

# Curriculum Vitae

**Brian L. Erstad, Pharm.D.**

**Professor**

University of Arizona College of Pharmacy  
Department of Pharmacy Practice & Science  
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## Chronology of Education

### Degrees

1985-87                      Doctor of Pharmacy, The University of Arizona, Tucson, Arizona  
1976                      Bachelor of Science in Pharmacy, South Dakota State University, Brookings, South Dakota

### Other Education

2004                      Arizona Clinical Research Training Program (AzCRTP), funded by NIH K30 Clinical Research Curriculum Award (biostatistics, epidemiology, grantsmanship, bioethics/regulations, and elective coursework); summer 2001 to June 2004

## Licensure

1982                      Arizona  
1976                      South Dakota

## Certification

2009-current      Basic CITI Course in The Protection of Human Research Subjects  
2001                      Rochester Test on the Protection of Study Volunteers in Research  
1993-current      Board Certified Pharmacotherapy Specialist (exam-Reno, NV)  
1988-current      Advanced Cardiac Life Support (ACLS) and Basic Life Support (BLS)

## Major Field(s)

Critical care medicine with emphasis on patient safety and related outcomes' research (Center Investigator-Center for Health Outcomes and Pharmacoeconomics Research, University of Arizona, 2004-present), and advancement of interdisciplinary pharmacy practice

## Chronology of Employment

2012-current	Interim Department Head, Department of Pharmacy Practice & Science, College of Pharmacy, University of Arizona
2004-current	Professor (with tenure), Department of Pharmacy Practice & Science, College of Pharmacy, University of Arizona
1998-2004	Associate Professor with tenure, Department of Pharmacy Practice & Science, College of Pharmacy, University of Arizona
1997-2011	Assistant Department Head, Department of Pharmacy Practice & Science, College of Pharmacy, University of Arizona
1994-1998	Clinical Associate Professor, Department of Pharmacy Practice & Science, College of Pharmacy, University of Arizona
1988-current	Clinical pharmacist for surgery with emphasis on critical care practice at University Medical Center, Tucson, Arizona
1988-1994	Clinical Assistant Professor, Department of Pharmacy Practice, College of Pharmacy, University of Arizona
1987-1988	Clinical Pharmacy Resident, University Medical Center, Tucson, Arizona
1982-1986	Staff Pharmacist, St. Joseph's Hospital, Tucson, Arizona
1976-1982	Staff Pharmacist, Rapid City Regional Hospital, Rapid City, South Dakota
1976	Pharmacy Internship, Sioux Valley Hospital, Sioux Falls, South Dakota
1976	Pharmacy Internship, Rapid City Regional Hospital, Rapid City, South Dakota

## Honors and Awards

2008	<b>Shubin-Weil Master Clinician/Teacher Excellence in Bedside Teaching Award</b>
2007	<b>Distinguished Practitioner</b> , National Academies of Practice in Pharmacy
2004	<b>American College of Clinical Pharmacy Clinical Practice Award</b>
2000	<b>Fellow of the American College of Clinical Pharmacy (FCCP)</b>
2000	<b>Elias Schlossberg Lecture Award</b> "Given in recognition to outstanding contributions to health-system pharmacy in Arizona"
1997	<b>Fellow of the American College of Critical Care Medicine (FCCM)</b>
1994	<b>Fellow of the American Society of Hospital Pharmacists (FASHP)</b>
1993	<b>Outstanding Pharmacist of the Year</b> , Arizona Society of Hospital Pharmacists

## Service

### State Professional Organization/Association Service Activities

**Arizona Society of Health-System Pharmacists**  
**President-Elect** (1993-1994)  
**Chair**, Past President's Council (1993-1994)  
**Chair**, Awards Committee (1993-1994)  
**President** (1994-1995)  
**Chair**, Board of Directors (1994-1995)

**Immediate Past-President** (1995-1996)  
**Chair**, ASHP HOD Issue Review Ad Hoc Task Force (1995-1996)

## **National Professional Organization/Association Service Activities**

### **American Association of Colleges of Pharmacy (AACP)**

Professional Affairs Committee (2012-13)  
 Delegate for College of Pharmacy, University of Arizona (1992, 1999, 2003, 2007-2010)  
 Alternate delegate for College of Pharmacy, University of Arizona (2001)  
 Section of Teachers of Pharmacy Practice  
 Nominations Committee (1992-1993, 1995-1996)  
 Resolutions Committee (2000-2002)  
 Task Force to Develop Criteria for the Evaluation of Teaching Performance of Pharmacy Practice Faculty (1996-1998)  
 New Investigator Program Proposal Review committee (2002)  
 Programming Committee (2007-2009)  
 Vice-Chair (2008-2009)  
**Chair**, Practice Affairs Task Force (2009-2010)  
 Strategic Plan and Bylaws Taskforce (2010-2011)  
 Crystal Apple Award Reviewer (2007, 2008)  
 Scholarship and Research Development Committee (2012-2013)  
 Advocacy in Pharmacy Practice Taskforce (2012-13)

### **American College of Chest Physicians (ACCP)**

ICU Pain Management Task Force, Critical Care Institute (2006-2007)  
 Critical Care Collaborative Initiative for mass casualty events (2006-2007)

### **American College of Clinical Pharmacy (ACCP)**

Critical Care PRN (specialty practice group)  
 Scientific Planning Committee, ACCP-ESCP International Congress of Clinical Pharmacy (2006-2009)  
 ACCP/ESCP 8 Spring Forum Student Symposium Planning Committee (2007-2008)  
 Publications Committee (2009-2010)  
 National Pharmacy Student Competition Item Writing Committee (2009-2010)  
 Educational Affairs Committee, Vice-Chair (2013)

### **American College of Critical Care Medicine (ACCM)**

Credentials Committee (2001-2002)

