance and Regulation	Animal Models: Improving prediction and performance with PK/PD studies
2004	Workshop on Animal Models of Infection – Novartis	Pharmacodynamic Characterization of Antimicrobials In vivo
2004	Antifungal Workshop – University of Texas Pediatric Pharmacology	Antifungal Pharmacodynamics
2004	44 <sup>th</sup> Interscience Conference on Antimicrobial Agents and Chemotherapy	Deep Infections in the eye, brain, and bone – Tissue penetration of antifungal drugs
2004	FDA Workshop – Antimicrobial Development	Use of Animal Model PK/PD for Dose Selection
2004	44 <sup>th</sup> Interscience Conference on Antimicrobial Agents and Chemotherapy	Clinical Relevance of Pharmacokinetics and Pharmacodynamics on Anti-Infective Agents
2005	International Immunocompromised Host	Epidemiology and Risk Factors for Invasive Fungal Infections In Solid

	Society – Fungal Infections In Solid Organ Transplant	Organ Transplantation
2005	Merck Research Symposium	Use of Animal Model Pharmacodynamics in Antimicrobial Drug Development
2005	105 <sup>th</sup> American Society for Microbiology General Meeting	Use of Animal Models of Fungal Infection in Drug Development
2005	45 <sup>th</sup> Interscience Conference on Antimicrobial Agents and Chemotherapy	Application of Preclinical Pharmacokinetics and Pharmacodynamics in Drug Development
2005	Pediatric Infectious Disease Roundtable	Treatment of Infection Due to ESBL Producing Organisms – What Really Matters?
2005	University of Alabama – Birmingham, Transplant Grand Rounds	Fungal Infections in Solid Organ Transplantation
2005	Cornell University – Infectious Diseases	Fungal Infections in Solid Organ Transplantation
2005	45 <sup>th</sup> Interscience Conference on Antimicrobial Agents and Chemotherapy	Meet the Experts – Antifungal Therapeutic Drug Monitoring
2006	San Diego Naval Hospital	Candidemia Epidemiology and Management
2006	46 <sup>th</sup> Interscience Conference on Antimicrobial Agents and Chemotherapy	CNS Antifungal Pharmacokinetics
2006	Molecular Mycology – Marine Biological Institute, Woods Hole	Mechanisms of Candida Biofilm Resistance
2007	47 <sup>th</sup> Interscience Conference on Antimicrobial Agents and Chemotherapy	Clinical Relevance of Antifungal Pharmacodynamics – Meet the Experts
2007	FOCUS on Fungal Infections	Antifungal Pharmacogenomics
2007	Infectious Diseases Society of America	Pharmacodynamics in Therapy of caMRSA Infections
2007	Infectious Diseases Society of America	Echinocandin Pharmacokinetics and Pharmacodynamics
2007	Duke University	Antifungal Pharmacodynamics
2008	University of Washington	Antifungal Pharmacodynamics
2008	9 <sup>th</sup> ASM Candida and Candidiasis	<i>C. albicans</i> Biofilm Infection in an In vivo Denture Model
2008	New England Microbiology Laboratory Directors Conference	Clinical and laboratory implications of antifungal pharmacodynamics
2008	International Society for Anti-Infective Pharmacology – Madison, WI	Pharmacodynamics and genomic endpoints
2008	Children’s Hospital of California Grand Rounds	A,B,Cs of Pharmacodynamics
2009	49 <sup>th</sup> Interscience Conference on Antimicrobial Agents and Chemotherapy	Clinical Relevance of Antifungal Pharmacodynamics

2009	49 <sup>th</sup> Interscience Conference on Antimicrobial Agents and Chemotherapy	Identification of the In vivo Target for Echinocandins against <i>C. albicans</i> , <i>C. glabrata</i> , and <i>C. parapsilosis</i> in the Neutropenic Murine Disseminated Candidiasis Model
2009	49 <sup>th</sup> Interscience Conference on Antimicrobial Agents and Chemotherapy	Exposure Response Relationships for Efficacy of Micafungin in Patients with Invasive Candidiasis
2009	49 <sup>th</sup> Interscience Conference on Antimicrobial Agents and Chemotherapy	Antifungal Pharmacokinetics/Pharmacodynamics: Past, Present and Future
2009	47 <sup>th</sup> Infectious Diseases Society of America	Mortality associated with antifungal use in transplant recipients with invasive candidiasis
2009	American Society of Clinical Pharmacology and Therapeutics	Antifungal Therapeutic Drug Monitoring
2010	Clinical Laboratory Standards Institute, Tampa, FL	Experimental and Clinical Echinocandin Pharmacodynamics
2010	American Society for Blood and Marrow Transplantation, Orlando, FL	Antifungal Therapeutic Drug Monitoring
2010	39 <sup>th</sup> Critical Care Congress, Society for Critical Care Medicine, Miami, FL	Clinical Use of Anti-infective Pharmacodynamics
2010	50 <sup>th</sup> Interscience Conference on Antimicrobial Agents and Chemotherapy	PK/PD, Genomics, and Translational Medicine
2010	50 <sup>th</sup> Interscience Conference on Antimicrobial Agents and Chemotherapy	Special Challenges in Antifungal Therapeutics
2011	Northwestern MSTP and Infectious Disease Translational Research Conference	Candida Biofilm Drug Resistance: Treatment and Diagnostic Target Identification
2011	Woods Hole Molecular Mycology Course – Marine Biological Institute	Candida Biofilm Drug Resistance
2011	51 <sup>st</sup> Interscience Conference on Antimicrobial Agents and Chemotherapy	Promises and Pitfalls of Translational Mycology – Antifungal Pharmacodynamics
2011	51 <sup>st</sup> Interscience Conference on Antimicrobial Agents and Chemotherapy	Clinical Application of Antifungal Pharmacodynamics
2012	American Society for Microbiology - Candida Conference	Identification of the <i>Candida</i> Biofilm Matrix Delivery Pathway
2012	American Society for Microbiology - Candida Conference	Development and Use of Rodent Vascular Catheter Biofilm Models
2012	Center for Diseases Control - Atlanta	Pharmacodynamic Strategies for Combating Antimicrobial Resistant Infections
2012	University of Minnesota School of Pharmacy	Antifungal Therapeutic Drug Monitoring
2012	13 <sup>th</sup> International Congress on Yeast	Chair - Session Antifungal Drug Resistance

