

CURRICULUM VITAE

MICHAEL B. KAYS, PHARM.D., FCCP

PERSONAL INFORMATION

Work Address: Purdue University
College of Pharmacy
Department of Pharmacy Practice
Fifth Third Bank Faculty Office Building, 3rd Floor
640 Eskenazi Avenue
Indianapolis, IN 46202

Home Address:

Office Phone: (317) 880-5432

Office Fax: (317) 880-0568

Date of Birth: May 8, 1962

E-mail Address: kaysm@purdue.edu or mkays@iupui.edu

CURRENT EMPLOYMENT

Associate Professor of Pharmacy Practice
College of Pharmacy
Purdue University
Indianapolis, Indiana
July 2002 – present

ADDITIONAL APPOINTMENTS

Adjunct Associate Professor of Medicine
School of Medicine
Indiana University
Indianapolis, Indiana
July 2002 – present

Clinical Specialist – Infectious Diseases
Clarian Health Partners, Inc., Methodist Hospital
Indianapolis, Indiana
May 1998 - present

PREVIOUS ACADEMIC APPOINTMENTS

Assistant Professor of Pharmacy Practice
Purdue University School of Pharmacy
Indianapolis, Indiana
May 1998 – June 2002

Adjunct Assistant Professor of Medicine
Indiana University School of Medicine
Indianapolis, Indiana
May 1998 – June 2002

Assistant Professor
College of Pharmacy
Medical University of South Carolina
Charleston, South Carolina
August 1991 - October 1994

Clinical Instructor
College of Pharmacy
Medical University of South Carolina
Charleston, South Carolina
1989 - 1991

BOARD CERTIFICATION

Pharmacotherapy Specialist
September 1992
December 1999

Added Qualifications in Infectious Diseases
December 1999

POSTGRADUATE EDUCATION AND TRAINING

Fellowship	Infectious Diseases Pharmacotherapy Medical University of South Carolina Preceptor: Roger L. White, Pharm.D. July 1, 1989 - June 30, 1991
------------	--

Residency	Infectious Diseases Pharmacotherapy Medical University of South Carolina Preceptor: Roger L. White, Pharm.D. July 1, 1988 - June 30, 1989
-----------	--

ACADEMIC DEGREES

Doctor of Pharmacy
Medical University of South Carolina
1988

Bachelor of Science, Pharmacy
Saint Louis College of Pharmacy
1985

PROFESSIONAL EXPERIENCE

May 1987 - September 1994	Staff Pharmacist Nuclear Pharmacy Medical University Hospital Charleston, South Carolina
August 1982 - August 1986	Pharmacy Intern/Staff Pharmacist The Jewish Hospital of Saint Louis Saint Louis, Missouri
January 1986 - August 1986	Staff Pharmacist (part-time) Lutheran Medical Center Saint Louis, Missouri
January 1985 - August 1986	Pharmacy Intern/Staff Pharmacist (part-time) Baxter-Travenol Laboratories, Inc. Earth City, Missouri

PUBLICATIONS (Peer-Reviewed)

1. Chung EK, Cheatham SC, Fleming MR, **Kays MB**. Population pharmacokinetics and pharmacodynamics of doripenem in obese, hospitalized patients. *Annals of Pharmacotherapy* 2016; DOI: 10.1177/1060028016676831 (published online 11/13/2016).
2. Chung EK, Cheatham SC, Fleming MR, Healy DP, **Kays MB**. Population pharmacokinetics and pharmacodynamics of meropenem in non-obese, obese, and morbidly obese patients. *Journal of Clinical Pharmacology* 2016; DOI: 10.1002/jcph.812 (published online 9/22/2016).
3. Lewis SJ, **Kays MB**, Mueller BA. Determination of carbapenem dosing recommendations in SHIFT renal replacement therapy using Monte Carlo simulations. *Journal of Clinical Pharmacology* 2016;56:1277-1287.

PUBLICATIONS (Continued)

4. Nichols K, Chung EK, Knoderer CA, Dees J, Healy DP, Buenger LE, Crumby AS, **Kays MB**. Population pharmacokinetics and pharmacodynamics of extended-infusion piperacillin and tazobactam in critically ill children. *Antimicrobial Agents and Chemotherapy* 2016;60:522-531.
5. Chung EK, Cheatham SC, Fleming MR, Healy DP, Shea KM, **Kays MB**. Population pharmacokinetics and pharmacodynamics of piperacillin and tazobactam administered by prolonged infusion in obese and non-obese patients. *Journal of Clinical Pharmacology* 2015;55:899-908.
6. Nichols KR, Karmire LC, Cox EG, **Kays MB**, Knoderer CA. Implementing extended-infusion cefepime as standard of care in a children's hospital. *Annals of Pharmacotherapy* 2015;49:419-426.
7. Pence LM, Mock CM, **Kays MB**, Atkinson KM, Muloma EW, Erdman SM. Correlation of adherence to the 2012 Infectious Diseases Society of America practice guidelines with patient outcomes in the treatment of diabetic foot infections in an outpatient parenteral antimicrobial program. *Diabetic Medicine* 2014;31:1114-1120.
8. **Kays MB**, Fleming MR, Cheatham SC, Chung EK, Juenke JM. Comparative pharmacokinetics and pharmacodynamics of doripenem and meropenem in obese patients. *Annals of Pharmacotherapy* 2014;48:178-186.
9. Cheatham SC, Fleming MR, Healy DP, Chung EK, Shea KM, Humphrey ML, **Kays MB**. Steady-state pharmacokinetics and pharmacodynamics of meropenem in morbidly obese, hospitalized patients. *Journal of Clinical Pharmacology* 2014;54:324-330.
10. Cheatham SC, Fleming MR, Healy DP, Chung CEK, Shea KM, Humphrey ML, **Kays MB**. Steady-state pharmacokinetics and pharmacodynamics of piperacillin and tazobactam administered by prolonged infusion in obese patients. *International Journal of Antimicrobial Agents* 2013;41:52-56.
11. Nichols KR, Knoderer CA, Cox EG, **Kays MB**. System-wide implementation of the use of extended-infusion piperacillin/tazobactam dosing strategy: feasibility of utilization from a children's hospital perspective. *Clinical Therapeutics* 2012;34:1459-1465.
12. Spencer DD, Jacobi J, Juenke JM, Fleck JD, **Kays MB**. Steady-state pharmacokinetics of intravenous levetiracetam in neurocritical care patients. *Pharmacotherapy* 2011;31:934-941.
13. Cheatham SC, Shea KM, Healy DP, Humphrey ML, Fleming MR, Wack MF, Smith DW, Sowinski KM, **Kays MB**. Steady-state pharmacokinetics and pharmacodynamics of cefepime administered by prolonged infusion in hospitalized patients. *International Journal of Antimicrobial Agents* 2011;37:46-50.

PUBLICATIONS (Continued)

14. Kaye KS, Auwaerter P, Bosso JA, Dean NC, Doern GV, **Kays MB**, Pogue JM, Ritchie DJ, Wispelwey B. Strategies to address appropriate fluoroquinolone use in the hospital. *Hospital Pharmacy* 2010;45:844-853.
15. Decker BS, **Kays MB**, Kraus MA, Moe SM, Sowinski KM. Vancomycin pharmacokinetics and pharmacodynamics during short daily hemodialysis. *Clinical Journal of the American Society of Nephrology* 2010;5:1981-1987.
16. Shea KM, Cheatham SC, Wack MF, Smith DW, Sowinski KM, **Kays MB**. Comparative pharmacodynamics of intermittent and prolonged infusions of piperacillin/tazobactam using steady-state pharmacokinetic data from hospitalized patients. *Annals of Pharmacotherapy* 2009;43:1747-1754.
17. Shea KM, Cheatham SC, Wack MF, Smith DW, Sowinski KM, **Kays MB**. Steady-state pharmacokinetics and pharmacodynamics of piperacillin/tazobactam administered by prolonged infusion in hospitalized patients. *International Journal of Antimicrobial Agents* 2009;34:429-433.
18. Cheatham SC, **Kays MB**, Smith DW, Wack MF, Sowinski KM. Steady-state pharmacokinetics and pharmacodynamics of meropenem in hospitalized patients. *Pharmacotherapy* 2008;28:691-698.
19. **Kays MB**, Lisek CR, Denys GA. Comparative in vitro and bactericidal activities of telithromycin against penicillin-nonsusceptible, levofloxacin-resistant, and macrolide-resistant *Streptococcus pneumoniae* by time-kill methodology. *International Journal of Antimicrobial Agents* 2007;29:289-294.
20. **Kays MB**, Zhanel GG, Reimann MA, Jacobi J, Denys GA, Smith DW, Wack MF. Selection of a *gyrA* mutation and treatment failure with gatifloxacin in *Streptococcus pneumoniae* with a pre-existing *parC* mutation. *Pharmacotherapy* 2007;27:221-226.
21. Zhang X, Overholser BR, **Kays MB**, Sowinski KM. Gatifloxacin pharmacokinetics in healthy men and women. *Journal of Clinical Pharmacology* 2006;46:1154-1162.
22. **Kays MB**, Overholser BR, Lagvankar S, Goldman M, Sowinski KM. Effect of Ensure on the oral bioavailability of gatifloxacin in healthy volunteers. *Pharmacotherapy* 2005;25:1530-1535.
23. Overholser BR, **Kays MB**, Lagvankar S, Goldman M, Sowinski KM. Pharmacokinetics of intravenously administered levofloxacin in men and women. *Pharmacotherapy* 2005;25:1310-1318.

PUBLICATIONS (Continued)

24. Overholser BR, **Kays MB**, Forrest A, Sowinski KM. Sex-related differences in the pharmacokinetics of oral ciprofloxacin. *Journal of Clinical Pharmacology* 2004;44:1012-1022.
25. Sowinski KM, **Kays MB**. Determination of ciprofloxacin concentrations in human serum and urine by HPLC with ultraviolet and fluorescence detection. *Journal of Clinical Pharmacy & Therapeutics* 2004;29:381-387.
26. **Kays MB**, Overholser BR, Mueller BA, Moe SM, Sowinski KM. Effects of sevelamer hydrochloride and calcium acetate on the oral bioavailability of ciprofloxacin. *American Journal of Kidney Diseases* 2003;42:1253-1259.
27. Overholser BR, **Kays MB**, Sowinski KM. Determination of gatifloxacin in human serum and urine by high performance liquid chromatography with ultraviolet detection. *Journal of Chromatography B* 2003;798:167-173.
28. Sowinski KM, Lucksiri A, **Kays MB**, Scott MK, Mueller BA, Hamburger RJ. Levofloxacin pharmacokinetics in end-stage renal disease and removal by the CAHP-210 hemodialyzer. *American Journal of Kidney Diseases* 2003;42:342-349.
29. **Kays MB**, Wack MF, Smith DW, Denys GA. Azithromycin failure in the treatment of community-acquired pneumonia caused by *Streptococcus pneumoniae* resistant to macrolides by a 23S rRNA mutation. *Diagnostic Microbiology and Infectious Disease* 2002;43:163-165.
30. Liang H, **Kays MB**, Sowinski KM. Separation of levofloxacin, ciprofloxacin, gatifloxacin, moxifloxacin, trovafloxacin, and cinoxacin by high-performance liquid chromatography: application to levofloxacin determinations in human plasma. *Journal of Chromatography B* 2002;772:53-63.
31. **Kays MB**, Smith DW, Wack MF, Denys GA. Levofloxacin treatment failure with probable emergence of resistance in pneumonia caused by *Streptococcus pneumoniae*. *Pharmacotherapy* 2002;22:395-399.
32. **Kays MB**, Graff MA. Comparison of broth microdilution and E-test for determining fluoroquinolone activity against *Streptococcus pneumoniae*. *Annals of Pharmacotherapy* 2002;36:416-422.
33. **Kays MB**, Genys GA. Fluoroquinolone susceptibility, resistance, and pharmacodynamics versus clinical isolates of *Streptococcus pneumoniae* from Indiana. *Diagnostic Microbiology and Infectious Disease* 2001;40:193-198.
34. **Kays MB**, White RL, Friedrich LV. Effect of serum from different patient populations on the serum bactericidal test. *Journal of Antimicrobial Chemotherapy* 2001;48:417-420.