### **Agency for HealthCare Research and Quality (AHRQ) Effective Healthcare Stakeholder Group** (2005-2007)

### **American Pharmacists Association (APhA)**

### **American Society of Health-System Pharmacists (ASHP)**

Delegate for State of Arizona (1993-1995)  
**Vice Chair**, Critical Care Specialty Practice Group (1994)  
**Chair**, Advisory Group for ASHP Section of Clinical Pharmacy Specialists (1994)  
**Chair (appointed)**, Executive Committee for ASHP Section of Clinical Pharmacy Specialists (1994-1995)  
 Ad Hoc Committee to Identify Long-Term Governance Issues (1995)

**Chair (elected)**, Executive Committee for ASHP Section of Clinical Pharmacy Specialists; observer at Regional Delegate Conferences and House of Delegates as Section Chair (1995-1997)

Finance Committee, ASHP Section of Clinical Specialists (1996-1998)

Project Catalyst Practitioner Panel (1996-1997)

Evaluator for Clinical Skills Competition (1996-2003)

**Immediate Past Chair**, Executive Committee for ASHP Section of Clinical Pharmacy Specialists (1997-1998)

Section of Pharmacy Practice Managers Advisory Group on Pharmacy Practice Model Initiative (2011-2012)

**Chair**, Nominations Committee, ASHP Section of Clinical Specialists (1997-1998)

Mentor for young practitioners in *Practice Advancement Links Program (PALS)* program for ASHP (1997-2000)

Accreditation Services site review team- critical care/nutrition (1998, 2005, 2009, 2010)

ASHP Virtual Mentoring Program (2002-2010)

**Board of Directors** (member-elect 2000, term 2001-2003)

**Board Liaison**, Council on Educational Affairs (2001-2002)

**Board Liaison**, Council on Professional Affairs (2002-2003)

**Board Liaison**, ASHP Section of Home Care Practitioners (2002-2003)

Awards Committee (2003-2004)

Critical Care Residency Update Team (2006-2007)

#### **ASHP Research and Education Foundation**

Research Advisory Panel (2005-2010, 2011-2013)

Selected as voting participant for Pharmacy Practice Model Summit (one of only 2 pharmacists selected from Arizona), Irving, TX; (Nov 2010)

#### **American Society of Parenteral and Enteral Nutrition**

##### **Board of Pharmaceutical Specialties (BPS)**

Council on Nuclear Pharmacy; **appointed** (reappointed 1998) as non-nuclear pharmacist member (1997-2001)

Item Development Workshop participant for the Specialty Council on Pharmacotherapy, Phoenix, AZ; (Nov 1997)

Council on Pharmacotherapy (2010-2012; reappointed 2013-2015)

##### **Critical Care Pharmacotherapy Trials Network**

Steering committee member (2012-current)

##### **Institute of Medicine (IOM)**

Invited panelist, "Identifying Triggers: Identifying the shift from 'Conventional' to 'Contingency' and then 'Surge' Capacity Situations" in disasters (Sept 2009)

##### **International Society for Pharmaceconomics and Outcomes Research (ISPOR)**

ISPOR Drug Cost Task Force (2006)

ISPOR cPro Working Group (2009-2010)

##### **Multi-Society Strategic Planning Task Force for Critical Care Research**

Objective "to define a broad, comprehensive agenda for critical care research that is of importance to healthcare in the U.S." to be used as a "blueprint for future critical care initiatives" aimed at NIH and other funding sources (2010)

##### **National Academies of Practice in Pharmacy** (2007-2010)

##### **Society of Critical Care Medicine (SCCM)**

**Chair**, Research Committee, Section of Pharmacy & Pharmacology (1999-2001)

Research Committee, Ad Hoc member (1999-2000) Member (2001-2003)  
**Chair**, CPP Grant Review Committee (1999-2001)  
 Strategic Planning Committee for CPP Section (1999-2001)  
 Task Force to write guidelines for neuromuscular blockade (1999-2000)  
 Neuromuscular Blockade Task Force to revise guidelines (2011-2012)  
 Critical Care Self-Assessment Program- question contributor (1999)  
 Critical Care Summit Committee (2005)  
 Quality and Safety Committee (2005-2007)  
 Congress Program Planning Committee (2006-2008)  
 Pharmacotherapy Conference Planning Committee (2009-2010)  
 Multidisciplinary Critical Care Knowledge Assessment Program Committee that  
 develops assessment tools for fellowship programs (2011-2013)  
 Neuromuscular Blockade Task Force to write guidelines (2011-2012)  
 Pharmacotherapy Conference (2011-2014), Co-Chair 2012 Conference  
**United States Critical Illness and Injury Trials (USCIIT)**  
 Group Steering Committee member (2011-2013)  
**USCIIT HHS Committee** for the “Rapid Assessment of Acute Illness and Injury to  
 Enhance the US Response to Public Health Emergencies,” Steering Committee Member  
 (2011-2012)  
**USP**  
 USP Therapeutic Decision Making Expert Committee (2006-2010)

## Editorial Advisory Boards

2010-current	International Advisory Board of <i>Journal of Medical Economics</i>
2008-2010	International Advisory Board of <i>Current Medical Research and Opinion</i>
2003-current	<i>Pharmacotherapy</i>
1994-current	<i>Annals of Pharmacotherapy</i> Critical Care Medicine Board

## Publications

### Monographs/National Guidelines

1. Erstad BL. Technology Report: Serum Albumin (author of monograph). UHC Technology Advancement Center, September 1992; 1-56.
2. Vermeulen LC, et al. Technology Assessment: Albumin, Nonprotein Colloid, and Crystalloid Solutions (exercise participant and contributing reviewer) UHC Technology Advancement Center, December, 1993 (Revised 5/00).
3. Yim JM et al. Technology Report: Results of the UHC Albumin and Nonprotein Colloid Solutions Multicenter Technology Use Surveillance (exercise participant and contributing reviewer) UHC Technology Advancement Center, November 1994.
4. Erstad BL, Grant K. ASHP Therapeutic Guidelines on stress ulcer prophylaxis (Project Coordinator). *Am J Health-Syst Pharm* 1999;56:347-79.
5. Murray MJ, Cowen J, DeBlock H, Erstad BL, Gray AW, Tescher AN, et al. Clinical practice guidelines for sustained neuromuscular blockade in the adult critically ill patient. *Crit Care Med*

- 2002;30:142-156 (also published in the Am J Health-Syst Pharm).
6. Rubinson L, Hick JL, Curtis JR, Branson RD, Burns S, Christian MD, Devereaux AV, Dichter JR, Talmor D, Erstad B, Medina J, Geiling JA. Definitive care for the critically ill during a disaster: medical resources for surge capacity. CHEST 2008;133:32S-50S (also member of Steering Committee associated with all related papers in supplement).