2012	13 <sup>th</sup> International Congress on Yeast	Biofilm Antifungal Drug Resistance
2012	NIH Conference on Antimicrobial Drug Development	Preclinical Drug Development Bottleneck
2012	University of Missouri - Medicine Grandrounds	Mycology Advances: From Clinic to ICU
2014	52 <sup>nd</sup> Interscience Conference on Antimicrobial Agents and Chemotherapy 2014.	Animal Models for Pharmacokinetics and Pharmacodynamics
2014	52 <sup>nd</sup> Interscience Conference on Antimicrobial Agents and Chemotherapy 2014.	Antifungal Pharmacokinetics and Pharmacodynamics in the ICU
2014	52 <sup>nd</sup> Interscience Conference on Antimicrobial Agents and Chemotherapy 2014.	ID Quiz
2014	Mycosis Study Group	Antifungal Management for the Patient at Risk in the ICU
2015	53 <sup>rd</sup> Interscience Conference on Antimicrobial Agents and Chemotherapy 2014.	Antifungal Pharmacokinetics and Pharmacodynamics in the ICU
2015	University of Iowa	Biofilm Antifungal Drug Resistance
<b>INTERNATIONAL</b>		
1999	University of Nijmegen, the Netherlands Microbiology Rounds	Pharmacodynamics of Antifungals
1999	1 <sup>st</sup> Annual Asia-Pacific Infectious Disease Meeting, Hong Kong, China	Pharmacodynamics in the Selection of Antibiotics for Respiratory Tract Infections
2000	10 <sup>th</sup> European Congress of Clinical Microbiology and Infectious Diseases, Stockholm, Sweden	Antifungal Pharmacodynamics
2000	40 <sup>th</sup> Interscience Conference on Antimicrobial Agents and Chemotherapy Pharmacokinetics and Pharmacodynamics, Toronto, CA	Pharmacokinetics and Pharmacodynamics: The Rational Basis for Antifungal Selection and Dosing
2001	7 <sup>th</sup> International Symposium on New Quinolones, Edinburgh, Scotland	Pharmacokinetics and Pharmacodynamics of the Non-Fluorinated Quinolones
2001	10 <sup>th</sup> International Society for Anti-infective Pharmacology, Nijmegen, Netherlands	Critical review of animal models in antimicrobial pharmacodynamics
2002	International Forum on Severe Fungal Infections, Paris, France	Central Vascular Catheter Candidiasis
2004	14 <sup>th</sup> European Congress of Clinical Microbiology and Infectious Diseases, Prague, Czech	Novel Advances in Antifungal Therapy – Relevance of Antifungal Pharmacokinetics and Pharmacodynamics
2005	15 <sup>th</sup> European Congress of Clinical	Pharmacodynamic Considerations in



	Microbiology and Infectious Diseases Copenhagen, Denmark	Treatment Infections Caused by ESBL- Producing Bacteria
2005	2 <sup>nd</sup> Trends in Medical Mycology, Berlin, Germany	Antifungal Pharmacodynamics From Bench to Bedside
2006	International Society for Human and Animal Mycology, Paris, France	Critical Appraisal of Antifungal Pharmacodynamics
2007	Antifungal Seminar, Copenhagen, Denmark	Understanding Polyene Pharmacokinetics to Optimize Outcome
2007	Trends in Medical Mycology, Torino, Italy	Drug Resistance Development and Antifungal Pharmacodynamics
2007	10th International Congress of Therapeutic Drug Monitoring & Clinical Toxicology, Nice, France	Antifungal Therapeutic Drug Monitoring
2008	13 <sup>th</sup> International Congress on Infectious Diseases, Kuala Lumpur, Malaysia	Using PK/PD Characteristics to Optimize Antifungal Therapy
2009	3 <sup>rd</sup> Congress European Microbiological Society, Goteburg, Sweden	Fungal Biofilm Resistance
2009	13 <sup>th</sup> Congress on Febrile Neutropenia, Vallencia, Spain	Antifungal Pharmacodynamics
2009	International Society for Human and Animal Mycology - Tokyo	Antifungal Therapeutic Drug Monitoring
2009	International Society for Human and Animal Mycology - Tokyo	Echinocandin Pharmacodynamics
2009	23rd Annual Conference on Concepts and Controversies in Infectious Diseases	Antifungal Therapeutic Drug Monitoring
2009	In focus VIII Forum de Infecceos Fungicas na Pratica Clinica – Sao Paulo, Brazil	Antifungal Pharmacodynamics
2009	Merck Frosst Campus	Preclinical Antimicrobial Pharmacodynamics in Drug Development
2010	4 <sup>th</sup> Advances Against Aspergillosis, Rome, Italy	Antifungal Therapeutic Drug Monitoring
2011	Institute Pasteur, Paris, France	Candida Biofilm Resistance
2011	Federation of European Biochemical Societies (FEBS) - Human Fungal Pathogens, Nice, France.	Antifungal Strategies and Mechanisms of Resistance
2011	1 <sup>st</sup> International Workshop on Antifungal Drugs: Pharmacology, Resistance, New Compounds and Treatment Strategies, Milan, Italy	Use of Antifungal Pharmacodynamics to Combat Resistance Development
2012	International Society for Human and Animal Mycology - Berlin	The Genetic Basis for Candida Biofilm Resistance
2012	Society for General Microbiology, Dublin, Ireland	<i>Candida</i> Biofilm Resistance Mechanisms
2013	14 <sup>th</sup> Japanese Mycoses Forum	Antifungal Pharmacodynamics