PUBLICATIONS (Continued)

35. **Kays MB**, Denys GA. In vitro activity and pharmacodynamics of azithromycin and clarithromycin versus *Streptococcus pneumoniae* based on serum and intrapulmonary pharmacokinetics. *Clinical Therapeutics* 2001;23:413-424.
36. **Kays MB**, Conklin M. Comparative in vitro activity and pharmacodynamics for five fluoroquinolones against clinical isolates of *Streptococcus pneumoniae*. *Pharmacotherapy* 2000;20:1310-1317.
37. **Kays MB**. Comparison of five β -lactam antibiotics against common nosocomial pathogens using the time above MIC at different creatinine clearances. *Pharmacotherapy* 1999;19:1392-1399.
38. **Kays MB**, Wood KK, Miles DO. In vitro activity and pharmacodynamics of oral β -lactam antibiotics against *Streptococcus pneumoniae* from southeast Missouri. *Pharmacotherapy* 1999;19:1308-1314.
39. Friedrich LV, White RL, **Kays MB**, Burgess DS. Drug degradation during HPLC analysis of aztreonam: Effect on pharmacokinetic parameter estimation. *Annals of Pharmacotherapy* 1994;28:444-446.
40. Nicolau DP, White RL, Friedrich LV, **Kays MB**. The costs of burn care: an analysis with an emphasis on the use of parenteral antimicrobials. *Journal of Burn Care & Rehabilitation* 1994;15:244-250.
41. Kim-Sing A, **Kays MB**, James VE, Weart CW. Intravenous streptomycin use in a patient with *Enterococcus faecalis* demonstrating high-level gentamicin resistance. *DICP Annals of Pharmacotherapy* 1993;27:712-714.
42. White RL, **Kays MB**, Friedrich LV, Del Bene VE. Impact of different statistical methodologies on the evaluation of the in vitro MICs for *Bacteroides fragilis* of selected cephalosporins and cephamycins. *Journal of Antimicrobial Chemotherapy* 1993;31:57-64.
43. **Kays MB**, White RL, Gatti G, Gambertoglio JG. Ex vivo protein binding of clindamycin in sera with normal and elevated alpha-1 acid glycoprotein concentrations. *Pharmacotherapy* 1992;12:50-55.
44. Friedrich LV, White RL, **Kays MB**, Burgess DS. Pharmacoeconomic evaluation of treatment of penetrating abdominal trauma. *American Journal of Hospital Pharmacy* 1992;49:590-594.
45. **Kays MB**, White RL, Friedrich LV, Del Bene VE. Evaluation of cephalosporins/cephamycins with antianaerobic activity by integrating microbiologic and pharmacokinetic properties. *Clinical Therapeutics* 1991;13:596-605.

PUBLICATIONS (Continued)

46. Friedrich LV, White RL, **Kays MB**, Brundage DM, Yarbrough D. Aztreonam pharmacokinetics in burn patients. *Antimicrobial Agents & Chemotherapy* 1991;35:57-61.
47. Friedrich LV, White RL, Brundage DM, **Kays MB**, Friedman RJ. The effect of tourniquet inflation on cefazolin tissue penetration during total knee arthroplasty. *Pharmacotherapy* 1990;10:373-377.
48. White RL, **Kays MB**, Friedrich LV, Brown EW, Koonce JR. Pseudoresistance of *Pseudomonas aeruginosa* resulting from degradation of imipenem in an automated susceptibility testing system with predried panels. *Journal of Clinical Microbiology* 1991;29:398-400.
49. Friedman RJ, Friedrich LV, White RL, **Kays MB**, Brundage DM, Graham J. Antibiotic prophylaxis and tourniquet inflation in total knee arthroplasty. *Clinical Orthopedics* 1990;260:17-23.
50. White RL, **Kays MB**, Armstrong TA, Friedrich LV. Effects of supraphysiologic temperature and broth dilution on serum protein binding. *Antimicrobial Agents & Chemotherapy* 1990;34:1257-1258.

PUBLICATIONS – Other

1. **Kays MB**. Should azithromycin no longer be considered a drug of choice for community-acquired pneumonia because of its potential to cause cardiovascular death – CON. *Canadian Journal of Hospital Pharmacy* 2013;66(5):328-331.
2. **Kays MB**. Principles and Practice of Infectious Diseases, Mandell GL, Bennett JE, Dolin R, eds. 7th edition. Philadelphia: Elsevier Churchill Livingstone. *Annals of Pharmacotherapy* 2010;44:1510-1511.
3. **Kays MB**. The pharmaceutical management of respiratory tract infections. *Adv Stud Pharm* 2005;2:219-230.
4. **Kays MB**. Comparison of five β -lactam antibiotics against common nosocomial pathogens using the time above MIC at different creatinine clearances – a comment (Author's Reply). *Pharmacotherapy* 2000;20:596-598.
5. **Kays MB**. Formulary considerations to manage the spread of vancomycin-resistant enterococci. *Challenges in Managing Resistance* 2000;2(5):1-8.
6. White RL, **Kays MB**, Friedrich LV, Koonce JR, Brown EW. External factors affecting imipenem performance in dried microdilution MIC plates (Author's Reply). *Journal of Clinical Microbiology* 1992;30:535-536.

PUBLICATIONS – Other (Continued)

7. **Kays MB.** Antibiotic Update. Drug Use in Surgery. Drug Information Center, Medical University of South Carolina, Charleston, South Carolina, Jan/Feb 1988.

BOOK CHAPTERS

1. **Kays MB.** Rhinosinusitis. In: Schwinghammer TL, Koehler JM, eds. *Pharmacotherapy Casebook: A Patient-Focused Approach*. 10th edition. New York: McGraw-Hill (in press).
2. **Kays MB.** Tuberculosis. In: Alldredge BK, Corelli RL, Ernst ME, Guglielmo BJ, Jacobson PA, Kradjan WA, Williams BR, eds. *Koda-Kimble and Young's Applied Therapeutics: The Clinical Use of Drugs*. 11th edition. Philadelphia: Lippincott Williams & Wilkins (in press).
3. **Kays MB.** Rhinosinusitis. In: Schwinghammer TL, Koehler JM, eds. *Pharmacotherapy Casebook: A Patient-Focused Approach*. 9th edition. New York: McGraw-Hill, 2014, Chapter 123, pp. 326-328.
4. **Kays MB.** Tuberculosis. In: Dong BJ, Elliott DP, eds. *Ambulatory Care Self-Assessment Program (ACSAP), Infection Primary Care Book 2*. Lenexa: American College of Clinical Pharmacy, 2013, pp. 91-110.
5. **Kays MB.** Tuberculosis. In: Alldredge BK, Corelli RL, Ernst ME, Guglielmo BJ, Jacobson PA, Kradjan WA, Williams BR, eds. *Koda-Kimble and Young's Applied Therapeutics: The Clinical Use of Drugs*. 10th edition. Philadelphia: Lippincott Williams & Wilkins 2013, Chapter 65, pp. 1534-1558.
6. **Kays MB.** Rhinosinusitis. In: Schwinghammer TL, Koehler JM, eds. *Pharmacotherapy Casebook: A Patient-Focused Approach*. 8th edition. New York: McGraw-Hill, 2011, Chapter 122, pp. 317-319.
7. **Kays MB.** Tuberculosis. In: Koda-Kimble MA, Young LY, Kradjan WA, Guglielmo BJ, eds. *Applied Therapeutics: The Clinical Use of Drugs*. 9th edition. Baltimore: Lippincott Williams & Wilkins, 2009, Chapter 61, pp. 1-26.
8. **Kays MB.** Rhinosinusitis. In: Schwinghammer TL, Koehler JM, eds. *Pharmacotherapy Casebook: A Patient-Focused Approach*. 7th edition. New York: McGraw-Hill, 2008, Chapter 115, pp. 1-4.
9. Capitano B, **Kays MB.** Cephalosporins. In: Yu VL, Edwards G, McKinnon PS, Peloquin C, Morse GD, eds. *Antimicrobial Therapy and Vaccines. Volume II : Antimicrobial agents*. 2nd edition. Pittsburgh, Esun Technologies, LLC, 2005;89-120.
10. **Kays MB.** Tuberculosis. In: Koda-Kimble MA, Young LY, Kradjan WA, Guglielmo BJ, eds. *Applied Therapeutics: The Clinical Use of Drugs*. 8th edition. Baltimore: Lippincott Williams & Wilkins, 2005, Chapter 61, pp. 1-26.

ABSTRACTS

1. Cheatham SC, Stock AH, Utley S, Campion M, Murrey TF, Healy DP, Wack MF, Browning A, Jeffery J, Chung EK, **Kays MB**. Total and unbound cefazolin pharmacokinetics and pharmacodynamics in non-obese and obese patients. ID Week 2016, Annual Meeting of the IDSA, SHEA, HIVMA, and PIDS, October 26-30, 2016, New Orleans, Louisiana (Abstract #1968).
2. Hoffman WJ, Cheatham SC, Fleming MR, Healy DP, **Kays MB**. First-dose pharmacokinetics/pharmacodynamics of piperacillin/tazobactam, administered by traditional and prolonged infusions, in non-obese and obese patients. 2014 Midyear Clinical Meeting, American Society of Health-Systems Pharmacy, December 7-11, 2014, Anaheim, California.
3. Dao J, Cheatham SC, Fleming MR, Healy DP, **Kays MB**. First-dose pharmacokinetics/pharmacodynamics of meropenem in morbidly obese patients hospitalized in an intensive care unit. 2014 Midyear Clinical Meeting, American Society of Health-Systems Pharmacy, December 7-11, 2014, Anaheim, California.
4. Nichols KR, Chung EK, Knoderer CA, Dees JM, Healy DP, Buenger LE, Crumby AS, Cox EG, Speicher R, **Kays MB**. Population pharmacokinetics and pharmacodynamics of extended-infusion piperacillin, administered with tazobactam, in critically ill children. 54th Interscience Conference on Antimicrobial Agents and Chemotherapy, September 5-9, 2014, Washington, DC (Abstract #A-729).
5. Utley S, Cheatham SC, Stock AH, Healy DP, Wack MF, Murrey T, Smith DW, **Kays MB**. Pharmacokinetics and pharmacodynamics of cefazolin and cephalexin in hospitalized obese and non-obese patients. 54th Interscience Conference on Antimicrobial Agents and Chemotherapy, September 5-9, 2014, Washington, DC (Abstract #A-710).
6. Utley S, Cheatham SC, Stock AH, Wack MF, Shea KF, Fleming MR, **Kays MB**. MIC distribution of cefazolin, cephalexin, cephalothin, and ceftriaxone for Enterobacteriaceae and methicillin-susceptible *Staphylococcus aureus*. 54th Interscience Conference on Antimicrobial Agents and Chemotherapy, September 5-9, 2014, Washington, DC (Abstract #C-115).
7. Cheatham SC, Stock AH, Wack MF, Eads R, Roembke C, **Kays MB**. Oxychlorosene bladder irrigation for prevention of catheter-associated urinary tract infections in hospitalized patients. 54th Interscience Conference on Antimicrobial Agents and Chemotherapy, September 5-9, 2014, Washington, DC (Abstract #K-571).
8. Chung EK, Cheatham SC, Fleming MR, Healy DP, **Kays MB**. Population pharmacokinetics and pharmacodynamics of cefepime in hospitalized obese and non-obese patients. American Society for Clinical Pharmacology and Therapeutics, March 18-22, 2014, Atlanta, Georgia (Abstract #PI-021)

ABSTRACTS (Continued)