#### Chapters in Scholarly Books and Handbooks

1. Erstad BL. Medication Dosing in Overweight and Obese Patients. In: Murphy JE, ed. *Clinical Pharmacokinetics*, 4<sup>th</sup> edition. Bethesda, MD: American Society of Health-System Pharmacists, 2008;19-26.
2. Erstad BL. Hypovolemic Shock. In: DiPiro et al, eds. *Pharmacotherapy: A Pathophysiologic Approach*. 7<sup>th</sup> edition. Stamford, CT: Appleton & Lange 2008;441-453.
3. Erstad BL. Hypovolemic Shock. In: Schwinghammer TL, Koehler J, eds. *Pharmacotherapy Casebook: A Patient-Focused Approach (and Instructor's Guide)*. 7<sup>th</sup> ed. New York: McGraw-Hill, 2008;22:1-4.
4. Erstad BL. Antimicrobial Prophylaxis in Surgical Patients. In, Mushlin SB, Greene HL, eds. *Decision Making in Medicine: An Algorithmic Approach*. 3<sup>rd</sup> edition. Mosby Elsevier, Philadelphia, PA 2010:700-701.
5. Erstad BL. Use and Monitoring of Aminoglycoside Antibiotics. In, Mushlin SB, Greene HL, eds. *Decision Making in Medicine: An Algorithmic Approach*. 3<sup>rd</sup> edition. Mosby Elsevier, Philadelphia, PA 2010:704-707.
6. Rominski JM, Matthias KR, Erstad BL. Use and Evaluation of Serum Drug Levels. In, Mushlin SB, Greene HL, eds. *Decision Making in Medicine: An Algorithmic Approach*. 3<sup>rd</sup> edition. Mosby Elsevier, Philadelphia, PA 2010:708-711.
7. Erstad BL. Surviving and Thriving in the Academic Setting. In: Zlatic TD, ed. *Clinical Faculty Survival Guide*. American College of Clinical Pharmacy, Lenexa, KS 2010:21-36.
8. Adriance SM, Erstad BL. Intra-Abdominal Infection. In: Katz MD, Matthias KR, Chisholm-Burns MA, eds. *Pharmacotherapy Principles and Practice Study Guide: A Case-Based Care Plan Approach*. McGraw-Hill Companies, Inc., New York, NY 2011:331-334.
9. Stahle SA, Erstad BL. Sepsis Syndromes. In: Katz MD, Matthias KR, Chisholm-Burns MA, eds. *Pharmacotherapy Principles and Practice Study Guide: A Case-Based Care Plan Approach*. McGraw-Hill Companies, Inc., New York, NY 2011:355-358.
10. Erstad BL. Hypovolemic Shock. In: DiPiro et al, eds. *Pharmacotherapy: A Pathophysiologic Approach*. 8<sup>th</sup> edition. Stamford, CT: Appleton & Lange 2011;421-435.
11. Erstad BL. Hypovolemic Shock. In: Schwinghammer TL, Koehler J, eds. *Pharmacotherapy Casebook: A Patient-Focused Approach*. 8<sup>th</sup> ed. New York: McGraw-Hill, 2011;91-92.
12. Erstad BL, Patanwala AE. Teaching and Precepting: Assuming the Role of an Educator. In: Murphy JE, ed. *Resident Survival Guide*. American College of Clinical Pharmacy, Lenexa, KS 2011:53-68.
13. Erstad BL. Medication Dosing in Overweight and Obese Patients. In: Murphy JE, ed. *Clinical Pharmacokinetics*. 5<sup>th</sup> ed. American Society of Health-System Pharmacists, Bethesda, MD 2012:19-28.
14. Erstad BL. Special Caveats of Drugs Used in Critical Care Medicine. In: Roberts PR, Todd SR, eds. *Comprehensive Critical Care: Adult*. Society of Critical Care Medicine, Mount Prospect, IL 2012;779-789.
15. Erstad BL. Drug Dosing in the Critically Ill Obese Patient. In: El Solh AA, ed. *Critical Care Management of the Obese Patient*. John Wiley & Sons, Ltd, Hoboken, NJ 2012:197-207.
16. Patanwala AE, Erstad BL. Reporting Patient Safety Events. In: Papadopoulos J, et al., eds. *Drug-*

Induced Complications in the Critically Ill Patient: A Guide for Recognition and Treatment. Society of Critical Care Medicine, Mount Prospect, IL 2012:449-456.

17. Erstad BL, Hoyland M. Step VII: Maximize Experiential Education. In: Bauman JI, Sims KA, eds. The ACCP Field Guide to Becoming a Standout Pharmacy Residency Candidate. American College of Clinical Pharmacy, Lenexa, KS 2012:89-112.
18. Erstad BL. Postgraduate Year Two (PGY2) Pharmacy Residency Training Programs. In: Crouch MA, ed. Securing and Excelling in a Pharmacy Residency. Jones & Bartlett Learning, Burlington, MA 2013:49-56.