	Tokyo, Japan	
2013	2 <sup>nd</sup> Fungal Biofilms Symposium Glasgow, UK	Candida Biofilm Resistance
2013	6 <sup>th</sup> Trends in Medical Mycology	PK/PD made simple!
2013	6 <sup>th</sup> Trends in Medical Mycology	Which antifungal for which site of infection?
2013	1st International Conference on Infection and Chemotherapy – Korean Infectious Diseases Society	Therapeutic drug monitoring of antifungal agents: is it necessary?
2013	1st International Conference on Infection and Chemotherapy, Korean Infectious Diseases Society	Invasive Candidiasis Update
2014	12th ASM Conference on Candida and Candidiasis	Interactive Role of Matrix Mannan in <i>C. albicans</i> Biofilm Pathogenesis
2015	International Society for Human and Animal Mycology (ISHAM), Melbourne, Australia	Antifungal TDM
2015	ECCMID - Copenhagen, Denmark	Antifungal Therapeutic Drug Monitoring
2015	Trends in Medical Mycology (TIMM) - Lisbon, Portugal	Antifungal Pharmacodynamics to Address Emerging Resistance
2015	Fungal Cell Wall - Paris	Candida Biofilm Cell Wall and Matrix

### Visiting Professor

Years	Location
2005	Gunderson Clinic – Lacrosse, WI
2006	Albert Einstein School of Medicine, NY
2006	University of Alabama – Birmingham
2006	University of California – Los Angeles
2007	Ordway Research Institute – Albany, NY
2007	Cornell – Sloan Kettering
2007	State Serum Institute – Copenhagen, Denmark
2007	Duke University
2008	University of Washington – Seattle
2008	University of Alabama – Birmingham
2009	Gunderson Clinic _ Lacrosse, WI
2009	University of Wisconsin, Milwaukee
2011	Northwestern University, Chicago, IL
2012	University of Minnesota School of Pharmacy
2012	University of Missouri - Columbia, MO
2013	University of Aberdeen, Scotland
2015	University of Iowa
2015	University of Minnesota
2015	Rutgers University

### Grant Support

#### Active Grants

Title: Antimicrobial Drug Discovery from Coevolved Symbiotic Communities  
Sponsor: NIH NIAID 1U19AI109673-01  
Amount: \$16,000,000 (direct)

Dates: 4/2014 – 4/2019  
Role: PI (30%)

Title: Novel therapeutic agents from the Bacterial Symbionts of Brazilian Invertebrates  
Sponsor: NIH U19 TW009872-01  
Amount: \$5,154,718 (direct)  
Dates: 7/2014- 6/2019  
Role: Project PI, overall PI Jon Clardy, Harvard  
Title: Function and Genetic Control of Matrix Carbohydrates in *Candida* Biofilms  
Sponsor: NIH NIAID 2 R01 AI073289  
Amount: \$1,250,000 (direct)  
Dates: 7/2008 – 6/2018  
Role: PI (30%)

Title: Genetic Control of *C. albicans* Biofilm Formation  
Sponsor: NIH-NIAID R01 R01 AI067703-01  
Amount: 100,000 (direct/yr)  
Dates: 1/2006 – 1/2016  
Role: Co-PI (10%)  
PI: Aaron Mitchell – Columbia Univ

Title: Artificial Polymeric Lipoproteins as Drug Carriers  
Sponsor: NIH R01 AI101157-01  
Amount: \$25,000/yr  
Dates: 04/2007-03/2018  
Role: Collaborator (10%)  
PI: Glen Kwon – UW School of Pharmacy

Title: Co-Delivery of Antifungal Agents, Toxicity, and Efficacy against Invasive Candidiasis  
Sponsor: NIH R01 AI101157-01  
Amount: \$1,839,202  
Role: Collaborator (10%)  
PI: Glen Kwon - UW School of Pharmacy

Title: Prevention of *C. albicans* Biofilms by Beta-Peptide Release From Thin Films  
Sponsor: NIH R01 AI092225 - 01  
Dates: 7/2011-6/2016  
Role: Collaborator 10%  
PI: Palecek

Title: Synthesis and Study of Amphotericin B Derivatives  
Sponsor: NIH R01  
Dates: 2/1/14-1/31/17  
Role: Collaborator (1%)  
PI: Burke - UIUC

Title: Mechanisms of *Candida* biofilm immune evasion  
Sponsor: Burroughs Wellcome Fund  
Dates: 09/01/13 - 08/31/18  
Role: Mentor

PI: Nett

Title: Mechanism of *Candida* biofilm immune evasion

Sponsor: NIH/NIAID K08 AI-108727A

Dates:

Role: Mentor

PI: Nett

Title: Mechanisms of *Candida* biofilm immune evasion

Sponsor: Burroughs Wellcome Fund

Dates: 09/01/13 - 08/31/18

Role: Mentor

PI: Nett

Title: Extracellular Vesicles: A Novel Aspect of Fungal Biofilm Architecture and Drug Resistance

Sponsor: American Heart Association 15PRE25000003

Dates: June 2015-2017

Role: Mentor - Predoctoral Fellowship

Student: Kaitlin Mitchell

Title: Pharmacodynamic Optimization of Isavuconazole for Invasive Pulmonary Aspergillosis

Sponsor: Astellas

Amount: \$92,207

Dates: 2012-2014

Role: PI

Title: In vivo Pharmacodynamics of Ceftolozane Against *Streptococcus* and *Pseudomonas* in a Neutropenic Murine Thigh Infection Model

Sponsor: Cubist

Amount: 230,000

Dates: 2013-2014

Role: PI

Title: In vivo Pharmacodynamics of ACT452051 Gram Negative Bacilli in a Neutropenic Murine Thigh Infection Model

Sponsor: Actelion

Amount: 253,000

Dates: 2013-2014

Role: PI

Title: Novel therapeutic agents from the bacterial symbionts of Brazilian invertebrates

Sponsor: NIH U19 TW009872-01

Amount: \$ 5,154,718

Dates:

Role: Collaborator (10%)

PI: Jon Clardy - Harvard

#### Completed Grants

Title: Developing Novel Antibiotics Against *Yersina pestis*  
Sponsor: NIH-SBIR 2R44AI063616-03  
Amount: \$145,000  
Dates: 03/01/2006 - 02/28/2009, renewed 2010-2015  
Role: Collaborator (0%)  
PI: Lucy Ling – NovoBiotics