9. Chung EK, Cheatham SC, Fleming MR, **Kays MB**. Population pharmacokinetics and pharmacodynamics of doripenem in obese patients. 2013 Annual Meeting, American College of Clinical Pharmacy, October 13-16, 2013, Albuquerque, New Mexico (Abstract #125).
10. Stock AH, Cheatham SC, Gollapudi SK, Cox DT, Utleby SS, Fleming MR, **Kays MB**. Achieving target pharmacokinetic/pharmacodynamic parameters for vancomycin in high-flux hemodialysis. 53rd Interscience Conference on Antimicrobial Agents and Chemotherapy, September 10-13, 2013, Denver, Colorado (Abstract #A-025).
11. Stock AH, Cheatham SC, Fleming MR, Wack MF, **Kays MB**. Determination of an optimal oxychlorosene regimen for treatment of urinary tract infections. 53rd Interscience Conference on Antimicrobial Agents and Chemotherapy, September 10-13, 2013, Denver, Colorado (Abstract #L-735).
12. Cheatham SC, Fleming MR, Healy DP, **Kays MB**. Steady-state pharmacokinetics and pharmacodynamics of cefepime, administered by prolonged infusion, in morbidly and super-morbidly obese hospitalized patients. 53rd Interscience Conference on Antimicrobial Agents and Chemotherapy, September 10-13, 2013, Denver, Colorado (Abstract A-473).
13. Chung EK, Cheatham SC, Fleming MR, **Kays MB**. Population pharmacokinetics and pharmacodynamics of meropenem in obese and non-obese hospitalized patients. 114th Annual Meeting, American Society for Clinical Pharmacology and Therapeutics, March 5-9, 2013, Indianapolis, Indiana (Abstract #PI-23).
14. **Kays MB**, Fleming MR, Cheatham SC, Chung CEK, Juenke JM. Doripenem pharmacokinetics and pharmacodynamics in obese patients hospitalized in an intensive care unit. 2012 Annual Meeting, American College of Clinical Pharmacy, October 21-24, 2012, Hollywood, Florida (Abstract #132).
15. **Kays MB**, Fleming MR, Cheatham SC, Chung CEK, Juenke JM. Comparative pharmacokinetics and pharmacodynamics of doripenem and meropenem in obese patients. 2012 Annual Meeting, American College of Clinical Pharmacy, October 21-24, 2012, Hollywood, Florida (Abstract #133).
16. Chung CEK, Fleming MR, Cheatham SC, **Kays MB**. Population pharmacokinetics and pharmacodynamics of piperacillin, administered with tazobactam by prolonged infusion, in morbidly obese and non-obese patients. Annual Meeting, American College of Clinical Pharmacy, October 21-24, 2012, Hollywood, Florida (Abstract #134).
17. **Kays MB**, Cheatham SC, Fleming MR, Juenke JM, Chung CEK. Pharmacokinetics and pharmacodynamics of doripenem in obese, hospitalized patients. 52nd Interscience Conference on Antimicrobial Agents and Chemotherapy, September 9-12, 2012, San Francisco, California (Abstract A-017).

ABSTRACTS (Continued)

18. Stock AH, Utley SS, Cheatham SC, Fleming MR, **Kays MB**. Effect of testing methodology on the in vitro activity of sodium oxychlorosene. 52nd Interscience Conference on Antimicrobial Agents and Chemotherapy, September 9-12, 2012, San Francisco, California (Abstract D-770).
19. Stock AH, Utley SS, Cheatham SC, Fleming MR, Smith DW, Wack MF, **Kays MB**. In vitro activity of sodium oxychlorosene against multidrug resistant pathogens. 52nd Interscience Conference on Antimicrobial Agents and Chemotherapy, September 9-12, 2012, San Francisco, California (Abstract F-1520).
20. Cheatham SC, Fleming MR, Healy DP, Chung CEK, Shea KM, Humphrey ML, **Kays MB**. Pharmacokinetics and pharmacodynamics of piperacillin/tazobactam administered by prolonged infusion in morbidly obese, hospitalized patients. 2011 Annual Meeting, American College of Clinical Pharmacy, October 16-19, 2011, Pittsburgh, Pennsylvania (Abstract #143).
21. Fleming MR, Cheatham SC, **Kays MB**. Evaluation of clinical outcomes and adverse effects when administering alternative doses of linezolid to obese patients. 2011 Annual Meeting, American College of Clinical Pharmacy, October 16-19, 2011, Pittsburgh, Pennsylvania (Abstract #154).
22. Cheatham SC, Fleming MR, Healy DP, Chung CEK, **Kays MB**. Pharmacokinetics and pharmacodynamics of meropenem in morbidly obese, hospitalized patients. 2011 Annual Meeting, American College of Clinical Pharmacy, October 16-19, 2011, Pittsburgh, Pennsylvania (Abstract #158).
23. Cheatham SC, Fleming MR, Healy DP, Chung CEK, Shea KM, Humphrey ML, **Kays MB**. Pharmacokinetics and pharmacodynamics of piperacillin, administered with tazobactam by prolonged infusion, in hospitalized obese patients. 51st Interscience Conference on Antimicrobial Agents and Chemotherapy, September 17-20, 2011, Chicago, Illinois (Abstract #A1-1155).
24. **Kays MB**, Cheatham SC, Shea KM, Humphrey ML, Fleming MR, Healy DP, Smith DW, Wack MF, Sowinski KM. Effect of infusion time duration on the pharmacodynamics of piperacillin/tazobactam and cefepime. 2010 Annual Meeting, American College of Clinical Pharmacy, October 17-20, 2010, Austin, Texas (Abstract #156).
25. Cheatham SC, Shea KM, Humphrey ML, Fleming MR, Healy DP, Wack MF, Smith DW, Sowinski KM, **Kays MB**. Steady-state pharmacokinetics and pharmacodynamics of cefepime, administered by prolonged infusion, in hospitalized patients. 2010 Annual Meeting, American College of Clinical Pharmacy, October 17-20, 2010, Austin, Texas (Abstract #152).

ABSTRACTS (Continued)

26. Cheatham SC, **Kays MB**, Fleming MR, Shawa I. Pharmacokinetics of linezolid in obese hospitalized patients utilizing higher doses. 50th Interscience Conference on Antimicrobial Agents and Chemotherapy, September 12-15, 2010 Boston, Massachusetts (Abstract A1-012).
27. Decker BS, Sowinski KM, **Kays MB**, Moe SM. Vancomycin pharmacokinetics and pharmacodynamics during short-daily hemodialysis. 42nd Annual Meeting, American Society of Nephrology, October 29, 2009, San Diego, California. *J Am Soc Nephrol* 2009;20:138A. (Abstract TH-PO124)
28. **Kays MB**, Cheatham SC, Shea KM, Smith DW, Wack MF, Sowinski KM. Do standard β -lactam dosing regimens achieve pharmacodynamic targets in hospitalized patients with faster creatinine clearances? 2009 Annual Meeting, American College of Clinical Pharmacy, October 18-21, 2009, Anaheim, California. (Abstract #105)
29. Cheatham SC, Shea KM, Smith DW, Wack MF, Sowinski KM, **Kays MB**. Effect of renal function on the pharmacodynamics of piperacillin/tazobactam administered by intermittent and prolonged infusion. 2009 Annual Meeting, American College of Clinical Pharmacy, October 18-21, 2009, Anaheim, California. (Abstract #95)
30. Shea KM, Cheatham SC, Smith DW, Wack MF, Sowinski KM, **Kays MB**. Steady-state pharmacokinetics and pharmacodynamics of piperacillin/tazobactam, administered by prolonged infusion, in hospitalized patients. 2009 International Congress on Clinical Pharmacy, American College of Clinical Pharmacy & European Society of Clinical Pharmacy, April 24-28, 2009, Orlando, Florida. (Abstract #61)
31. Shea KM, Cheatham SC, Wack MF, Smith DW, Sowinski KM, **Kays MB**. Comparative pharmacodynamics of intermittent and prolonged infusions of piperacillin/tazobactam using pharmacokinetic data from hospitalized patients. 2009 International Congress on Clinical Pharmacy, American College of Clinical Pharmacy & European Society of Clinical Pharmacy, April 24-28, 2009, Orlando, Florida. (Abstract #62)
32. Cheatham C, **Kays MB**, Smith DW, Wack MF, Sowinski KM. Steady-state pharmacodynamics of meropenem 500 mg every 6 hours versus 1 gram every 8 hours in hospitalized patients. 2007 Annual Meeting, American College of Clinical Pharmacy, October 14-17, 2007, Denver, Colorado. (Abstract #110)
33. **Kays MB**, Overholser BR, Jones RN, Sowinski KM. Pharmacodynamic evaluation of levofloxacin 500 mg and 750 mg once daily using sex-specific pharmacokinetic and MIC data. 2007 Annual Meeting, American College of Clinical Pharmacy, October 14-17, 2007, Denver, Colorado. (Abstract #116)

ABSTRACTS (Continued)

34. Zhang X, Overholser BR, **Kays MB**, Sowinski KM. Gatifloxacin pharmacokinetics in healthy men and women. 106th Annual Meeting, American Society for Clinical Pharmacology and Therapeutics, March 2-6, 2005, Orlando, Florida. *Clinical Pharmacology and Therapeutics* 2005;77:P78 (Abstract PII-105).
35. **Kays MB**, Lisek CR. Bactericidal activity of telithromycin against penicillin-nonsusceptible, macrolide-resistant, and levofloxacin-resistant *Streptococcus pneumoniae* by time-kill methodology. 2004 Annual Meeting, American College of Clinical Pharmacy, October 24-27, 2004, Dallas, Texas. *Pharmacotherapy* 2004;24:1443 (Abstract #147).
36. **Kays MB**, Brown SD. Prevalence of antibacterial resistance among *Streptococcus pneumoniae* isolated in the USA: PROTEKT US Years 1-3. 42nd Annual Meeting, Infectious Diseases Society of America, September 30-October 3, 2004, Boston, Massachusetts (Abstract #354).
37. Traczewski MM, Brown SD, **Kays MB**, Patel M. PROTEKT US Year 3: Activity of telithromycin against isolates of *Streptococcus pneumoniae*, *Streptococcus pyogenes*, and *Haemophilus influenzae* from across the US in 2002-2003. 104th General Meeting, American Society for Microbiology, May 23-27, 2004, New Orleans, Louisiana.
38. Overholser BR, **Kays MB**, Lagvankar S, Goldman M, Sowinski KM. Sex-based pharmacokinetics of intravenous levofloxacin in healthy subjects. 105th Annual Meeting, American Society for Clinical Pharmacology and Therapeutics, March 24-27, 2004, Miami Beach, Florida (Abstract # 51).
39. Overholser BR, **Kays MB**, Lagvankar S, Goldman M, Sowinski KM. Sex-based differences in the disposition of levofloxacin. 2003 Annual Meeting, American College of Clinical Pharmacy, November 2-5, 2003, Atlanta, Georgia (Abstract #342).
40. **Kays MB**, Denys GA. Pharmacodynamic evaluation of garenoxacin, a novel des-F(6)-quinolone, compared to four fluoroquinolones against *Streptococcus pneumoniae* using Monte Carlo analysis. 2003 Annual Meeting, American College of Clinical Pharmacy, November 2-5, 2003, Atlanta, Georgia. *Pharmacotherapy* 2003;23:1345 (Abstract #111).
41. **Kays MB**, Denys GA, Smith DW, Wack MF. Increasing fluoroquinolone and macrolide resistance with decreasing penicillin resistance among clinical isolates of *Streptococcus pneumoniae* from 1999 to 2002-2003. 2003 Annual Meeting, American College of Clinical Pharmacy, November 2-5, 2003, Atlanta, Georgia. *Pharmacotherapy* 2003;23:1344-5 (Abstract #110).
42. Hittle SD, Smith DW, Cheatham SC, Trujillo TN, Wack MF, **Kays MB**. Steady-state pharmacokinetics and pharmacodynamics of cefepime administered every six hours in critically ill patients. 2003 Annual Meeting, American College of Clinical Pharmacy, November 2-5, 2003, Atlanta, Georgia (Abstract #316).