#### Refereed Journal Articles- Original Research (past 5 years)

1. Nolan PE Jr., Marcus FI, Erstad BL, et al. Effects of coadministration of propafenone on the pharmacokinetics of digoxin in healthy volunteer subjects. *J Clin Pharmacol* 1989;29:46-52.
2. Nolan PE, Erstad BL, Hoyer GL, Bliss M, Gear K, Marcus FI. Steady-state interaction between amiodarone and phenytoin in normal subjects. *Am J Cardiol* 1990;65:1252-7.
3. Gales BJ and Erstad BL. Albumin audit results and guidelines for use. *J Pharm Technol* 1992;8:125-9.
4. Erstad BL, Snyder BA, Kramer T. Epidural, intrathecal, and patient-controlled analgesic use in a university medical center. *J Pharm Technol* 1993;9:141-3.
5. Erstad BL, Harlander DK, Daller JA. Hematologic effects of alcohol consumption in trauma patients. *Ann Pharmacother* 1993;27:889-91.
6. Erstad BL, Ortmeier BG, Hubbard JH, Judkins DG. Native American trauma at a university medical center. *The Provider* (Indian Health Service/Public Health Service) 1994;19:9-12.
7. Erstad BL, Campbell DJ, Rollins CJ, Rappaport WD. Albumin and prealbumin concentrations in patients receiving postoperative parenteral nutrition. *Pharmacotherapy* 1994;14:458-62.
8. Erstad BL, Draugalis JR, Waldrop SM, et al. Patients' perceptions of increased pharmacy contact. *Pharmacotherapy* 1994;14:724-8.
9. Erstad BL, Murphy JE. Developing critical interaction skills in students: debating clinical pharmacokinetic controversies. *Am J Pharm Educ* 1994;58:440-5.
10. Whipple JK, Quebbeman EJ, Esser MJ, Lewis KS, Gottlieb MS, McKindley DS, Hess M, Boucher BA, Jancik JT, Wesley LC, Erstad BL, Ausman RK. Current patterns of prescribing and administering morphine in trauma patients. *Pharmacotherapy* 1995;15:210-5.
11. Vermeulen LC, Ratko TA, Erstad BL, Brecher ME, Matuszewski KA. A paradigm for consensus: The University Hospital Consortium guidelines for the use of albumin, nonprotein colloid, and crystalloid solutions. *Arch Intern Med* 1995;155:373-9.
12. Carl JL, Erstad BL, Murphy JE, Slack MK. Infusion syringe device comparison study for medication delivery. *Am J Hosp Pharm* 1995;52:1428-32.
13. O'Connell H, Erstad BL. Comparison of predicted and measured energy expenditure in mechanically ventilated obese patients. *J Pharm Technol* 1995;11:47-9.
14. Kinkade RE, Mathews CT, Draugalis JR, Erstad BL. Evaluation of a computer simulation in a therapeutics case discussion. *Am J Pharm Educ* 1995;59:147-50.
15. Yim JM, Vermeulen LC, Erstad BL, Matuszewski KA, Burnett DA, Vlasses PH. Albumin and nonprotein colloid solution use in U.S. academic health centers *Arch Intern Med* 1995;155:2450-5.
16. Erstad BL, Grier DG, Scott ME, Esser MJ, Joshi P. Recognition and treatment of ethanol abuse in trauma patients. *HEART & LUNG: The Journal of Critical Care* 1996;25(4):330-6.
17. Erstad BL, Chopda S, Esser MJ. Prescribing of analgesics in trauma patients. *Amer J Ther* 1997;4:27-30.
18. Erstad BL, Meeks ML, Chow HH, Rappaport WD, Levinson ML. Intramuscular meperidine

- administration in elderly postoperative patients. *Ann Pharmacother* 1997;31:23-8.
19. Erstad BL, McIntyre K. Prospective, randomized comparison of ampicillin-sulbactam and cefoxitin for diabetic foot infections. *Vasc Surg* 1997;31:419-25.
  20. Erstad BL, Callahan P, Keller J. Evaluation of practice site learning experience for entry-level Doctor of Pharmacy students. *Am J Pharm Educ* 1997;61:87-90.
  21. Erstad BL, Camamo JM, Miller MJ, Anthony M, Webber, Fortune J. Impacting cost and appropriateness of stress ulcer prophylaxis at a university medical center. *Crit Care Med* 1997;25:1678-84.
  22. Erstad BL, Costa CM, Daller JA, Fortune JB. Lack of hematologic effects or recent ethanol ingestion. *Am J Ther* 1999;6:299-302.
  23. Erstad BL, Tong T. Evaluation of learning skills development and computer-assisted learning strategies with an orientation program. *Am J Pharm Educ* 1999;63:182-5.
  24. Erstad BL, Richards H, Rose S, Nakazato P, Fortune J. Influence of twenty-five per cent human serum albumin on total and ionized calcium concentrations *in vivo*. *Crit Care* 1999;3:117-21.
  25. Erstad BL. Pharmacoeconomic comparison of an albumin-furosemide complex versus sequential therapy for renal insufficiency. *Clin Ther* 1999;21:1380-6.
  26. Erstad BL, Barletta JF, Jacobi J, et al. Survey of stress ulcer prophylaxis. *Crit Care* 1999;3:145-9.
  27. Erstad BL, Favre JK. Written testing of students in the experiential setting. *Amer J Pharm Educ* 2000;63:426-9.
  28. Barletta JF, Erstad BL, Loew M, Keim SM. A prospective study of pain control in the emergency department. *Am J Ther* 20007:251-6.
  29. Barletta JF, Johnson SB, Nix DE, Nix LC, Erstad BL. Population pharmacokinetics of aminoglycosides in critically ill trauma patients on once-daily regimens. *J Trauma* 2000;49:869-72.
  30. Armstrong EP, Patrick KL, Erstad BL. Comparison of preoperative skin preparation products. *Pharmacotherapy* 2001;21:345-50.
  31. Calabrese AD, Erstad BL, Brandl K, Barletta JF, Kane SL, Sherman DS. Medication administration errors in adult patients in the ICU. *Intensive Care Med* 2001;27:1592-8.
  32. Keim SM, Erstad BL, Sakles JC, Davis V. Etomidate for procedural sedation in the emergency department. *Pharmacotherapy* 2002;22:586-92.
  33. Bolesta S, Erstad BL. The use of metoclopramide in ileus: A look at duration of therapy. *Hosp Pharm* 2002;37:949-52.
  34. Barletta JF, Erstad BL. Stress ulcer prophylaxis in trauma patients. *Crit Care* 2002;6:526-30.
  35. Thomas MC, Erstad BL. Safety of enteral naloxone and IV neostigmine when used to relieve constipation. *Am J Health-Syst Pharm* 2003;60:1264-7.
  36. Herout PM, Erstad BL. Medication errors involving continuously infused medications in a surgical intensive care unit. *Crit Care Med* 2004;32:428-32.
  37. Allen ME, Kopp BJ, Erstad BL. Stress ulcer prophylaxis in the postoperative period. *Am J Health-Syst Pharm* 2004;61:588-96.
  38. Erstad BL. Cost-effectiveness of proton pump inhibitor therapy for acute peptic ulcer related bleeding. *Crit Care Med* 2004;32:1277-83.
  39. Adams RJ, Armstrong EP, Erstad BL. Prescribing and self-administration of morphine in Hispanic and non-Hispanic Caucasian patients treated with patient-controlled analgesia. *J Pain Palliat Care Pharmacother* 2004;18:29-38.
  40. Camamo JM, McCoy RH, Erstad BL. Retrospective evaluation of inhaled prostaglandins in patients with acute respiratory distress syndrome. *Pharmacotherapy* 2005;25:184-90.
  41. Olson LM, Desai S, Soto ML, Namazifard S, Quelland A, Erstad BL. Evaluation of pharmacists' interventions at a university teaching hospital. *Can J Hosp Pharm* 2005;58:20-5.
  42. Kopp, BJ, Erstad, BL, Allen, ME, Theodorou AA, Priestley G. Medication errors and adverse drug