Title: Discovery of natural product-based drugs from bacterial symbionts of insects.  
Sponsor: NIH/NIGMS RC4 Challenge Grant GM096347  
Dates: 9/2010 – 8/2013  
Role: Co-I 5%  
PI: Currie

Title: In vivo PD Characterization of Novel Oral Echinocandin Molecules  
Sponsor: Seachaid  
Amount: \$99,000  
Dates: 2011-2013  
Role: PI

Title: In vivo PK/PD Modeling of a Novel Ketolide (CEM101) in a Murine Pneumonia Model  
Sponsor: Ordway Research Institute  
Amount: \$107,250  
Dates: 2011-2012  
Role: PI

Title: Clinical Pharmacodynamic Target Identification of Micafungin From Candidemia  
Sponsor: Astellas (Treatment Trials)  
Amount: \$56,000  
Dates: 2008-2012  
Role: PI

Title: In vivo PK/PD Modeling of a Novel GSK Compound Against Gram Negative Bacilli  
Sponsor: Ordway Research Institute  
Amount: \$107,250  
Dates: 2011-2012  
Role: PI

Title: In vivo Efficacy of Novel Seachaid Glycopeptides Against *Staphylococcus aureus* in a Murine Thigh Infection Model  
Sponsor: Seachaid  
Amount: \$66,000  
Dates: 2010-2012  
Role: PI

Title: Comparative In vivo Efficacy PK/PD Modeling of a Novel Novozymes Molecules Against Gram Negative Bacilli in a Murine Thigh Infection Model  
Sponsor: Novozymes  
Amount: \$39,000  
Dates: 2010-2012

Role: PI

Title: In vivo PK/PD Modeling of a Novel Sentinella Lantabiotics Against *S. aureus* in a Murine (Thigh Infection Model)  
 Sponsor: Sentinella  
 Amount: \$63,000  
 Dates: 2010-2012  
 Role: PI

Title: In vivo Pharmacodynamic Characterization of MUT056399, a Novel Bacterial Enoyl-ACP (Reductase Inhibitor, in the Murine Thigh Infection Model)  
 Sponsor: FAB Pharma  
 Amount: \$75,000  
 Dates: 2011-2012  
 Role: PI

Title: Patient Level Analysis of Randomized Candidemia Trials  
 Sponsor: Mycoses Study Group  
 Dates: 2009-2012  
 Role: PI (0%)

Title: Targeting Hybrid Histidine Kinase for Broad Spectrum Anti-fungal Therapy  
 Sponsor: NIH-NIAID RC1 AI086025 (Challenge Grant)  
 Dates: 09/26/09-08/31/11  
 Role: Co-I (5%)  
 PI: Klein

Title: Identification of the pharmacodynamic target for caspofungin and posaconazole used alone and in combination against drug susceptible and drug resistant *Aspergillus fumigatus* strains in a murine model of Invasive Pulmonary Aspergillosis (IPA).  
 Sponsor: Merck  
 Amount: \$75,185  
 Dates: 2010-2011  
 Role: PI

Title: Large-scale analysis of *Candida albicans* gene function  
 Sponsor: NIH AI057804-01  
 Amount: 0  
 Role: Collaborator (0% effort)  
 PI: Aaron Mitchell – Columbia Univ

Title: Mortality in Transplant Patients with Aspergillosis  
 Sponsor: NIH-NIAID K23 AI064613-01  
 Amount: 0  
 Role: Collaborator  
 PI: John Baddley –University of Alabama, Birmingham

Title: SBIR Phase 1 – Novel Amphotericin B Analogs  
 Sponsor: NIH

Role: Collaborator (with Richard Hutchinson – Centrose)

Title: Mechanisms of an *Aspergillus fumigatus* virulence mutant  
 Sponsor: NIH – NIAID R01 AI65728-01A1  
 Amount: \$175,000  
 Role: Co-PI (50% effort) (Co-PI Nancy Keller – UW Plant Pathology):

Title: Pharmacodynamics and Gene Expression in Antifungal Drug Resistance  
 Sponsor: NIH-NIAID  
 Amount: (no cost extension 4/07)  
 Dates: 4/01 – 4/06  
 Role: PI NIH K08: AI01767-01A1

Title: Prospective Surveillance of Invasive Fungal Infections Among Transplant Recipients  
 Sponsor: CDC  
 Dates: 4/2001 – 4/2006  
 Role: PI (UW site) for CDC PA#00055

Title: Validation of NCCLS Methods and Breakpoints for Extend-Spectrum Beta-Lactamase.  
 Sponsor: National Center for Infectious Diseases, CDC Applied Research on Antimicrobial Resistance  
 Amount: \$128,045  
 Role: Co-PI Co-PI William A. Craig

Title: BAMSG 2-01 A Randomized Double-Blind Placebo-Controlled Trial of Caspofungin versus Placebo as Prophylaxis of Invasive Candidiasis in High-risk Adults in the Critical Care Setting  
 Sponsor: NIH  
 Role: PI

Title: Mycosis Study Group #44: Fungal Infections in Liver Transplantation  
 Sponsor: NIH/NIAID  
 Role: PI

Title: Potentiators of fluconazole activity against *Candida sp.*  
 Sponsor: NIH-SBIR AI45271-02  
 Amount: \$30,000  
 Role: Collaborator with Influx

Title: Infectious Complications Associated with Alemtuzumab (Campath = anti-CD52) in Solid Organ Transplant Recipients: A Case Control Study  
 Sponsor: NIH-GCRC

Title: In vitro Susceptibility of Fungal Isolates From Reptiles to Antifungal Drugs.  
 Sponsor: ARAV Conservation  
 Amount: \$3,000  
 Role: Co-PI Co-PI Jean Pare, DVM – UW School of Veterinary Medicine

Title: In vivo Pharmacokinetics/Pharmacodynamics of an Oral Amphotericin B Analog,  
Sponsor: Acea (Corifungin)  
Amount: \$57,000  
Dates: 2010-2011  
Role: PI

Title: In vivo PK/PD of Novel ACT Compound  
Sponsor: Actellion  
Amount: \$66,000  
Dates: 2009-2011  
Role: PI (Andes)