ABSTRACTS (Continued)

43. **Kays MB**, Brown SD. Effect of culture source on antibacterial susceptibility among *Streptococcus pneumoniae* isolated during 2001-2002 as part of PROTEKT US. 41st Annual Meeting, Infectious Diseases Society of America, October 9-12, 2003, San Diego, California (Abstract #204).
44. **Kays MB**, Overholser BR, Lagvankar S, Goldman M, Sowinski KM. Effect of Ensure on the oral bioavailability of gatifloxacin. 43rd Interscience Conference on Antimicrobial Agents and Chemotherapy, September 14-17, 2003, Chicago, Illinois (Abstract A-1626).
45. **Kays MB**, Overholser BR, Mueller BA, Moe SM, Sowinski KM. Effect of sevelamer and calcium acetate on the relative oral bioavailability of ciprofloxacin. 35th Annual Meeting & Scientific Exposition, American Society of Nephrology, October 30-November 4, 2002, Philadelphia, Pennsylvania (Abstract #964).
46. Burgess DS, **Kays MB**, Denys GA. Pharmacodynamic evaluation of continuous infusion piperacillin/tazobactam against *Pseudomonas aeruginosa* and Enterobacter species using Monte Carlo analysis. 40th Annual Meeting, Infectious Diseases Society of America, October 24-27, 2002, Chicago, Illinois (Abstract #63).
47. **Kays MB**, Denys GA, Hoban DJ. Impact of new and proposed MIC breakpoint changes on the in vitro activity of penicillin and ceftriaxone against non-meningeal isolates of *Streptococcus pneumoniae*. 2002 Annual Meeting, American College of Clinical Pharmacy, October 20-23, 2002, Albuquerque, New Mexico. *Pharmacotherapy* 2002;22:1348 (Abstract #139).
48. Overholser BR, **Kays MB**, Sowinski KM. Effect of sex on the pharmacokinetics of ciprofloxacin. 2002 Annual Meeting, American College of Clinical Pharmacy, October 20-23, 2002, Albuquerque, New Mexico. *Pharmacotherapy* 2002;22:1366 (Abstract #267).
49. Burgess DS, **Kays MB**, Denys GA. Pharmacodynamic evaluation of meropenem and imipenem against *Pseudomonas aeruginosa* and Enterobacter species using Monte Carlo analysis. 2002 Annual Meeting, American College of Clinical Pharmacy, October 20-23, 2002, Albuquerque, New Mexico. *Pharmacotherapy* 2002;22:1351-1352 (Abstract #172).
50. Denys GA, Renzi PB, **Kays MB**. Comparison of Vitek and broth microdilution methods for testing cefepime and ceftazidime against *Pseudomonas aeruginosa* and Enterobacter species. 2002 Annual Meeting, American College of Clinical Pharmacy, October 20-23, 2002, Albuquerque, New Mexico. *Pharmacotherapy* 2002;22:1352 (Abstract #173).
51. **Kays MB**, Overholser BR, Mueller BA, Moe SM, Sowinski KM. Effects of sevelamer and calcium acetate on the relative oral bioavailability of ciprofloxacin. 2002 Annual Meeting, American College of Clinical Pharmacy, October 20-23, 2002, Albuquerque, New Mexico. *Pharmacotherapy* 2002;22:1352 (Abstract #174).

ABSTRACTS (Continued)

52. **Kays MB**, Burgess DS, Denys GA. Pharmacodynamic evaluation of six β -lactams against recent clinical isolates of *Pseudomonas aeruginosa* using Monte Carlo analysis. 42nd Interscience Conference on Antimicrobial Agents and Chemotherapy, September 27-30, 2002, San Diego, California (Abstract A-642).
53. Denys GA, Renzi PB, Wack MF, Smith DW, **Kays MB**. Comparison of the Vitek automated system and NCCLS microdilution MIC methods for *Pseudomonas aeruginosa* and Enterobacter species against piperacillin and piperacillin/tazobactam. 102nd General Meeting, American Society for Microbiology, May 19-23, 2002, Salt Lake City, Utah (Abstract C-130).
54. **Kays MB**. Activity of gemifloxacin against levofloxacin-resistant *Streptococcus pneumoniae* by time-kill methodology. 2001 Annual Meeting, American College of Clinical Pharmacy, October 21-24, 2001, Tampa, Florida. *Pharmacotherapy* 2001;21:1278 (Abstract #145).
55. Lucksiri A, **Kays MB**, Hamburger RJ, Mueller BA, Scott MK, Sowinski KM. Levofloxacin pharmacokinetics in patients with end-stage renal disease. 2001 Annual Meeting, American College of Clinical Pharmacy, October 21-24, 2001, Tampa, Florida. *Pharmacotherapy* 2001;21:1286 (Abstract #206).
56. Graff MA, **Kays MB**. Effect of MIC methodology on AUC/MIC calculations for fluoroquinolones versus *Streptococcus pneumoniae*. 2001 Spring Practice and Research Forum, American College of Clinical Pharmacy, April 22-25, 2001, Salt Lake City, Utah. *Pharmacotherapy* 2001;21:374 (Abstract #53).
57. **Kays MB**, Denys G. Fluoroquinolone susceptibility, resistance, and pharmacodynamics versus clinical isolates of *Streptococcus pneumoniae* from Indianapolis, Indiana. 40th Interscience Conference on Antimicrobial Agents and Chemotherapy, September 17-20, 2000, Toronto, Ontario, Canada (Abstract #2310).
58. **Kays MB**. Comparative in vitro activity and pharmacodynamics for five fluoroquinolones against clinical isolates of *Streptococcus pneumoniae*. 2000 Spring Practice and Research Forum, American College of Clinical Pharmacy, April 2-5, 2000, Monterey, California. *Pharmacotherapy* 2000;20:349 (Abstract #63).
59. **Kays MB**. Comparative pharmacodynamics of five β -lactams against common nosocomial pathogens. 1999 International Congress on Clinical Pharmacy, April 11-14, 1999, Orlando, Florida. *Pharmacotherapy* 1999;19:490 (Abstract #85).
60. Wood KK, **Kays MB**, Miles DO. In vitro activity and pharmacodynamics of oral β -lactam antibiotics versus clinical isolates of *Streptococcus pneumoniae* exhibiting intermediate penicillin resistance. 1999 International Congress on Clinical Pharmacy, April 11-14, 1999, Orlando, Florida. *Pharmacotherapy* 1999;19:490 (Abstract #86).

ABSTRACTS (Continued)

61. **Kays MB**, Manduru M. In vitro activity of selected glycopeptides and ampicillin, alone and in combination with gentamicin, against enterococci exhibiting low-level vancomycin resistance. 1994 Annual Meeting, American College of Clinical Pharmacy, July 31-August 3, 1994, St. Louis, Missouri.
62. **Kays MB**, Poole L, Segarra M, Probst L. In vitro activity of investigational fluoroquinolones, alone and in combination, versus enterococci with and without high-level gentamicin resistance. 33rd Interscience Conference on Antimicrobial Agents and Chemotherapy, October 19, 1993, New Orleans, Louisiana (Abstract #1095).
63. **Kays MB**, Segarra M, Poole L. In vitro activity of sparflaxacin and clinafloxacin (CI-960), alone and in combination with vancomycin and teicoplanin, against *Enterococcus faecalis*. 1993 Annual Meeting, American College of Clinical Pharmacy, August 15-18, 1993, Reno, Nevada (Abstract #95).
64. White RL, Burgess DS, Friedrich LV, **Kays MB**. Concentration dependent activity of imipenem and meropenem during time-kill testing. 1993 Annual Meeting, American College of Clinical Pharmacy, Reno, Nevada, August 17, 1993 (Abstract #80E).
65. White RL, Friedrich LV, Burgess DS, **Kays MB**. Time-dependent differences in the relationship between antimicrobial usage and changes in susceptibility. 93rd General Meeting, American Society for Microbiology, May 18-20, 1993, Atlanta, Georgia (Abstract #80E).
66. Burgess DS, White RL, Friedrich LV, **Kays MB**. Evaluation of antimicrobial breakpoints based on pharmacodynamic relationships. 1993 Winter Practice and Research Forum, American College of Clinical Pharmacy, February 7-10, 1993, Ft. Lauderdale, Florida.
67. White RL, Burgess DS, Friedrich LV, **Kays MB**, Warkentin DI. Potential impact of degradation of imipenem vs. meropenem on in vitro susceptibility. 1993 Winter Practice and Research Forum, American College of Clinical Pharmacy, February 7-10, 1993, Ft. Lauderdale, Florida.
68. White RL, Burgess DS, Friedrich LV, **Kays MB**, Warkentin DI. Concentration-dependent activity of imipenem and meropenem during time-kill testing. 32nd Interscience Conference on Antimicrobial Agents and Chemotherapy, October 11-14, 1992, Anaheim, California (Abstract #1613).
69. White RL, Burgess DS, Friedrich LV, **Kays MB**, Warkentin DI. Potential impact of degradation on imipenem versus meropenem on in vitro susceptibility. 32nd Interscience Conference on Antimicrobial Agents and Chemotherapy, October 11-14, 1992, Anaheim, California (Abstract #117).

ABSTRACTS (Continued)

70. White RL, Friedrich LV, **Kays MB**. Differential effect of serum on the susceptibility of Gram-positive and Gram-negative organisms. American College of Clinical Pharmacy Winter Practice and Research Forum, February 9-12, 1992, Phoenix, Arizona (Abstract #57E).
71. Warkentin DI, White RL, Friedrich LV, **Kays MB**. Indicators of antibiotic usage in a university hospital. The 26th Annual American Society of Hospital Pharmacists Midyear Clinical Meeting, December 10, 1991, New Orleans, Louisiana (Abstract #97R).
72. White RL, Friedrich LV, **Kays MB**, Zahaykevich A, Koonce JR. Protein binding of azithromycin in sera with normal and elevated alpha-1 acid glycoprotein concentrations. 31st Interscience Conference on Antimicrobial Agents and Chemotherapy, September 30, 1991, Chicago, Illinois (Abstract #132).
73. Friedrich LV, White RL, **Kays MB**. Degradation during HPLC analysis: effect on pharmacokinetic parameter estimation. 12th Annual Meeting, American College of Clinical Pharmacy, August 18-21, 1991, Minneapolis, Minnesota (Abstract #69).
74. White RL, Friedrich LV, **Kays MB**, Brown EW, Scott LE. Duplicate isolates: evaluation of their effect on antibiogram susceptibility reports. 12th Annual Meeting, American College of Clinical Pharmacy, August 18-21, 1991, Minneapolis, Minnesota (Abstract #29E).
75. White RL, **Kays MB**, Friedrich LV. Effect of heat-inactivation of serum on antimicrobial activity. 17th International Congress of Chemotherapy, June 25, 1991, Berlin (West), Federal Republic of Germany (Abstract #653).
76. White RL, Friedrich LV, **Kays MB**, Brown EW, Scott LE. Use of susceptibility ratios as a marker of changes in susceptibility in individual patients. 17th International Congress of Chemotherapy, June 25, 1991, Berlin (West), Federal Republic of Germany (Abstract #1432).
77. White RL, Friedrich LV, **Kays MB**, Brown EW, Scott LE. Effect of removing duplicate isolates on susceptibility reports. 91st General Meeting, American Society for Microbiology, May 7, 1991, Dallas, Texas (Abstract #C123).
78. White RL, **Kays MB**, Friedrich LV. Effect of media and drug degradation during in vitro testing on the microbiologic activity of imipenem. 91st General Meeting, American Society for Microbiology, May 6, 1991, Dallas, Texas (Abstract #A20).
79. **Kays MB**, White RL, Friedrich LV, Del Bene VE. Pharmacodynamic evaluation of cephalosporins with antianaerobic activity. 1991 Winter Practice and Research Forum, American College of Clinical Pharmacy, February 11, 1991, Ft. Lauderdale, Florida (Abstract #54E).