- events in an intensive care unit: Direct observation approach for detection. *Crit Care Med* 2006;34:415-25.
43. Nix DF, Erstad BL, Nakazato PZ, et al. Estimation of creatinine clearance in end-stage liver disease. *Ann Pharmacother* 2006;40:900-8.
  44. Erstad AJ, Erstad BL, Nix DE. Accuracy and reproducibility of small-volume injections from various-sized syringes. *Am J Health-Syst Pharm* 2006;63:748-50.
  45. Patanwala A, Abarca J, Huckleberry Y, Erstad BL. Pharmacologic management of constipation in the critically ill patient. *Pharmacotherapy* 2006;26:896-902.
  46. Pantanwala AE, Erstad BL, Nix DE. Cost-effectiveness of linezolid and vancomycin in the treatment of surgical site infections. *Curr Med Res Opin* 2007;23:185-93.
  47. Buckley MS, Erstad BL, Kopp BJ, Theodorou AA, Priestley G. Direct observation approach for detecting medication errors and adverse drug events in a pediatric intensive care unit. *Pediatr Crit Care Med* 2007;8:145-52.
  48. Erstad BL, Schultz JM. Prophylactic antibiotic compliance with published guidelines. *J Pharm Pract* 2007;19.5:300-5.
  49. Koopman E, Nix DE, Erstad BL, Demeure MJ, Hayes MM, Ruth JT, Matthias KR. End-of-procedure cefazolin concentrations after administration for prevention of surgical-site infection. *Am J Health-Syst Pharm* 2007;64:1927-34.
  50. Kopp BJ, Mrsan M, Erstad BL, Duby JJ. Cost implications of actual and potential adverse events prevented by interventions of a critical care pharmacist. *Am J Health-Syst Pharm* 2007;64:2483-7.
  51. Duby JJ, Erstad BL, Abarca J, Camamo JM, Huckleberry Y, Bramblett SN. Impact of delayed initiation of erythropoietin in critically ill patients. *BMC Blood Disord* 2007;7:1.doi: 10.1186/1471-2326-7-1
  52. Patanwala AE, Jarzyna DL, Miller MD, Erstad BL. Comparison of opioid requirements and analgesic response in opioid-tolerant versus opioid-naïve patients after total knee arthroplasty. *Pharmacotherapy* 2008;28:1453-60.
  53. Patanwala AE, Norris CJ, Nix DE, Kopp BJ, Erstad BL. Vancomycin dosing for pneumonia in critically ill trauma patients. *J Trauma Inj Infect Crit Care* 2009;67:802-4.
  54. Fernandez J, Erstad BL, Petty W, Nix DE. Time to positive culture and identification for *Candida* bloodstream infections. *Diag Micro Infect Dis* 2009;64:402-7..
  55. Patanwala AE, Warholak TL, Sanders AB, Erstad BL. A prospective observational study of medication errors in a tertiary care emergency department. *Ann Emerg Med* 2010;55:522-6.
  56. Hennings S, Romero A, Erstad BL, Franke H, Theodorou AA. A comparison of automated infusion device technology to prevent medication errors in pediatric and adult intensive care unit patients. *Hosp Pharm* 2010;45:464-71.
  57. Jacques KA, Erstad BL. Availability of information for dosing injectable medications in underweight or obese patients. *Am J Health-Syst Pharm* 2010;67:1948-50.
  58. Patanwala AE, Stahle SA, Sackles JC, Erstad BL. Comparison of succinylcholine and rocuronium for first-attempt intubation success in the emergency department. *Acad Emerg Med* 2011;18:11-14.
  59. Patanwala AE, Biggs AD, Erstad BL. Patient weight as a predictor of pain response to morphine in the emergency department. *J Pharm Pract* 2011;24:109-113.
  60. Patanwala AE, Hays DP, Sanders AB, Erstad BL. Severity and probability of harm of medication errors intercepted by an emergency department pharmacist. *Int J of Pharm Pract* 2011;19:358-62.
  61. Baggs JH, Patanwala AE, Williams EM, Erstad BL. Dosing of 3-factor prothrombin complex concentrate for international normalized ratio reversal. *Ann Pharmacother* 2012;46:51-56.
  62. Patanwala AE, Sanders AB, Thomas MC, Acquisto NM, Weant KA, Baker SM, Merritt E, Erstad BL. A prospective, multicenter study of pharmacist activities resulting in medication error interception in the emergency department. *Ann Emerg Med* 2012;59:369-73.

63. Doungngern T, Huckleberry Y, Bloom JW, Erstad BL. Effect of albumin on diuretic response to furosemide in patients with hypoalbuminemia. *Am J Crit Care* 2012;21:280-6.