Title: In vivo Pharmacokinetics/Pharmacodynamic Characterization of a Novel  
Oxazolidinone  
Sponsor: Trius  
Amount: \$65,000  
Dates: 2009-2010  
Role: PI (Andes)

Title: In vivo PK/PD Target Identification for the Echinocandin, Micafungin, Against  
*Candida* Species  
Sponsor: Astellas  
Amount: \$57,000  
Dates: 2009-2011  
Role: PI (Andes)

Title: In vivo Pharmacodynamic Target Investigation of Three Echinocandins Against  
Common *Candida* Species  
Sponsor: Merck  
Amount: \$67,562  
Dates: 2009-2011  
Role: PI (Andes)

Title: In vivo Pharmacodynamics of Two Novel Oral Glucan Synthase Inhibitors  
Sponsor: Merck  
Amount: \$112,000  
Dates: 2009-2010  
Role: PI: (Andes)

Title: In vivo Pharmacodynamic Characterization of Lysostaphin Analogues in a *S*  
*aureus* Infection Model  
Sponsor: InPharma  
Amount: \$25,000  
Dates: 2009-2010  
Role: PI (Andes)

Title: Pharmacodynamics of a New Glycopeptide, Dalbavancin, in a Murine Thigh  
Infection Model  
Sponsor: Vicuron Pharmaceuticals  
Amount: \$48,912



Role: PI

Title: Pharmacodynamics of a New Streptogramin, XRP2868, Against Gram Positive Bacteria in the Murine Thigh and Lung Infection Models  
 Sponsor: Aventis Pharmaceuticals  
 Amount: \$56,582  
 Role: PI

Title: Pharmacodynamics of a New Topoisomerase Inhibitor, AVE 6971, Against Gram Positive Bacteria in a Murine Thigh Infection Model  
 Sponsor: Aventis Pharmaceuticals  
 Amount: \$48,912  
 Role: PI

Title: Pharmacodynamics of a New Cephalosporin, TAK 599, in the Murine Thigh and Lung Infection Models  
 Sponsor: Peninsula Pharmaceuticals  
 Amount: \$60,417  
 Role: PI

Title: In vivo Characterization and Quantitation of the Pharmacodynamics of an Echinocandin, HMR3270  
 Sponsor: Aventis  
 Amount: \$26,000  
 Role: PI

Title: In vivo Pharmacodynamics of a New Generation Triazole, Ravuconazole  
 Sponsor: Bristol-Myers Squibb  
 Amount: \$27,000  
 Role: PI

Title: In vivo Pharmacodynamic Characterization of Voriconazole Against *Candida glabrata*  
 Sponsor: Pfizer  
 Amount: \$50,000  
 Role: PI

Title: In-vivo Characterization and Quantitation of the Pharmacodynamics of the New Triazole Posaconazole  
 Sponsor: Schering-Plough  
 Amount: \$27,497  
 Role: PI

Title: In-vivo Efficacy and Toxicity of Novel Nystatin Nanosphere Vehicles in a Neutropenic Murine Candidiasis Model  
 Sponsor: NanoCarrier  
 Amount: \$20,548  
 Role: PI

Title: Clear II Registry-Collaborative Exchange of Antifungal Research  
 Sponsor: Enzon Pharmaceuticals, Inc

Role: PI

Title: PathAlliance – Invasive Fungal Infection Surveillance Network

Sponsor: Astellas Pharmaceuticals

Role: PI

Title: Characterization of the In vivo Pharmacokinetics and Pharmacodynamics of a New Echinocandin, Anidulafungin, Against *Candida albicans* and *Candida glabrata*. 2007

Sponsor: Pfizer Pharmaceuticals

Dates: 2006-2007

Role: PI

Title: Characterization of the In vivo Pharmacokinetics and Pharmacodynamics of a New Echinocandin, Micafungin, Against *Candida albicans* and *Candida glabrata*.

Sponsor: Astella Pharmaceuticals

Amount: \$50,000

Dates: 2006-2007

Role: PI

Title: Characterization of the In vivo Pharmacokinetics and Pharmacodynamics of a Novel Plectasin Compound Against Multi-Drug Resistant Gram Positive Bacteria.

Sponsor: Novozyme

Amount: \$73,000

Dates: 2007-2008

Role: PI

Title: In vivo Characterization of the Pharmacodynamics of a New Carbapenem

Sponsor: Cerexa

Amount: \$97,000

Dates: 2007-2008

Role: PI

## **Educational Activities**

### **Research Mentoring**

#### Infectious Disease Fellows

Sue Wang 2001

John Christianson 2001

Jeannina Smith 2002-2005

Wendy Slattery 2003-2004

Nasia Safdar

Shravan Kethireddy 2007

Alex Lepak 2009-2013

Jeniell Nett 2011-2013

#### Medical Students and Residents

Alex Lepak 2002-2003

Jason Clark Summer 2002

Jeniell Nett – 2003 – Internal Medicine Resident

Kristie Vujnovich

Colleen Sherkow - 2006 NIH/GCRC Shapiro award  
Casey Herreforth - 2006 NIH/GCRC Shapiro award

#### Graduate Students

Jeniell Nett (Cellular and Molecular Biology/Hematology T32) graduated 2009  
Kelly Ross (Bacteriology Masters Program) graduated 2010  
Jonathan Cabezas Olcoz (Visiting student from Spain Jose Ponton mentor - 2013)  
Heather Taff (MSTP) graduated 2014  
Jessica Edwards (Bacteriology Masters Program) graduated 2012  
Caitlin Mitchell (Molecular Pathology) Present  
Eddie Dominguez (Molecular Pathology) Present

#### Post Doctoral Students

Solen Pichereu  
Jeniell Nett  
Alex Lepak  
Jonathan Cabezas

#### Graduate/Postgraduate Training Programs

2005-present	Trainer: Microbiology Doctoral Training Program
2005-present	Trainer: Kirschstein National Research Service Award - (NIH National Heart, Lung, and Blood Institute Grant: T32 HL07899)
2005-present	Trainer: Cellular and Molecular Biology Program
2008-present	Trainer: Microbes in Health and Disease T32
2012-present	Trainer: Cellular and Molecular Pathology