ABSTRACTS (Continued)

80. Friedrich LV, White RL, **Kays MB**, Burgess DS. Pharmacoeconomic evaluation of penetrating abdominal trauma. 1991 Winter Practice and Research Forum, American College of Clinical Pharmacy, February 11, 1991, Ft. Lauderdale, Florida (Abstract #21).
81. White RL, **Kays MB**, Del Bene VE, Friedrich LV. Effect of descriptive statistics on the analysis of cephalosporin activity against *Bacteroides fragilis*. International Congress for Infectious Diseases, July 19, 1990, Montreal, Quebec, Canada (Abstract #331).
82. White RL, **Kays MB**, Friedrich LV, Brown EW. Apparent degradation of imipenem in an automated susceptibility testing system. Sixth International Congress on Rapid Methods and Automation in Microbiology and Immunology, June 9, 1990, Helsinki, Finland (Abstract #374).
83. Friedrich LV, White RL, **Kays MB**, Brundage DM, Yarbrough DM. Pharmacokinetic evaluation of aztreonam in burn patients. 11th Annual Meeting, American College of Clinical Pharmacy, August 7, 1990, San Francisco, California (Abstract #89).
84. White RL, **Kays MB**, Friedrich LV, Brown EW. "Pseudo" resistance of Pseudomonas - Degradation of imipenem in susceptibility panels. 11th Annual Meeting, American College of Clinical Pharmacy, August 6, 1990, San Francisco, California. (Abstract #88)
85. White RL, Brown EW, Friedrich LV, **Kays MB**, Koonce JR. Effect of age of breakpoint panels on imipenem susceptibility patterns. 90th Annual Meeting, American Society for Microbiology, May 15, 1990, Anaheim, California (Abstract #C-269).
86. White RL, **Kays MB**, Armstrong TA, Friedrich LV. Effects of heat-inactivation and serum dilution on protein binding. 90th Annual Meeting, American Society for Microbiology, May 15, 1990, Anaheim, California (Abstract #C-268).
87. Uber WE, **Kays MB**, Friedrich LV, White RL. Acinetobacter: an emerging pathogen. 24th Annual American Society of Hospital Pharmacists Midyear Clinical Meeting, December 7, 1989, Atlanta, Georgia (Abstract #P-319R).
88. Nicolau DP, White RL, Friedrich LV, **Kays MB**. The impact of the antibiotic order form on antibiotic usage in the burn treatment center. 24th Annual ASHP Midyear Clinical Meeting, December 7, 1989, Atlanta, Georgia (Abstract #P-345R).
89. **Kays MB**, White RL. Effect of elevated alpha-1 acid glycoprotein concentration on the serum protein binding of clindamycin. 10th Annual Meeting, American College of Clinical Pharmacy, August 9, 1989, Kansas City, Missouri (Abstract #96).
90. White RL, **Kays MB**, Friedrich LV, Brundage RC. Variability in the relationship between antibiotic breakpoints and achievable serum concentrations. 10th Annual Meeting, American College of Clinical Pharmacy, August 9, 1989, Kansas City, Missouri (Abstract #98).

ABSTRACTS (Continued)

91. White RL, Friedrich LV, **Kays MB**, Brundage DM. Disproportionate changes in vancomycin and nafcillin usage based on susceptibility patterns. 89th Annual Meeting, American Society for Microbiology, May 18, 1989, New Orleans, Louisiana (Abstract #A-167).
92. White RL, Friedrich LV, **Kays MB**. Reevaluation of aminoglycoside breakpoints based on pharmacodynamic relationships. 89th Annual Meeting, American Society for Microbiology, May 18, 1989, New Orleans, Louisiana (Abstract #A-126).
93. **Kays MB**, White RL. Comparison of serum bactericidal activity between different patient populations. 89th Annual Meeting, American Society for Microbiology, May 15, 1989, New Orleans, Louisiana (Abstract #C-65).
94. White RL, Yost R, **Kays MB**, Bednarczyk E. Clindamycin serum protein binding in subjects with variable alpha-1 acid glycoprotein concentrations. 9th Annual Meeting, American College of Clinical Pharmacy, July 24, 1988, Philadelphia, Pennsylvania (Abstract #47).

GRANTS

Chung EK, Kays MB.

Population pharmacokinetics and pharmacodynamics of linezolid in obese and non-obese patients

\$35,000 (American Society for Clinical Pharmacology and Therapeutics)

Kays MB, Sowinski KM.

Steady-state pharmacokinetics and pharmacodynamics of doripenem in obese patients in the non-ICU and ICU settings

\$ 99,192 (Ortho-McNeil)

Foster DR, Kays MB.

The Effects of Green Tea Polyphenols on Endotoxemic Intestinal Injury in Rats.

\$ 20,000 (TAP Pharmaceutical Products GI Research Award, American College of Clinical Pharmacy Research Institute)

Kays MB.

In Vitro Activity of Fluoroquinolones Versus Clinical Isolates of *Streptococcus pneumoniae* from Indiana.

\$ 9,250.00 (Bayer)

Kays MB.

Bactericidal Activity of Gemifloxacin Versus Levofloxacin-Resistant *Streptococcus pneumoniae*.

\$ 9,725.00 (SmithKline Beecham)

GRANTS (Continued)

Kays MB.

Serum bactericidal activity following single dose administration of moxifloxacin and azithromycin against *Streptococcus pneumoniae*.
\$ 54,210 (Bayer)

Kays MB.

In vitro activity and pharmacodynamic evaluation of fluoroquinolones versus *Streptococcus pneumoniae*.
\$ 5,500.00 (Bristol-Myers Squibb)

Kays MB.

Comparative in vitro activity of macrolides and fluoroquinolones versus clinical isolates of *Streptococcus pneumoniae* from Indiana.
\$ 6,000.00 (Abbott)

Kays MB.

Gatifloxacin surveillance susceptibility study.
\$ 5,000.00 (International Health Management Associates, Inc./Bristol-Myers Squibb)

Kays MB, Sowinski KM, Mueller BA.

Effect of Ensure® on the oral bioavailability of gatifloxacin in healthy volunteers.
\$ 42,360.50 (Bristol-Myers Squibb Company)

Mueller BA, Kays MB, Sowinski KM.

Effect of Renagel® and calcium acetate on the oral bioavailability of ciprofloxacin in normal volunteers.
\$ 45,250.00 (GelTex Pharmaceuticals, Inc.)

Kays MB, Mueller BA, Sowinski KM.

In vitro evaluation of the effect of enteral nutrition formulae on concentrations on various fluoroquinolones.
\$ 22,000.00 (Pfizer, Inc.)

Kays MB.

In vitro activity of levofloxacin, alone and in combination with cell wall-active agents, against high-level aminoglycoside resistant *Enterococcus faecalis*.
\$13,148.48 (The R. W. Johnson Pharmaceutical Research Institute)

Kays MB.

Evaluation of cephalosporins/cephamycins versus non-fragilis strains of *Bacteroides* by integrating microbiologic and pharmacokinetic properties.
\$ 8,000 (Merck, Sharp & Dohme)

GRANTS (Continued)

White RL, **Kays MB**, Friedrich LV.

Effect of protein binding on the pharmacodynamic and microbiologic evaluation of antimicrobial agents.

\$24,405 (Glaxo)

White RL, **Kays MB**, Friedrich LV.

Degradation of imipenem in predried susceptibility panels and its effect on the in vitro susceptibility of *Pseudomonas aeruginosa*.

\$15,100 (Merck, Sharp & Dohme)

White RL, **Kays MB**.

Ex vivo protein binding of clindamycin in sera with normal and elevated alpha-1 acid glycoprotein concentrations.

\$ 3,525 (Upjohn)

White RL, Friedrich LV, **Kays MB**.

Pharmacokinetics of fluconazole in burn patients.

\$32,000 (Roerig)

White RL, Friedrich LV, **Kays MB**.

Ofloxacin in vitro surveillance study.

\$ 2,500 (Ortho)

White RL, Friedrich LV, Burgess DS, **Kays MB**, Warkentin DI.

Comparative stability of imipenem and meropenem and the effect on in vitro susceptibility.

\$19,151 (Merck, Sharp & Dohme)

INVITED SYMPOSIUM/SEMINAR PRESENTATIONS

“Infectious Diseases Update from A(ntibiotics) to Z(ika)”

Symposium: Therapeutic Update 2017

University Learning Systems

Marco Island, Florida, January 13, 2017

“Rapid Diagnostic Tests in Antimicrobial Stewardship: The Time is Now”

Reviewing the Latest Advancement In Technology and Automation

3rd Annual GCC Pharmacy Congress

Dubai, United Arab Emirates, November 1, 2016

INVITED SYMPOSIUM/SEMINAR PRESENTATIONS (Continued)

“Antimicrobial Resistance: A Global Concern”

“Overview of Assessment and Evidence-Based Empiric Therapy”

“Tailoring Antimicrobial Therapy and Overcoming Resistance”

“Pharmacist-Led Antimicrobial Stewardship Strategies”

“Patient Cases”

Symposium: Antimicrobial Stewardship: Focus on Lower Respiratory Tract Infections and the Role of the Pharmacist

American College of Clinical Pharmacy (in conjunction with the 3rd Annual GCC Pharmacy Congress)

Dubai, United Arab Emirates, October 30, 2016

“Antibiotic Stewardship”

CME Lecture

Saint Joseph Regional Medical Center

Mishawaka, Indiana, September 21, 2016

“Infectious Diseases Update from A(ntibiotics) to Z(ika)”

Symposium: Current Topics in Healthcare 2016

University Learning Systems

Las Vegas, Nevada, September 15, 2016

“Application of Pharmacokinetic and Pharmacodynamic Principles in Antimicrobial Stewardship”

Symposium: Alaska Antimicrobial Stewardship Collaborative Summit

Alaska State Hospital and Nursing Home Association; Alaska Division of Public Health; Alaska Pharmacist Association

Anchorage, Alaska, February 12, 2016

“Sepsis Update”

Symposium: 18th Annual Infectious Diseases Update

Promedica Continuing Medical Education Department and Toledo Hospital Department of Pharmacy

Perrysburg, Ohio, October 21, 2015

“PK/PD Principles and Applications for Antimicrobial Stewardship”

“Newly Released Anti-Infectives and the Current Pipeline: 10 x 20 IDSA Initiative and Beyond”

Symposium: MAD-ID (Making A Difference in Infectious Diseases)

2015 Annual Meeting

Orlando, Florida, May 7, 2015

“Emerging and Re-Emerging Infectious Diseases”

Symposium: Continuing Education Conference

University Learning Systems

Las Vegas, Nevada, December 3, 2014

INVITED SYMPOSIUM/SEMINAR PRESENTATIONS (Continued)

“Antimicrobial Resistance: Mechanisms and Emerging Patterns”

“Genomics: Strategies against Resistance Development and Therapeutic Implications”

“Formulary and Pharmacoeconomic Considerations”

Symposium: Antimicrobial Resistance: Prevention and Management Strategies

American College of Clinical Pharmacy

2012 From Theory to Bedside: Clinical Reasoning Series

Hollywood, Florida, October 20, 2012

“Infectious Diseases Update – What’s in My Fave 5?”

Symposium: Indiana Pharmacists Alliance Spring Meeting

Indiana Pharmacists Alliance

Indianapolis, Indiana, June 12, 2009

“Fluoroquinolone Use in Hospital Infections: Have We Come to the End of an Era?”

Symposium: Debate in Therapeutics 2008

ASHP Midyear Clinical Meeting

Orlando, Florida, December 9, 2008

“Emerging Issues with Gram-Negative Bacterial Pathogens”

4th Annual Fall Pharmacy CE Symposium

Eugene Applebaum College of Pharmacy and Health Sciences

Wayne State University

Detroit, Michigan, November 6, 2008

“Treatment of Complicated Intra-abdominal Infections”

Symposium: Making a Difference in Infectious Diseases Pharmacotherapy

Orlando, Florida, May 12, 2007

“Therapeutic Approach for Infections in High-Risk Patients”

Symposium: Making a Difference in Infectious Diseases Pharmacotherapy

Orlando, Florida, May 10, 2007

“CAP Treatment Options from Clinical Trials to Practice: Are All Fluoroquinolones the Same?”