Refereed Journal Articles- Nonexperimental (literature reviews, case reports with literature review)

64. Erstad BL. Prevention of Amphotericin B Toxicity. *Clin Trends Hosp Pharm* 1987;1:31-5.
65. Katz M, Erstad B, Rose K. Treatment of severe cryptosporidium-related diarrhea with octreotide in a patient with AIDS. *Drug Intell Clin Pharm* 1988;22:134-5.
66. Erstad BL. Sucralfate in the prophylaxis and treatment of stress-induced bleeding. *J Pharm Technol* 1988;4:138-43.
67. Katz MD, Erstad BL. Octreotide: review of a new somatostatin analogue. *Clin Pharm* 1989;8:255-73.
68. Erstad BL. Severe cardiovascular adverse effects in association with acute, high-dose corticosteroid administration. *Drug Intell Clin Pharm* 1989;23:1019-23.
69. Erstad BL, Gales BJ, Rappaport WD. The use of albumin in clinical practice. *Arch Int Med* 1991;151:901-11. (Also requested to abbreviate English version of article for international translation/readership). Erstad BL. Utilización de la albúmina en la práctica clínica. *Pharmacy Digest* 1991;3:10-12.
70. Daller JA, Erstad BL, Rosado L, Otto C, Putnam CW. Aminophylline antagonizes the neuromuscular blockade of pancuronium but not vecuronium. *Crit Care Med* 1991;19:983-5.
71. Erstad BL, Witte CL, Talkington DK. Toxic shock-like syndrome. *Pharmacotherapy* 1992;12:23-27.
72. Erstad BL. Massive gastrointestinal bleeding associated with ketorolac administration. *J Pharm Practice* 1992;5:11-12.
73. Erstad BL. Dapsone-induced methemoglobinemia and hemolytic anemia. *Clin Pharm* 1992;11:800-5 [selected as Grand Rounds article by Editor].
74. Erstad BL. Serum albumin levels: who needs them? *Ann Pharmacother* 1992;26:1134-8 [article also converted to Spanish edition (Concentraciones de seroalbumina: quien las necesita?) since it was one of "the best" articles "that appeared in our English-language edition."]
75. Gales BJ, Erstad BL. Adverse reactions to human serum albumin. *Ann Pharmacother* 1993;27:87-94.
76. Erstad BL. How to be an effective clerkship or internship preceptor. *Am J Hosp Pharm* 1993;50:434-9.
77. Erstad BL, Meeks ML. Influence of injection site and route on medication absorption. *Hosp Pharmacy* 1993;28:853-78.
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82. Erstad BL. A rational approach to the management of acute pain states (part 2). *Hosp Formul* 1994;29:586-593 (accredited C.E. article).
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123. Patanwala AE, Keim, SM, Erstad BL. Intravenous opioids for severe acute pain in the emergency department. *Ann Pharmacother* 2010;44:1800-9.
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125. Patanwala AE, Acquisto NM, Erstad BL. Prothrombin complex concentrate for critical bleeding. *Ann Pharmacother* 2011;45:990-9.
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127. Johnson SG, Kayser SR, Attridge RL, Duvall L, Kiser TH, Moote R, Reed BN, Rodgers JE, Erstad B. Key articles and guidelines in the management of pulmonary arterial hypertension: 2011 update. *Pharmacotherapy* 2012;32:e134-69.

#### Letters and Editorials

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129. Erstad BL. Developing models for pharmacy practice. *Am J Health-Syst Pharm* 2010;67(letter):23-24.
130. Erstad BL. Colloids and renal dysfunction: Another brick in the wall of safety concerns. *Crit Care Med* 2011;39:1565-6.
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132. Nix DE, Matthias KR, Erstad BL. Vancomycin clearance in overweight and obese patients. *Am J Health-Syst Pharm* 2011;68(letter):1776-7.
133. Erstad BL. Obesity in critical illness: What weight or why weight? *Crit Care Med* 2012;40(editorial):1657-60.

## Scholarly Presentations (past 5 years)

### Submitted With Abstracts

#### International

1. Patanwala A, Erstad BL, Jarzyna D, Miller M. "Post-operative pain management in opioid naïve and opioid tolerant patients after orthopedic surgery," International Conference on Clinical Pharmacy, Istanbul, Turkey; October 2007.
2. Kopp BK, Erstad BL, Schultz JM. "Impact of prolonged morphine infusions in ICU patients with or without renal insufficiency," American College of Clinical Pharmacy/European Society of Clinical Pharmacy International Congress on Clinical Pharmacy, Orlando, Florida; April 2009.

#### National

1. Kopp BJ, Theodorou AA, Buckley MS, Erstad BL, Priestley G. An Evaluation of Medication Errors and Adverse Drug Events (ADEs) in a Pediatric ICU," presented at Society of Critical Care Medicine's 35<sup>th</sup> Educational and Scientific Symposium, San Francisco, CA; January 2006.
2. Duby JJ, Erstad BL, Abarca J, et al. Epoetin Alfa in the Critically Ill Patient: Published Trials Versus Practice," presented at American Society of Health-System Pharmacists Summer Meeting, Orlando, FL; June 2006.
3. Patanwala A, Erstad BL, Nix DE. "Cost-Effectiveness of Linezolid Versus Vancomycin in the Treatment of Surgical Site Infections," presented at the American College of Clinical Pharmacy Annual Meeting, St. Louis, MO Oct 2006.
4. Dang KH, Huckleberry Y, Abarca J, Smoyer R, Erstad B. "Glycemic Control in Ward Patients After Tight Control with Insulin Infusions in the Intensive Care Unit," presented at American Society of Health-System Pharmacists Midyear Clinical Meeting, Anaheim, CA; Dec 2006.
5. Schultz JM, Erstad BL. "Evaluation of Surgical Antibiotic Prophylaxis in an Academic Medical Center," presented at American Society of Health-System Pharmacists Midyear Clinical Meeting, Anaheim, CA; Dec 2006.
6. Patanwala A, Norris CJ, Nix DE, Erstad BL. "Vancomycin Dosing for Pneumonia in Critically Ill Patients," presented at the Society of Critical Care Medicine's 36<sup>th</sup> Educational and Scientific Symposium, Honolulu, Hawaii; February 2008.
7. Fernandez J, Nix D, Erstad B, Petty W. "Time Between Blood Culture Collection and Positive Results Reported for Candida species," presented at the American College of Clinical Pharmacy Annual Meeting, Phoenix, AZ; April 2008.
8. Erstad BL, Patanwala A. "Integration of Didactic and Experiential Education to Smooth Transition to the Acute Care Setting," presented at the American Association of Colleges of Pharmacy Annual Meeting, Chicago, IL; July 2008.
9. Biggs A, Patanwala A, Erstad B, Chase P. "Factors Affecting Morphine Dosage in Treating Severe Pain in the Emergency Department," presented at the American College of Clinical Pharmacy