#### Undergraduate

Jonathan Wong, 2006 Research honors  
Kathleen Holoyda, 2006 Mycology research honors  
Brian Hoff, 2005 Biology 152  
Megan Hichwa, 2006 Biology 152  
Lane Benes, 2007 Biology 152  
Gwen Bone, 2007-2008  
Alex Ringeisen, 2007-2008  
Katherine Kozarek 2008  
Mike Cain 2008-2011  
Kyler Crawford 2008-11  
Elliot Thieleke 2011-13  
Kasey Reeves 2011-23  
Miguel Melendez 2012  
Anne Reda 2012-13  
Emily Reinicke 2012-14  
Abigael O'Brien 2015  
Michaela Madison 2014-15  
Sabyn Warrick 2014-15  
Steven Plesch 2014-

#### **Didactic Teaching Activities**

##### **Undergraduate**

<b>Years</b>	<b>Course</b>	<b>Role</b>	<b>Time</b>
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<b>Title</b>			
1998-present	MMI 410 Medical Mycology	Lecturer and Honors project mentor Lecture titles: 1. Antifungal therapy 2. Fungal diagnosis 3. Candida -Clinical 4. Candida - Pathogenesis	1 h lecture 4 times per year, 20 h per year honor project

### **Graduate School**

<b>Years</b>	<b>Course Title</b>	<b>Role</b>	<b>Time</b>
1999-present	MMI 504 Infectious Diseases	Lecturer Lecture titles: 1. Fungal infections	1 h lecture 1 time per year
2005-present	MMI 655 Biology and Genetics of Fungi	Lecturer Lecture titles: 1. Candida - clinical 2. Candida - pathogenesis	1 h lecture 2 times per year
2006-present	MMI 773 Eukaryotic Pathogenesis	Lecturer Lecture title: Candida biofilms and drug resistance	1 h lecture 1 time per year

### **Medical Students**

<b>Years</b>	<b>Course Title</b>	<b>Role</b>	<b>Time</b>
1994-1996	Clinical Medicine and Practice	Discussant of multiple clinical topics	1 h per week for 1 semester
1996-2001	3rd year mentor – internal medicine	Discussant of multiple clinical topics	10 h per week for 1 month per year
1997-present	MMI701-702 Infection and Immunity	Small group discussant of multiple topics	1-2 h up to 6 times per year
2001-present	Pharmacology 727	Lecturer Lecture titles: 1. Antifungals 1 2. Antifungals 2 3. Clinical antivirals	1 h per lecture 3 times per year
2001-present	Senior Therapeutics	Lecturer: Lecture title: Antifungal therapy	1 h lecture 1 time per year
2006-present	Infection and Immunity (Now Foundations in Medicine 2)	Lecturer: Lecture titles 1. Antifungal drug resistance	2 h lecture 1 time per year
1999-present	Infectious Diseases Clinical Service	Bedside teaching and daily didactic sessions	4-5 two week blocks, 1 h per day didactic, 3-4 h per day bedside teaching

2011-present	MSTP Pathophysiology Round Table	Candida Biofilm Resistance	1 h
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### Resident and Fellows

Years	Course Title	Role	Time
1994-1995	Internal Medicine Morning Report	Discussant of multiple clinical topics	1 h per day for 200 days
1999-present	Infectious diseases fellowship curriculum	Lecturer Titles: antifungal therapy, fungal diagnosis, candidiasis, aspergillosis, outpatient mycology, histoplasmosis, vulvovaginal candidiasis, antifungal prophylaxis and febrile neutropenia, asymptomatic bacteriuria, bacterial meningitis, intra- abdominal infections	1 h up to 11 times per year
1999-present	Infectious disease fellowship	Clinical bedside teaching	2-4 h per day up to 9 weeks per year
1997-present	Internal Medicine Tissue Conference	Discussant; Topics: tuberculosis meningitis 1997, septic thrombosis 1997, ehrlichiosis 1998, hematologic diagnosis of infection 1998, candidiasis 1998, histoplasmosis 2001, fungal brain abscess 2003	1 h each topic
2004-present	Infection diseases fellowship	Create and update web- based curriculum	200 h initial, 40 h per year since
2005-2006	Internal Medicine Resident Career Week	Lecturer: topics 1. finding your nitch, 2. time management	1 h each
1999-present	Infectious Diseases Clinical Service	Bedside teaching and daily didactic sessions	4-5 two week blocks, 1 h per day didactic, 3-4 h per day bedside teaching
2008	Hematology Fellows	Antifungal Therapy	1 h

### Continuing Medical Education

Years	Course Title	Lecture	Location
1999	University of Wisconsin	Community-	University of

	Grand Rounds	acquired pneumonia	Wisconsin
	University of Wisconsin Radio Lecture	Community-acquired pneumonia	University of Wisconsin
	Meriter Hospital Grand Rounds	Community-acquired pneumonia	Meriter Hospital, Madison, WI
	University of Wisconsin - Update in Infectious Diseases	Antifungal therapy	Madison
	University of Wisconsin - Update in Infectious Diseases	Community-acquired pneumonia	Madison
2000	Wisconsin Infectious Diseases Society of America	Community-acquired pneumonia	Madison
	University of Wisconsin Website lecture	Antifungal therapy	University of Wisconsin
2001	University of Wisconsin Pulmonary Grand Rounds	Invasive aspergillosis	University of Wisconsin
	Sinusitis Update	Customizing Antibiotic Therapy of Sinusitis: Use of Pharmacodynamics	Coral Gables, FL
	Infectious Diseases Society, University of Wisconsin, Lacrosse	Systemic antifungal therapy	University of Wisconsin Lacrosse, WI
	University of Wisconsin – Lacrosse Internal Medicine Resident Conference	Nosocomial candidiasis	University of Wisconsin Lacrosse, WI
	University of Wisconsin - Update in Infectious Diseases	Outpatient fungal infection management	University of Wisconsin
	University of Wisconsin - Update in Infectious Diseases	Management of Upper respiratory tract infections	University of Wisconsin
	University of Wisconsin Grand Rounds	Community-acquired pneumonia	University of Wisconsin
2002	University of Wisconsin Dept of Medicine Grand Rounds	Management of chronic sinusitis	University of Wisconsin
	University of Wisconsin Transplant Grand Rounds	Advances in systemic antifungal therapy	University of Wisconsin
	National webcast	Advances in management of sinusitis in the era	