Symposium: Optimal Antibiotic Choices in Current Clinical Practice: A Case-Based Guide to Treating Infectious Diseases

ASHP Midyear Clinical Meeting

Anaheim, California, December 4, 2006

“Clinical Application of Pharmacodynamic Principles”

Symposium: Making a Difference in Infectious Diseases Pharmacotherapy

Orlando, Florida, May 13, 2006

INVITED SYMPOSIUM/SEMINAR PRESENTATIONS (Continued)

“Trends in Etiology and Resistance with Nosocomial Infections”
Symposium: Making a Difference in Infectious Diseases Pharmacotherapy
Orlando, Florida, May 11, 2006

“Antimicrobial Stewardship: Appropriate Treatment of Respiratory Tract Infections”
Symposium: 2005 Annual CME Meeting
Sponsored by Abbott Laboratories
West Chester, Ohio, November 19, 2005

“Antibiotic Stewardship – Can We Win the Bug-Drug Battle?”
Symposium: 2005 Annual Continuing Education Conference
ADVANTAGE Health Solutions
Indianapolis, Indiana, September 14, 2005

“Antimicrobial Stewardship: Appropriate Treatment of Respiratory Tract Infections”
Symposium: 2005 Annual CME Meeting
American Filipino Medical Association
Louisville, Kentucky, April 30, 2005

“Infectious Diseases Top Ten List: Hot Topics in Bugs and Drugs”
Symposium: Indiana Pharmacists Alliance Spring Meeting
Indiana Pharmacists Alliance
Indianapolis, Indiana, April 23, 2005

“Antimicrobial Stewardship – Can We Win the Bug-Drug Battle?”
Symposium: Second Annual Western Michigan Fall CME Symposium
Sponsored by Abbott Laboratories
Kalamazoo, Michigan, October 9, 2004

“The Fluoroquinolone Switch: Practical Experience with Conversion and Implementation”
Symposium: Fluoroquinolones: Optimizing Current Usage Strategies
Bayer Corporation
New York, New York, June 5, 2004

“Resistance and Respiratory Tract Infections: Hype or Hysteria?”
Symposium: West Virginia American Academy of Family Practice Annual Meeting
West Virginia American Academy of Family Practice
Charleston, West Virginia, April 3, 2004

“Resistance and Respiratory Tract Infections: Hype or Hysteria?”
Symposium: 17th Annual Family Practice Weekend & Sports Medicine Conference
Family Medicine Foundation of West Virginia
Huntington, West Virginia, November 14, 2003

“Prophylactic Antibiotics: Can Appropriate Use Affect Bacterial Resistance”
Symposium: Surgical Infection Prevention: Improving Outcomes Using Evidence and Innovation
Veteran’s Health Administration (VHA Central)
Dayton, Ohio, May 6, 2003

“Community-Acquired Pneumonia – Treatment Issues in the Era of Increasing Bacterial Resistance”
Symposium: 2003 Spring CE Meeting
Indiana Pharmacists Alliance
Indianapolis, Indiana, April 25, 2003

“The Role of Bacterial Resistance in the Treatment of Community-Acquired Respiratory Tract Infections”
Symposium: 16th Annual Family Practice Weekend & Sports Medicine Conference
Family Medicine Foundation of West Virginia
Huntington, West Virginia, November 15, 2002

“Care for Respiratory Tract Infections: How and Why It Is Changing”
“The Economic Outcomes with RTI Failure”
Symposium: Emerging Trends in the Diagnosis and Management of Respiratory Disease
International Center for Postgraduate Medical Education
Minneapolis, Minnesota, October 11, 2002

“Care for Respiratory Tract Infections: How and Why It Is Changing”
“The Economic Outcomes with RTI Failure”
Symposium: Emerging Trends in the Diagnosis and Management of Respiratory Disease
International Center for Postgraduate Medical Education
New York, New York, October 4, 2002

“Pharmacodynamics: Analysis of the Host, Bug, and Drug Relationship”
Symposium: Macrolides: Critical Analysis of Appropriate Antimicrobial Options
42nd Annual Interscience Conference on Antimicrobial Agents and Chemotherapy
San Diego, California, September 27, 2002

“Care for Respiratory Tract Infections: How and Why It Is Changing”
“Sinusitis: Current Diagnosis and Management Strategies”
Symposium: Emerging Trends in the Diagnosis and Management of Respiratory Disease
International Center for Postgraduate Medical Education
Los Angeles, California, September 27, 2002

“Treatment of Nosocomial Pneumonia in an Era of Increased Antibiotic Resistance”
Symposium: Monotherapy Regimens for the Treatment of Serious Gram-Negative Infections
Fifth Annual Conference of Infectious Diseases Pharmacotherapy: Making a Difference
Symposium
Orlando, Florida, May 5, 2002

INVITED SYMPOSIUM/SEMINAR PRESENTATIONS (Continued)

“Update on Susceptibility, Resistance, and Pharmacokinetics/Pharmacodynamics”

Symposium: 6th Annual Infectious Diseases Workshop
Medical University of South Carolina College of Pharmacy
Charleston, South Carolina, April 26-27, 2002

“Antimicrobial Resistance: Emerging Pathogens”

Symposium: First Annual Great Lakes Infectious Diseases Conference
Ferris State University College of Pharmacy
Grand Rapids, Michigan, March 16, 2002

“Antibiotic Resistance”

Symposium: 53rd Annual Scientific Assembly
Indiana Academy of Family Physicians
French Lick, Indiana, August 2, 2001

“Role of New Agents for Treating “New” Pathogens – Where and When?”

Symposium: “From Macrolides to Ketolides: Current Challenges in Treating Respiratory Tract Infections”
ASHP Annual Meeting 2001
Los Angeles, California, June 4, 2001

“Susceptibility of Respiratory Tract Pathogens in Indiana – Considerations for Appropriate Antimicrobial Therapy”

Indiana Philippine Medical Association and Alliance Spring Meeting and CME Seminar
Indiana Philippine Medical Association
Terre Haute, Indiana, May 12, 2001

“Emerging Treatment Issues in Gram-Positive Infections”

104th Annual Convention
Indiana Osteopathic Association
South Bend, Indiana, May 3, 2001

“Emerging Trends in Bacterial Resistance – Is This the Post-Antibiotic Era?”

Symposium: Clinical Otolaryngology Update
Indiana University School of Medicine
Indianapolis, Indiana, May 2, 2001

“Treatment of Respiratory Tract Infections in the Era of Increasing Bacterial Resistance”

Symposium: “5th Annual Infectious Diseases Pharmacotherapy Conference”
The University of Texas Health Science Center
San Antonio, Texas, March 24, 2001

INVITED SYMPOSIUM/SEMINAR PRESENTATIONS (Continued)

“Vancomycin-Resistant Enterococci – Control Strategies”

Symposium: “Therapeutic Options to Manage Resistance in the 21st Century”

35th Annual ASHP Midyear Clinical Meeting

Las Vegas, Nevada, December 5, 2000

“Pharmacokinetic and Pharmacodynamic Profiles of the New Fluoroquinolones”

Symposium: “The Impact of Antimicrobial Drug Resistance on the Selection of Appropriate Antibiotics for Community Acquired Respiratory Tract Infections”

28th Annual Physician Assistant Conference

Chicago, Illinois, May 29, 2000

“Treatment of Respiratory Tract Infections in the Era of Increasing Bacterial Resistance”

2000 Spring Meeting, Kentucky Society of Health-System Pharmacists

Lexington, Kentucky, May 12, 2000

“Treatment of Respiratory Tract Infections in the Era of Increasing Bacterial Resistance”

103rd Annual Convention

Indiana Osteopathic Association

Indianapolis, Indiana, May 6, 2000

“Role of the Newer Fluoroquinolones in the Next Millennium”

Symposium: “Cutting Edge Drug Therapies for the New Millennium”

Minnesota Pharmacists Association

Minneapolis, Minnesota, December 5, 1999

“Changing Perspectives in Respiratory Tract Infections: Pathogens and Antimicrobials”

Symposium: Management of Community-Acquired Adult Respiratory Tract Infections

Sponsored by Bristol-Myers Squibb Company

Indianapolis, Indiana, October, 19, 1999

Louisville, Kentucky, October 21, 1999

Brunswick, Georgia, January 7, 2000 (Grand Rounds, SE Georgia Regional Medical Hospital)

Cincinnati, Ohio, January 13, 2000 (Grand Rounds, Veterans Administration Hospital)

Cincinnati, Ohio, January 14, 2000 (Grand Rounds, Good Samaritan Hospital)

“A Focus on Newer Agents in Selected Respiratory Tract Infections: Microbiology, Resistance, and Pharmacokinetics/Pharmacodynamics of the Newer Agents”

Symposium: Antibiotic Selection in the Age of Resistance

Sponsored by Bayer Pharmaceutical Division

Little Rock, Arkansas, September 28, 1999

Peoria, Illinois, September 29, 1999

Grand Rapids, Michigan, September 30, 1999

INVITED SYMPOSIUM/SEMINAR PRESENTATIONS (Continued)

“A Focus on Newer Agents in Selected Respiratory Tract Infections: Defining the Clinical Role of the Newer Agents”

Symposium: Antibiotic Selection in the Age of Resistance

Sponsored by Bayer Pharmaceutical Division

Chicago, Illinois, September 23, 1999

“Emerging Trends in Bacterial Resistance - Review of Patient Cases”

1st Annual Infectious Diseases Pharmacodynamics Seminar

Medical University of South Carolina

Charleston, South Carolina, April 25-26, 1997

“Treatment of Resistant Bacterial Infections”

6th Annual Coming Together in Advanced Practice Conference

Missouri Nurses Association and the Missouri Coalition of Nurses in Advanced Practice

Jefferson City, Missouri, May 7, 1996

“Emerging Trends in Bacterial Resistance”

Infectious Diseases Conference

University of Osteopathic Medicine & Health Sciences

Des Moines, Iowa, December 2, 1995

“Vancomycin-Resistant Enterococci: Sound the Alarm”

29th Annual Fall Seminar

Arkansas Association of Hospital Pharmacists

Hot Springs, Arkansas, September 16, 1995

"Emerging Trends in Bacterial Resistance"

"The New Oral Antibiotics: How Different Are The Similarities"

"Treatment of HIV Infection and AIDS 1995"

"Reemergence of Mycobacterium Tuberculosis"

39th Annual Pharmacy Postgraduate Institute

Drake University College of Pharmacy and Health Sciences

Des Moines, Iowa, April 30, 1995

"Impact of Standardized Methodology on Anaerobic Susceptibility Testing"

Infectious Diseases Specialty Practice Group

ASHP Midyear Clinical Meeting

Miami Beach, Florida, December 7, 1994

"Emerging Trends in Bacterial Resistance"

Sponsored by Medical University of South Carolina, College of Pharmacy

Symposium: "1994 Infectious Diseases Pharmacotherapy"

Mt. Pleasant, South Carolina, September 23, 1994

INVITED SYMPOSIUM/SEMINAR PRESENTATIONS (Continued)

"Streamlining Antimicrobial Therapy"

Sponsored by McNeil Pharmaceuticals

Myrtle Beach, South Carolina, August 31, 1994

"Antibiotic Update"

Sponsored by Medical University of South Carolina, Dept. of Family Medicine

Symposium: "Intensive Review of Family Medicine"

Charleston, South Carolina, June 18, 1994

"Tuberculosis in the 1990s"

Sponsored by Medical University of South Carolina, College of Pharmacy

Symposium: "1993 Infectious Disease Pharmacotherapy - Emerging Trends and Advances in Therapy"

Mt. Pleasant, South Carolina, September 24, 1993

"Communicable Diseases: Focus on AIDS, Tuberculosis and Hepatitis"

Sponsored by Fujisawa Pharmaceutical Company

South Carolina Society of Hospital Pharmacists Eighth Annual Spring Symposium

Hilton Head, South Carolina, March 24, 1993

"Management of Mycobacterial Infections"

Sponsored by South Carolina Society of Hospital Pharmacists and Medical University of South Carolina

Symposium: "Clinical Pulmonary Issues"

Greenville, South Carolina, November 13, 1992

"Issues in the Treatment of Gram-Positive Infections - Development of Antimicrobial Resistance"

Sponsored by Merck, Sharp & Dohme

Symposium: "Clinical Pharmacy Grand Rounds"

Charleston, South Carolina, December 8, 1991

"Local Susceptibility Trends for Gram-Negative Bacteria Which Elaborate Type I β -lactamase"

Sponsored by Lederle Laboratories - Moderator

Symposium: "Gram-Negative Resistance Forum: A National Nosocomial Resistance Surveillance Group Program"

Tampa, Florida, February 28, 1991

"Ensuring Rational Antibiotic Use by Integrating Therapeutic and Fiscal Considerations"

Sponsored by Baxter Healthcare Corporation, Microscan Division

Symposium: "Meaningful Rapid Testing: Technology, Clinical Relevance, and Impact"

Cincinnati, Ohio, June 20, 1990 and Chicago, Illinois, June 21, 1990

PRESENTATIONS

“Treatment of acute bacterial skin and skin structure infections: focus on new treatment options”, presented to the medical staff at Indiana University Health, Starke Hospital, Knox, Indiana, May 17, 2016.

“Bad bugs and bleach: treatment and prevention of multidrug-resistant urinary tract infections”, presented at the Department of Pharmacy Practice seminar series, Purdue University College of Pharmacy, Indianapolis, Indiana, April 13, 2016.

“The rising tide of gram-negative resistance”, presented to clinical pharmacists and pharmacy residents from local hospitals, Greensboro, North Carolina, November 13, 2015.