- Annual Meeting, Louisville, KY; Oct 2008.
10. Patanwala A, Warholak Terri, Sanders A, Erstad BL. "A Prospective Observational Study of Medication Errors in a Tertiary Care Academic Emergency Department," presented at the American College of Emergency Physician's ACEP Research Forum, Boston, Mass; Oct 2009.
  11. Stahle S, Patanwala A, Hays D, Sakles J, Erstad BL. "Effect Of Sedative and Paralytic Dosing on First Attempt Success Rates During Rapid Sequence Intubation in the Emergency Department," presented at the American College of Clinical Pharmacy Annual Meeting, Anaheim, CA; Oct 2009.
  12. Hennings S, Romero A, Erstad BL, Franke H, Theodorou AA. "Use of Automated Infusion Device Technology in Critically Ill Patients to Avoid Adverse Drug Events Associated with High-Risk Medications." presented at the Society of Critical Care Medicine's 39<sup>th</sup> Educational and Scientific Symposium, Miami, Fl; January 2010.
  13. Baggs JH, Patanwala AE, Williams E, Erstad BL. "Adequacy of International Normalized Ratio (INR) Reversal After Receiving 3-Factor Prothrombin Complex Concentrate," presented at the American College of Clinical Pharmacy Annual Meeting, Austin, TX; Oct 2010.
  14. Jacques KA, Erstad BL. "Availability of Information for Dosing Injectable Medications in Underweight and Obese Patients," presented at the American Society of Health-System Pharmacists Midyear Clinical Meeting, Anaheim, CA; Dec 2010.
  15. Stahle S, Adriance S, Kopp B, Erstad B. "Effectiveness of Levetiracetam Versus Phenytoin for Early Seizure Prophylaxis Following Traumatic Brain Injury," presented at the American Society of Health-System Pharmacists Midyear Clinical Meeting, Anaheim, CA; Dec 2010.
  16. Doungngern T, Huckleberry Y, Erstad B, Bloom J. "Furosemide Versus Furosemide/Albumin Combination on Urine Output in Hypoalbuminemic Critically Ill Patients," presented at the American Society of Health-System Pharmacists Summer Meeting, Denver, CO; June 2011.
  17. Patanwala AE, Sanders AB, Thomas MC, Acquisto NM, Weant KA, Baker SM, Merritt E, Erstad BL. A prospective, multicenter study of medication errors intercepted by emergency department pharmacists. American College of Emergency Physicians, San Francisco, CA; Oct 2011.
  18. Holmes K, Patanwala A, Erstad B. Effect of body mass index on analgesic response to morphine. presented at the Society of Critical Care Medicine's 41<sup>th</sup> Educational and Scientific Symposium, Houston, TX; February 2012.
  19. Traylor BR, Patanwala AE, Sackles JC, Erstad BL. Etomidate dosing variability based on weight for rapid sequence intubation in the emergency department. presented at the Society of Critical Care Medicine's 41<sup>th</sup> Educational and Scientific Symposium, Houston, TX; February 2012.
  20. Shearin AE, Patanwala AE, Tang A, Erstad BL. "Hypotension associated with propofol in the emergency department," presented at the American College of Clinical Pharmacy Annual Meeting, Hollywood, FL; October 2012.
  21. Radosevich J, Nix DE, Erstad BL. "Evaluation of the treatment of candiduria in intensive care unit and non-intensive care units patients at an academic medical center," presented at the American College of Clinical Pharmacy Annual Meeting, Hollywood, FL; October 2012.
  22. McKinney CB, Patanwala AE, Sakles JC, Erstad BL. "Effect of etomidate versus ketamine on intubation success in the emergency department," presented at the Society of Critical Care Medicine's Annual Meeting, San Juan, Puerto Rico; January 2013.

## INVITED PRESENTATIONS

### International

1. "Is Sugar Nice in the ICU," American College of Clinical Pharmacy/European Society of Clinical

Pharmacy International Congress on Clinical Pharmacy, Orlando, FL, April 2009.