		of antibiotic resistance – pharmacodynamic impact	
2003	Meriter Hospital Grand Rounds	Advances in management of acute and chronic rhinosinusitis	Meriter Hospital, Madison, WI
	Regional CME	Advances in management of otitis media in an era of antibiotic resistance	Minneapolis, MN
	University of Wisconsin – Lacrosse Internal Medicine Grand Rounds	Advances in the epidemiology and therapy of fungal infections.	University of Wisconsin Lacrosse, WI
	University of Wisconsin – Surgery /Trauma Grand Rounds	Candidiasis in the surgical intensive care unit	University of Wisconsin
2004	University of Wisconsin - Update in Infectious Diseases	Fungal infections – frequently asked questions	University of Wisconsin
	University of Wisconsin - Update in Infectious Diseases	Management of upper respiratory tract infection	University of Wisconsin
	University of Wisconsin Medical Grand Rounds	Fungal infections – frequently asked questions	University of Wisconsin
2005	Gunderson Clinic Medical Grand Rounds	Fungal infections – frequently asked questions	Gunderson Clinic
	University of Wisconsin - Update in Infectious Diseases	Community-acquired pneumonia	University of Wisconsin
	University of Wisconsin - Update in Infectious Diseases	Antifungal update	University of Wisconsin
2006	University of Wisconsin Pulmonary Grand Rounds	Candidemia	University of Wisconsin
	Medical College of Wisconsin Transplant Grand Rounds	Antifungal therapy	Medical College of Wisconsin, Milwaukee, WI
2008	University of Wisconsin - Update in Infectious Diseases	Fungal infections – frequently asked questions	University of Wisconsin
	University of Wisconsin - Update in Infectious Diseases	Management of upper respiratory tract infection	University of Wisconsin
2009	University of Wisconsin –	Mycology FAQ	Gunderson Clinic

	Lacrosse Grand Rounds		
	Appleton Hospital Grand Rounds	Mycology FAQ	
	University of Wisconsin – Milwaukee Grand Grounds	Mycology FAQ	
	University of Wisconsin Infectious Diseases CME	Antifungal Therapy and Cases	
2010	UW Infectious Disease - Antimicrobial Therapeutics	Antifungal Therapy	University of Wisconsin, Madison
2011	University of Wisconsin - Update in Infectious Diseases	Antifungal Therapy	University of Wisconsin
	University of Wisconsin - Update in Infectious Diseases	Sinusitis	University of Wisconsin
2013	University of Wisconsin - Update in Infectious Diseases	When Things Don't Go as Planned: Pitfalls in the Use of Common Antibiotics	University of Wisconsin
2014	University of Wisconsin - Department of Medicine Grandrounds	Antimicrobial Resistance - Global Crisis with Local Solutions	University of Wisconsin
	University of Wisconsin - Department of Transplantation Grandrounds	Antimicrobial Resistance - Global Crisis with Local Solutions	University of Wisconsin

### **Thesis Committee Member**

1. DaWoon Chung – Nancy Keller mentor (Plant Pathology)
2. Spencer Hoover – Rob Stricker mentor (Medical Microbiology)
3. Fang Li – Sean Palecek mentor (School of Engineering)
4. Greg Gauthier NIH Career Development Mentor Committee – Bruce Klein mentor
5. Fang Yun Lim – Nancy Keller mentor (Masters Bacteriology)
6. Brad Tebbits – Bruce Klein mentor (Medical Microbiology)
7. Mitra Farnoodian - Nancy Keller mentor (Masters Bacteriology)
8. Adam Bailey – Dave O'Connor mentor
9. Michael Bucci – David Eide mentor (MDTP)
10. Stephanie Lawry - Bruce Klein mentor (Medical Microbiology)
11. Heidi Horn - Cameron Currie mentor
12. Jenny Bratburd - Cameron Currie mentor

### **Faculty Mentoring**

Vijay Vidyasagar – Dept of Medicine, Nephrology  
Erin Brooks - Dept of Pathology  
Kara Gross - Dept of Medicine, Pulmonary Critical Care

### **Service/Committees:**



## **Journal Editorial Service**

Section (Associate) Editor

Antimicrobial Agents and Chemotherapy

Mayo Clinic Proceedings – Infectious Diseases Section

PLoS One

### Editorial Board

1. Antimicrobial Agents and Chemotherapy
2. Journal of Infectious Diseases
3. Eukaryotic Cell
4. Diagnostic Microbiology and Infectious Diseases
5. Mayo Clinic Proceedings
6. Virulence
7. Medical Mycology
8. Pharmaceutics
9. Frontiers in Mycology
10. PLoS One

### Ad Hoc Reviewer

11. Proceedings of the National Academy of Sciences
12. PLoS Pathogens
13. Infection and Immunity
14. Clinical Infectious Diseases
15. Nature Reviews Microbiology
16. Infection Control Hospital Epidemiology
17. The Lancet Infectious Diseases
18. Nature Protocols
19. Faculty of 1000
20. Clinical Pharmacokinetics
21. Expert Opinion on Pharmacotherapy
22. Journal of Antimicrobial Chemotherapy
23. Clinical Microbiology and Infection
24. Journal of Respiratory Diseases
25. Drug Disposition and Biopharmaceutics
26. Drugs
27. Research in Veterinary Science
28. European Journal of Clinical Microbiology and Infectious Diseases
29. Mycoses
30. Journal of Medical Microbiology
31. Scandinavian Journal of Infectious Diseases
32. Biomed Central – Infectious Diseases
33. FEMS Yeast Research
34. Emerging Infectious Diseases Journal – CDC
35. Biochemical Pharmacology
36. Journal of Clinical Microbiology
37. Transplantation
38. Pediatric Infectious Diseases Journal
39. Oral Diseases
40. Future Microbiology
41. Mycopathologia
42. Microbes and Infection