“New treatment options for acute bacterial skin and skin structure infections”, presented to the Missouri Society of Health-System Pharmacists, St. Louis, Missouri, August 20, 2015.

“Current controversies and treatment of MRSA infections,” presented at medical grand rounds, St. Mary’s Hospital, Evansville, Indiana, June 30, 2010.

“Evaluating a targeted fluoroquinolone formulary – a clinical perspective,” presented to the pharmacy and medical staff at noon conference, St. Mary’s Hospital, Boonville, Indiana, March 13, 2008.

“Current issues in the epidemiology and treatment of methicillin-resistant *Staphylococcus aureus* infections,” presented at the annual infectious disease conference, Parkview Hospital, Fort Wayne, Indiana, January 24, 2008.

“Current issues in the epidemiology and treatment of methicillin-resistant *Staphylococcus aureus* infections,” presented at medical grand rounds, Marion General Hospital, Marion, Indiana, January 2, 2008.

“New advances in the treatment of invasive fungal infections”, presented to the pharmacy and infectious diseases staff during pharmacy noon conference, Methodist Hospital, Indianapolis, Indiana, December 12, 2006.

“The challenge of bacterial resistance”, presented at the annual continuing medical education conference, West Area Health Education Center, Trover Foundation, Madisonville, Kentucky, June 6, 2006.

“Fluoroquinolones: appropriate use from head to toe and all points in between,” presented at medical grand rounds, Lutheran Hospital, Fort Wayne, Indiana, January 17, 2006.

“Antibiotic stewardship: can we win the bug-drug battle?”, presented to physicians, microbiologists, and pharmacists, Boca Community Hospital, Boca Raton, Florida, July 13, 2005.

PRESENTATIONS (Continued)

“Clinical significance of bacterial resistance in the treatment of respiratory tract infections”, presented at grand rounds lunch program, Foote Health System, Jackson, Michigan, June 14, 2005.

“Designing novel antibiotic dosing regimens based on pharmacokinetic and pharmacodynamic principles”, presented at noon conference, Division of Infectious Diseases, Henry Ford Hospital, Detroit, Michigan, March 23, 2005.

“Antimicrobial stewardship: appropriate treatment of community-acquired respiratory tract infections”, presented at noon conference, Lewis County Family Health Center, Vanceburg, Kentucky, February 28, 2005.

“New developments in the treatment of community-acquired respiratory tract infections”, presented at medical grand rounds, Memorial Hospital, Logansport, Indiana, January 20, 2005.

“Antimicrobial stewardship: appropriate treatment of community-acquired respiratory tract infections”, presented at noon conference, University Family Health Care, Wright State University, Yellow Springs, Ohio, December 8, 2004.

“Designing novel antibiotic dosing regimens based on pharmacokinetic and pharmacodynamic principles”, presented at pharmacy noon conference, Sinai-Grace Hospital, Detroit, Michigan, December 1, 2004.

“New developments in the treatment of community-acquired respiratory tract infections”, presented at medical grand rounds, Morgan County Hospital, Martinsville, Indiana, November 18, 2004.

“Antimicrobial stewardship – can we win the bug-drug battle?”, presented at the Howard County Medical Society Fall CME meeting, Kokomo, Indiana, November 17, 2004.

“New developments in the treatment of community-acquired respiratory tract infections”, presented at medical grand rounds, Bluffton Regional Medical Center, Bluffton, Indiana, November 17, 2004.

“Antibiotic stewardship – can we win the bug-drug battle?”, presented at medical grand rounds, Jackson Memorial Hospital, Miami, Florida, November 9, 2004.

“Institutional management of antibiotic therapy”, presented at medical grand rounds, Wilson Memorial Hospital, Sydney, Ohio, October 29, 2004.

“Antimicrobial stewardship – can we win the bug-drug battle?”, presented to clinical pharmacists, Methodist Medical Group, Indianapolis, Indiana, September 15, 2004.

PRESENTATIONS (Continued)

“Antimicrobial stewardship – can we win the bug-drug battle?”, presented to members of the Kentucky Antibiotic Conservation Coalition, Louisville, Kentucky, August 31, 2004.

“Rationale and implementation of a dual fluoroquinolone formulary”, presented to physicians and pharmacists from local hospitals, Dayton, Ohio, August 12, 2004.

“Formularies and fluoroquinolones: practical experience with conversion and implementation”, presented at medical grand rounds, Lima Memorial Hospital, Lima, Ohio, May 27, 2004.

“Treatment of hospitalized patients with community-acquired respiratory infections in the era of increasing bacterial resistance”, presented at pharmacy noon conference, Unity Hospital, Minneapolis, Minnesota, May 13, 2004.

“Treatment of acute otitis media: new practice guidelines, same bad bugs”, presented at medical grand rounds, Marshall University, Huntington, West Virginia, May 10, 2004.

“Treatment of respiratory tract infections in the era of increasing bacterial resistance”, presented at medical grand rounds, DeWitt Army Community Hospital, Fort Belvoir, Virginia, May 7, 2004.

“Resistance and respiratory tract infections: selection of appropriate therapy using PK/PD parameters”, presented to community and hospital pharmacists, Muncie, Indiana, April 21, 2004.

“Antimicrobial safety: Hints, allegations, and things left unsaid”, presented at medical grand rounds, St. Anthony Medical Center, Crown Point, Indiana, February 12, 2004.

“The role of bacterial resistance in the treatment of community-acquired respiratory tract infections”, presented at medical grand rounds, Greenville Hospital, Greenville, Ohio, January 20, 2004.

“Community-acquired pneumonia: Treatment issues in the era of increasing bacterial resistance”, presented at noon conference, Veterans Administration Hospital, Danville, Illinois, January 8, 2004.

“Treatment of community-acquired pneumonia: Role of bacterial resistance when selecting empiric therapy”, presented at medical grand rounds Jennie Stuart Medical Center, Hopkinsville, KY, January 7, 2004.

“Treatment of respiratory tract infections in the era of increasing bacterial resistance”, presented at medical grand rounds, Department of Family Medicine, University of Illinois College of Medicine, Peoria, Illinois, December 4, 2003.

“Changing antimicrobial resistance rates in *Streptococcus pneumoniae* at Methodist Hospital”, presented at medical grand rounds, Methodist Hospital, Indianapolis, Indiana, October 28, 2003.

PRESENTATIONS (Continued)

“Community-acquired pneumonia: Treatment issues in the era of increasing bacterial resistance”, presented at medical grand rounds, Andrews Air Force Base, Washington, DC, October 15, 2003.

“Resistance trends in *Streptococcus pneumoniae* in Indiana”, presented at the annual meeting of the Indiana Coalition for Antimicrobial Resistance Education Strategies (ICARES), Indianapolis, Indiana, September 23, 2003.

“Prophylactic antibiotics: Can appropriate use affect bacterial resistance”, presented as a teleconference to the Veterans Health Administration, Indianapolis, Indiana, September 23, 2003.

“Antimicrobial safety: Hints, allegations, and things left unsaid”, presented as a national teleconference series to health care practitioners (physicians, pharmacists, nurses), Indianapolis, Indiana, July 30, 2003, September 8, 2003, September 24, 2003, October 2, 2003, October 8, 2003, November 5, 2003, December 3, 2003.

“The role of bacterial resistance in the treatment of community-acquired respiratory tract infections”, presented at medical grand rounds, Bloomington Hospital and Healthcare System, Bloomington, Indiana, May 16, 2003.

“Community-acquired pneumonia: treatment issues in the era of increasing bacterial resistance”, presented to staff and clinical pharmacists, St. Vincent’s Hospital, Indianapolis, Indiana, May 14, 2003.

“Resistance and respiratory tract infections: hype or hysteria?”, presented to the Northeast Indiana Pharmacists Association, Fort Wayne, Indiana, April 15, 2003.

“The role of bacterial resistance in the treatment of community-acquired respiratory tract infections”, presented at medical grand rounds, St. Mary’s Medical Center, Evansville, Indiana, February 26, 2003.

“Treatment of ICU pneumonia in an era of increased antibiotic resistance”, presented at medical grand rounds, Ball Memorial Hospital, Muncie, Indiana, July 25, 2001.

“Antimicrobial resistance in *Streptococcus pneumoniae* from Indianapolis, Indiana”, presented to Indiana physicians as part of the Indiana Coalition for Antimicrobial Resistance Education Strategies (ICARES) teleconference series, Indianapolis, Indiana, February 8, 2001.

“New developments in the treatment of community-acquired respiratory tract infections”, presented to drug information pharmacists, Chicago, Illinois, January 30, 2001.

PRESENTATIONS (Continued)

“Treatment of infections caused by *Streptococcus pneumoniae* in the era of penicillin resistance”, presented at medical grand rounds, Marion General Hospital, Marion, Ohio, November 9, 2000.

“Treatment of ICU pneumonia in an era of increased antibiotic resistance”, presented to physicians and pharmacists, Dallas, Texas, October 19, 2000.

“Treatment of ICU pneumonia in an era of increased antibiotic resistance”, presented to physicians and pharmacists, Detroit, Michigan, October 4, 2000.

“Treatment of infections caused by *Streptococcus pneumoniae* in the era of penicillin resistance – a pharmacodynamic approach”, presented at the annual meeting of the Missouri chapter of the American Society of Health-Systems Pharmacists, St. Louis, Missouri, September 14, 2000.

“Pharmacokinetic and pharmacodynamic considerations in antibiotic decision-making”, presented at Medical Grand Rounds, The Medical Center of Central Georgia, Macon, Georgia, August 23, 2000.

“Treatment of infections caused by *Streptococcus pneumoniae* in the era of penicillin resistance”, presented to clinical pharmacists, pharmacy staff, and pharmacy residents at Pharmacy Grand Rounds, University of Arkansas for Medical Sciences, Little Rock, Arkansas, February 15, 2000.

“Update on antibiotic resistance”, presented to the Washington Metropolitan Society for Health-System Pharmacists, Bethesda, Maryland, January 20, 2000.

“Treatment of infections caused by *Streptococcus pneumoniae* in the era of penicillin resistance”, presented to clinical pharmacists, pharmacy staff, and pharmacy residents at Pharmacy Noon Conference, Indiana University Medical Center, Indianapolis, Indiana, December 17, 1999.

“Treatment of infections caused by *Streptococcus pneumoniae* in the era of penicillin resistance”, presented to clinical pharmacists, infectious diseases physicians, pharmacy staff, and pharmacy residents at Pharmacy Noon Conference, Methodist Hospital, Indianapolis, Indiana, December 13, 1999.

“Treatment of respiratory tract infections: What’s new in resistance and treatment”, presented to family medicine, internal medicine, and pulmonary physicians, Indianapolis, Indiana, December 11, 1999.

“Differentiation of fluoroquinolones using pharmacodynamics principles”, presented to the Indian Medical Society, Joliet, Illinois, November 19, 1999.

PRESENTATIONS (Continued)

“Pharmacokinetics and pharmacodynamics of newer fluoroquinolones”, continuing pharmacy education presentation to clinical and staff pharmacists, Indianapolis, Indiana, November 9, 1999.

“Pharmacokinetic and pharmacodynamic considerations in antibiotic decision-making”, presented to physicians, pharmacists, and nurse practitioners, Milwaukee, Wisconsin, November 2, 1999, and Madison, Wisconsin, November 3, 1999.

“Management of community-acquired pneumonia in the immunocompetent adult: From the hospital to the community”, presented at Grand Rounds, Shawnee Mission Medical Center, Shawnee Mission, Kansas, October 26, 1999.

“Lower respiratory tract infections: What’s new in treatment and resistance”, presented to physicians and nurse practitioners, Chicago, Illinois, October 18, 1999.

“Pharmacokinetic and pharmacodynamic considerations in the treatment of community-acquired pneumonia”, presented to pharmacy staff, Pharmacy Noon Conference, Parkview Memorial Hospital, Fort Wayne, Indiana, October 13, 1999.

“Pharmacokinetic and pharmacodynamic considerations in the treatment of community-acquired pneumonia”, presented to family medicine, internal medicine, and pulmonary physicians, Muncie, Indiana, October 5, 1999.

“Emerging trends in bacterial resistance: racing toward the post-antibiotic era?”, presented to the Indiana College of Clinical Pharmacy, Indianapolis, Indiana, September 16, 1999.