43. Environmental Microbiology
44. AAPS Journal
45. FEMS Microbiology Letters
46. Expert Opinion on Drug Metabolism and Toxicology
47. Fungal Genetics and Biology
48. Clinical Pharmacology in Drug Development
49. Drug Discovery Today

### Grant Review Service

Years	Grant Source/Role
2001, 2002, 2003	VA Merit, ad hoc
2004	NIH/NIAID R44, ad hoc
2004	CDC Transplant Infectious Diseases, ad hoc
2005	The Wellcome Trust, ad hoc
2005	University of Wisconsin, GCRC CReF Grant
2005	CDC Epi-Center for Prevention of Health Care Associated Infection, ad hoc
2006	University of Texas, Houston, Career Development Grants, ad hoc
2006	NIH/NIAID R34 and UO1, ad hoc
2007	Infectious Diseases Clinical Research Program of The Uniformed Services University
2007	University of Wisconsin - Medical Education and Research Committee (MERC) New Investigator Program.
2007	CDC RFA-AI-07-002 KO1 Young Investigator - Special Emphasis Panel
2007	NIH-NIAID RFA AI 07 002 Asthma and Allergic Diseases Cooperative Research Centers
2008	NIH-NIAID RFA RFA-AI-07-025 Pharmacological Approaches to Combating Antimicrobial Resistance
2008	The Wellcome Trust, ad hoc
2008	University of Maryland School of Medicine
2009	NWO Division for Earth and Life Sciences
2009	NIH- Special Emphasis Panel/Scientific Review Group 2009/10 ZRG1 AARR-D (04) M
2009	NIH-NIAID Special Emphasis Panel
2010	NIH RC4 Panel
2010	NIH/NIDCR Oral Microbiome Panel
2010	Medical Research Council – United Kingdom
2011	NIH ZRG1 IDM-S (03) Topics on Infectious Diseases and Microbiology
2011	NIH ZRG1 IDM-L (02)
2011	University of Wisconsin – PERC
2011	University of Wisconsin - Medical School Research Committee
2011	NIH Drug Resistance Drug Development ZRG IDM-P(02)M
2011	CDC Antimicrobial Resistance Program
2012	United States – Israel Binational Science Foundation
2012	NIH ZRG1 IDM-V (12) Non HIV Infectious Agent Detection/Diagnostics, Food Safety, Sterilization/Disinfection and Bioremediation
2013	NIH Non-HIV Diagnostics, Food Safety, Sterilization/Disinfection and Bioremediation Special Emphasis Panel [ZRG1 IDM-V (12)]
2014	NIH PTHE

2015	NIH PTHE
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### Committee Service

Years	Service/Role
<b>UW Hospital</b>	
1995-96, 1999-2002	UWHC Medical Practice Committee
1995-96	UW HC Clinical Practice Committee
1999-present	UWHC Antimicrobial Use Subcommittee, Pharmacy and Therapeutic Committee
2000	UWHC Community-Acquired Pneumonia Guidelines Committee
2007	UW Hospital Cellulitis Guideline
2010-present	UWHC Physicians Health Link Advisory Group (PHLAG)
2009-present	Director, UWHC Infectious Diseases Clinic
<b>Department</b>	
1994-96	Dept Medicine, Resident/Fellow Committee
2002-2012	UW Department of Medicine Information Systems Committee, Chair
2006-present	Dept of Medicine Executive Committee
2006	Dept of Medicine Research Administrator Search Committee
1999-present	Infectious Diseases Clinical Consult Service
1999-present	Infectious Diseases Outpatient Clinic
2006-2014	ID Fellowship Program Director and Chair Education Committee
2007-present	UW Dept of Medicine Post-Promotion Committee
2004-present	Dept of Medicine Research Committee
2010-2011	Chair, Search Committee Head, Division of Nephrology, UW DOM
2010-present	UW Dept of Medicine Division Head Committee
2011	Chair, UW Dept of Medicine Research Day Symposium
2011	Co-Chair, Search Committee, Head, Division of Cardiology, UW DOM
2011-present	
2011-	UW DOM - IMPACT Program
2012	UW DOM – MAMA Committee
2015	UW DOM - Search Committee Vice Chair for Research
<b>UW Campus</b>	
2005	UW Pediatric Infectious Diseases Search Committee
2007-2014	UW Faculty Senate
1998-present	VA Chair, Research Biosafety Committee
1999	Search Committee for position of Director of the Office of Clinical Trials at the University of Wisconsin, Madison
2002-present	General Clinical Research Center – Proposal Review Committee (now Clinical and Translational Research Review Committee)
2003-present	VA Animal Research Committee (IACUC)
2005	WISLE Site Visit
2005-2007	Microbial Doctoral Training Program Admissions Committee
2008-2012	UW Medical School Research Committee
2008-2012	Institutional Biosafety Committee – UW
2010-present	Medical Scientist Training Program (MSTP) Steering Committee
2013	Search Committee for Chair of the Department of Ophthalmology and Visual Sciences

2015	Search Committee School of Pharmacy - Medicinal Chemistry
<b>National</b>	
2003, 2004, 2006, 2010, 2011, 2012, 2013, 2014	Infectious Diseases Society of America Abstract Review Committee
2003-2012	CDC TRANSNET Oversight Committee
2000-present	NIH/Mycoses Study Group Member
2004-2006	Clinical Laboratory Standards Institute (Antifungal Subcommittee) Advisor 2004-2006, Elected Voting Member 2006-present
2005-2008	Frontline Fungal Infection Education Steering Committee
2006-present	Mycoses Study Group Education Committee
2006-2007, 2013-2014	Infectious Diseases Society of America – Expert panel to update Candidiasis treatment guideline
2006-2007	American Academy of Otolaryngology, Head and Neck Surgery Sinusitis Guidelines Group
2007-2014	ASM Candidiasis Finance Committee
2007-2013	Co-Chair, Mycosis Study Group Education Committee
2002-2006	International Society of Anti-infective Pharmacology – treasurer
2006-2010	International Society of Anti-infective Pharmacology – president
2009-present	Infectious Diseases Society of America Annual Program Committee
2012-2013	CDC Fungal Meningitis Outbreak - Clinician Network
2015-present	Mycoses Study Group - Steering Committee