“Use of pharmacodynamic principles in antimicrobial decision-making”, presented to medical residents, medical staff, and pharmacy residents at Noon Conference, St. Vincent’s Hospital, Indianapolis, Indiana, May 10, 1999.

“Differentiation of fluoroquinolones using pharmacodynamics principles”, presented to staff of Lovelace Health System, Albuquerque, New Mexico, March 11, 1999.

“Pharmacodynamics: A rational strategy for comparison and selection of antimicrobial agents”, presented at grand rounds, Ireland Army Community Hospital, Fort Knox, Kentucky, November 3, 1998.

“Treatment of infections caused by *Streptococcus pneumoniae* in the era of penicillin resistance”, presented to pediatricians, family physicians, and internal medicine physicians, Chicago, Illinois, November 1, 1998.

“Pharmacodynamics: A rational strategy for comparison and selection of antimicrobial agents”, presented to clinical pharmacists, pharmacy residents, and pharmacy students, University of Kentucky, Lexington, Kentucky, October 14, 1998.

PRESENTATIONS (Continued)

“Treatment of bacterial infections in the long-term care facility”, presented to pharmacists at NCS Healthcare, Cleveland, Ohio, September 15, 1998, and Indianapolis, Indiana, September 17, 1998.

“Antimicrobial treatment of febrile neutropenia”, presented at nursing staff in-service, Indiana University Medical Center, Indianapolis, Indiana, September 10, 1998.

“Developing vancomycin resistance: to enterococci and beyond”, presented to clinicians, residents, and staff, Department of Pharmacy, Harper Hospital, Detroit Medical Center, Detroit, Michigan, January 9, 1998.

“Developing vancomycin resistance: to enterococci and beyond”, presented to clinicians, residents, and staff, Department of Pharmacy, Baylor University Medical Center, Dallas, Texas, November 21, 1997.

"Entering the post-antibiotic era", presented to the faculty, fellows, residents, and Pharm.D. students, College of Pharmacy, Medical University of South Carolina, August 11, 1994.

"Treatment of infections caused by antibiotic-resistant Gram-positive cocci", presented to Internal Medicine and Family Medicine residents, Medical University of South Carolina, June 22, 1994.

"Clinical utility of the serum bactericidal test", presented Infectious Diseases Grand Rounds, Medical University of South Carolina, July 22, 1993.

"In vitro evaluation of antimicrobial degradation and concentration-dependent bactericidal activity of imipenem and meropenem", presented at the Health Science Associate Pharmacy Research Conference, Merck & Co., Inc., West Point, Pennsylvania, October 28, 1992.

"Recent developments in antimicrobial therapy", presented to ENT physicians, Medical University of South Carolina, September 24, 1992.

"Effect of in vitro degradation on the antimicrobial activity of imipenem", presented to the College of Pharmacy, University of Oklahoma, Oklahoma City, February 13, 1991.

"Effect of in vitro degradation on the antimicrobial activity of imipenem", presented to the College of Pharmacy and Allied Health Professions, Wayne State University, Detroit, Michigan, February 8, 1991.

"Review of antimicrobial agents", presented to the Oral Surgery Department, Medical University of South Carolina, June 5, 1991.

"Pseudo resistance of pseudomonas - degradation of imipenem in predried susceptibility panels", Student Research Day, Medical University of South Carolina, November 9, 1990.

PRESENTATIONS (Continued)

"Comparison of serum bactericidal activity between different patient populations", Student Research Day, Medical University of South Carolina, November 4, 1989.

"In vitro susceptibility and treatment of infections caused by *Branhamella (Moraxella) catarrhalis*", Infectious Diseases Case Conference, Medical University of South Carolina, June 1, 1989.

"Placental transfer of antimicrobial agents", Infectious Diseases Case Conference, Medical University of South Carolina, March 23, 1989.

"*Acinetobacter calcoaceticus*: an emerging pathogen", Resident Seminar Series, Medical University of South Carolina, November 29, 1988.

"Clindamycin serum protein binding in subjects with variable alpha-1 acid glycoprotein concentrations", Student Research Day, Medical University of South Carolina, November 4, 1988.

"Pharmacodynamics of the aminoglycosides - Importance of the peak/MIC ratio", Pharmacy Grand Rounds, Medical University of South Carolina, April 13, 1988.

"Fluoroquinolones", Pharm.D. Conference and Infectious Diseases Clerkship, Medical University of South Carolina, November 1987 and January 1988.

"Catheter-related sepsis and the controversies associated with its treatment", Pharmacy Grand Rounds, Medical University of South Carolina, November 18, 1987.

COMMUNITY SERVICE

"HIV infection and the acquired immunodeficiency syndrome", presented to 7th grade students at Westview Middle School during their sex education course, Goose Creek, South Carolina, March 2, 1992.

WORKSHOP LEADER

"Infectious Diseases in the Elderly"
Symposium - Geriatrics in South Carolina, Charleston, South Carolina, October 24, 1992

TEACHING

Didactic

Purdue University College of Pharmacy

Doctor of Pharmacy Curriculum

Course Coordinator

Integrated Pharmacotherapy V (PHRM 86500) – Spring 2015, Spring 2016

Pathophysiology and Therapeutics III (CLPH 57300/87300) – Spring 2005, Spring 2006, Spring 2007, Spring 2008, Spring 2009, Spring 2010, Spring 2011, Spring 2012, Spring 2013, Spring 2014

Lecturer

Integrated Pharmacotherapy V (PHRM 86500) – Spring 2015, Spring 2016

Professional Program Laboratory VI (PHRM 86100) – Spring 2015, Spring 2016

Public Health Pharmacy (PHRM 827) – Spring 2013, Spring 2014, Spring 2015, Spring 2016

Infectious Diseases Therapeutics (CLPH 57300/87300) – Spring 1999, Spring 2000, Spring 2001, Spring 2002, Spring 2003, Spring 2004, Spring 2005, Spring 2006, Spring 2007, Spring 2008, Spring 2009, Spring 2010, Spring 2011, Spring 2012, Spring 2013, Spring 2014

Integrated Lab VI (PHRM 40400) – Spring 2003, Spring 2004, Spring 2005, Spring 2006, Spring 2007, Spring 2008, Spring 2009, Spring 2010, Spring 2011, Spring 2012, Spring 2013, Spring 2014

Pharmaceutical Care in Developing Countries (CLPH 45700) – Spring 2004, Spring 2005, Spring 2006, Spring 2007, Spring 2008, Spring 2009, Spring 2010

Purdue University School of Nursing

M.S. Degree with a Major in Nursing and Adult Nurse Practitioner specialization

Pharmacotherapeutics in Primary Care (NUR 502) – Spring 2008, Spring 2009, Spring 2010

Indiana University School of Medicine

Clinical Therapeutics

Infectious Diseases Clinical Case Discussions – Spring 1999, Spring 2000

TEACHING (Continued)

Medical University of South Carolina

Advanced Therapeutics I

Course Coordinator - Fall 1993, Fall 1994

Infectious Diseases Therapeutics Module

Module Coordinator - Fall 1991, Fall 1992, Fall 1993, Fall 1994

Study Design and Evaluation

Course Co-coordinator - Fall 1994

Clinical

Served as a preceptor for post-Pharm.D. residents and Pharm.D. candidates on the Infectious Diseases clerkship rotation:

Residents	11
Pharm.D. candidates	292

REVIEWER

Pharmacotherapy

Annals of Pharmacotherapy

Antimicrobial Agents and Chemotherapy

Journal of Antimicrobial Chemotherapy

Journal of Clinical Pharmacology

Journal of Clinical Pharmacy and Therapeutics

Diagnostic Microbiology and Infectious Diseases

European Journal of Clinical Microbiology and Infectious Diseases

Clinical Therapeutics

BMC Infectious Diseases

BMC Clinical Pharmacology

Journal of the Pediatric Infectious Diseases Society

Clinical Journal for the American Society of Nephrology

EDITORIAL BOARD MEMBERSHIP

Annals of Pharmacotherapy

Laboratory Medicine – 2004 to 2007

Infectious Diseases – 2007 to present

Chair, Infectious Diseases – 2015 to present

EDITORIAL BOARD MEMBERSHIP (Continued)

Journal of Clinical Pharmacology
Editorial Board – 2015 to present

International Journal of Antibiotics
Editorial Board – 2012 to 2015

Clinical Therapeutics
Infectious Diseases/Pharmacokinetics-Pharmacodynamics – 2010 to 2013

RESIDENT ADVISOR

Grant Sklar - Adult Internal Medicine Resident
July 1, 1993 - June 30, 1994
Jimmie L. Brandon - Pharmacy Practice Resident
July 1, 1992 - June 30, 1993

COMMITTEES

College of Pharmacy – Purdue University

Graduate Affairs Committee
May 1999 – present

Experiential Learning Academic Standards Committee
August 2006 – present

Pharm.D. Academic Standards and Readmission
August 2014 – present

Student Cases Committee
July 2016 – present

College Murphy Award Committee
July 2016 – present

Evaluation of Teaching Committee
July 2016 – present

Faculty Council
August 2012 – July 2014

Grade Appeals Committee
August 2011 – July 2013

COMMITTEES (Continued)

Admissions Committee
August 2010 – June 2011

Curriculum Committee
Member, August 2000 – July 2010
Chair, August 2001 – July 2002

Curriculum Revision Task Force
January 2008 – May 2009

Strategic Planning Committee, Department of Pharmacy Practice
November 2008 – December 2009

Purdue University

University Grievance Committee
August 2011 - present

National Committees

American College of Clinical Pharmacy
Infectious Diseases PRN
Program Committee
Initiatives Committee
Chair Elect, Infectious Diseases PRN
October 1998 – November 2001
Awards Committee
October 2009 – September 2011

Society of Infectious Diseases Pharmacists
Membership Committee
September 1998 – September 1999, September 2004-2008
Chair, Membership Committee
September 1999 – September 2001
Awards Committee
September 2002-2008

PAST COMMITTEE MEMBERSHIPS (Medical University of South Carolina)

Medical University Hospital

Infection Control Committee
August 1991 - October 1994

COMMITTEES (Continued)

Antibiotic Subcommittee
July 1992 - October 1994
Secretary, July, 1993 - October 1994

Hospital Pharmacy Practice and Administration

Information Technology Committee
August 1991 – October 1994

College of Pharmacy

Continuing Education Committee
August 1991 - October 1994

Research and Fellowship Committee
January 1992 - July 1992

Student Activities Committee
August 1986 - May 1988

National Organizations

Ad Hoc Committee on Subspecialization
Society of Infectious Diseases Pharmacists

PROFESSIONAL ORGANIZATIONS

American College of Clinical Pharmacy
1992 - present (Member)
1989 - 1992 (Associate Member)

Society of Infectious Diseases Pharmacists
1991 - present

American Society for Microbiology
1988 – present

Infectious Diseases Society of America
2002 – present

Indiana College of Clinical Pharmacy
1998 – present

PROFESSIONAL ORGANIZATIONS (Continued)

American Society of Hospital Pharmacists
1987 – 1999

South Carolina Society of Hospital Pharmacists
1994 – 1997

Phi Delta Chi Professional Fraternity
Member (Beta Delta Chapter) – 1982 – present
Faculty Advisor (Tau Chapter) – 2016 – present

LICENSURE

Missouri (#41737)

HONORS AND AWARDS

Dr. Aziz Outstanding Teacher of the Year Award
Purdue University College of Pharmacy
May 2016

Henry W. Heine Memorial Award for Excellence in Undergraduate Teaching
Purdue University School of Pharmacy and Pharmaceutical Sciences
April 2005

Academic Keys Who's Who in Pharmaceutical Sciences Education
August 2004

Professor of the Year
Presented by the Pharm.D. Class of 1992, Medical University of South Carolina
March 28, 1992

Professor of the Year
Presented by the Pharm.D. Class of 1993, Medical University of South Carolina
March 28, 1992

Doctor of Pharmacy Class President
Medical University of South Carolina
1986-1988

Rho Chi Honor Society
Medical University of South Carolina
1987

HONORS AND AWARDS (Continued)

HONORS AND AWARDS (Continued)

Who's Who Among Students in American Colleges and Universities
Saint Louis College of Pharmacy
1985

Phi Delta Chi Professional Fraternity
Saint Louis College of Pharmacy
President - 1984
Correspondent – 1983

Updated 1/2017