### National

1. "Pharmacology of the morbidly obese patient," presented at Society of Critical Care Medicine's 35<sup>th</sup> Educational and Scientific Symposium, San Francisco, CA; January 2006.
2. "Traditional Pharmacological Management of ICU Pain," ICU Pain Consensus Meeting, American College of Chest Physicians, Tucson, AZ; March 2006.
3. "An Evidence-Based Approach to Clinical Decision Making in the ICU," American Society of Health-System Pharmacists Summer Meeting, Orlando, FL; June 2006
4. "Use of Pharmacoeconomics in the ICU," Excellence in Quality and Safety in Critical Care conference, Baltimore, MD; September 2006.
5. "The Increasing Role of the Pharmacist in the Management of Postoperative Ileus," moderator and speaker for symposium in conjunction with American College of Clinical Pharmacy Annual Meeting, St. Louis; Oct 2006.
6. "Pharmacological Agents for Managing Sedation and Analgesia," American College of Chest Physicians annual meeting, Salt Lake City, Utah; October 2006.
7. "Bicarbonate in Paris," presented at American Society of Health-System Pharmacists Midyear Clinical Meeting, Anaheim, CA; Dec 2006.
8. "ABGs and Acid-Base Status," presented at the American Society of Parenteral and Enteral Nutrition (ASPEN) annual meeting, Phoenix, AZ; Sept 2007.
9. "Key Lessons for Being an Excellent Educator," American College of Clinical Pharmacy annual meeting, Denver, CO; October 2007.
10. "Interdisciplinary Management of Sedation and Analgesia in the ICU: Pharmacologic Management Issues," American College of Chest Physicians annual meeting, Chicago, IL; October 2007.
11. "Developing a Quality Medication-Use Evaluation Program," group facilitator at American Society of Health-System Pharmacists Midyear Clinical Meeting, Las Vegas; Dec 2007.
12. "Not All Islands are the Same: Pharmacotherapy in Morbidly Obese Patients," presented at the Society of Critical Care Medicine's 36<sup>th</sup> Educational and Scientific Symposium, Honolulu, Hawaii; February 2008.
13. "Medication Errors and Adverse Drug Reactions in the ICU," presented at the Society of Critical Care Medicine's 36<sup>th</sup> Educational and Scientific Symposium, Honolulu, Hawaii; February 2008.
14. "Effects of Morbid Obesity on Dosing," presented at the Society of Critical Care Medicine's 36<sup>th</sup> Educational and Scientific Symposium, Honolulu, Hawaii; February 2008.
15. "Interpreting ABG's and Acid-Base Status," presented at the American Society of Parenteral and Enteral Nutrition (ASPEN) annual meeting, Chicago, Ill; February 2008.
16. "Clinical Pearls for Residency," roundtable discussion at the American College of Clinical Pharmacy Annual Meeting, Phoenix, AZ; April 2008.
17. "How to Better Detect and Prevent Adverse Events and Medication Errors in Your ICU," moderator and speaker at the American Society of Health-System Pharmacists Summer Meeting, Seattle, WA; June 2008.
18. "Incorporating Scholarship into Clinical Practice," Section of Teachers of Pharmacy Practice, American Association of Colleges of Pharmacy Annual Meeting, Chicago, IL; July 2008.
19. "I'm a New Practitioner Now," Great Expectations Conference for New Practitioners, American Society of Health-System Pharmacists, New York, NY; August 2008.
20. "Integrating Specialized Tips into Your Daily Practice," Great Expectations Conference for New Practitioners, American Society of Health-System Pharmacists, New York, NY; August 2008.
21. "Involvement in National Organizations: A Win-Win Opportunity," Great Expectations Conference

- for New Practitioners, American Society of Health-System Pharmacists, New York, NY; August 2008.
22. "Being an Effective Preceptor," presented at the American College of Clinical Pharmacy Annual Meeting, Louisville, KY Oct 2008.
  23. "Managing Pain in the ICU: Pharmacologic Management," American College of Chest Physicians annual meeting, Philadelphia, PA; October 2008.
  24. "Developing a Rigorous Medication-Use Evaluation Program – Applying the Principles of Descriptive Research," group facilitator at American Society of Health-System Pharmacists Midyear Clinical Meeting, Orlando, FL; Dec 2008.
  25. "Pharmacokinetic Dosing Dilemmas in Current Clinical Practice – Dosing in Obesity," American Society of Health-System Pharmacists Midyear Clinical Meeting, Orlando, FL; Dec 2008.
  26. "Applying Analytical Research Principles in Medication Use Evaluation," group facilitator at American Society of Health-System Pharmacists Midyear Clinical Meeting, Orlando, FL; Dec 2008.
  27. "Bedside Teaching," Society of Critical Care Medicine's 38<sup>th</sup> Critical Care Congress, Nashville, TN; Jan/Feb 2009.
  28. "High-Risk Medications in the ICU," Society of Critical Care Medicine's 38<sup>th</sup> Critical Care Congress, Nashville, TN; Jan/Feb 2009.
  29. "Interpreting Acid-Base Status with Blood Gases," presented at the American Society of Parenteral and Enteral Nutrition (ASPEN) annual meeting, New Orleans, LA; February 2009.
  30. "Medication Dose Adjustments for Obese Patients," presented at the American Pharmacists Association Annual Meeting, San Antonio, Tx, April 2009.
  31. "Procedural Sedation in the Emergency Department," presented at the American College of Clinical Pharmacy Annual Meeting, Anaheim, CA; Oct 2009.
  32. "Who Wants to be a Millionaire? The Short and Sweet of Scientific Writing," presented at the 44<sup>th</sup> ASHP Midyear Clinical Meeting; Las Vegas, NV; Dec 2009.
  33. "Who You Buggin? ID Pearls," presented at the 44<sup>th</sup> ASHP Midyear Clinical Meeting; Las Vegas, NV; Dec 2009.
  34. "Developing a Rigorous Medication-Use Evaluation Program – Applying the Principles of Descriptive Research," group facilitator at the 44<sup>th</sup> ASHP Midyear Clinical Meeting; Las Vegas, NV; Dec 2009.
  35. "Optimizing Patient Comfort with Safe and Effective Sedation," presented at the 44<sup>th</sup> ASHP Midyear Clinical Meeting; Las Vegas, NV; Dec 2009.
  36. "A Review of the Fluids and Factors Used for Resuscitation," moderator and session presenter at the 44<sup>th</sup> ASHP Midyear Clinical Meeting; Las Vegas, NV; Dec 2009.
  37. "Is Sugar Nice in the ICU," clinical pearl presented at the 44<sup>th</sup> ASHP Midyear Clinical Meeting; Las Vegas, NV; Dec 2009.
  38. "Heparin and Low Molecular Weight Heparin Dosing in Difficult Situations," presented at the 44<sup>th</sup> ASHP Midyear Clinical Meeting; Las Vegas, NV; Dec 2009.
  39. "The Graying of Albumin," presented (and session moderator) at the Society of Critical Care Medicine's 39<sup>th</sup> Educational and Scientific Symposium, Miami, FL; January 2010.
  40. "The Weight is Over: Now What," presented (and session moderator) at the Society of Critical Care Medicine's 39<sup>th</sup> Educational and Scientific Symposium, Miami, FL; January 2010.
  41. "Interpreting Arterial Blood Gases and Acid-Base Status" and "The Basic Metabolic Panel," Postgraduate Course presented at the American Society of Parenteral and Enteral Nutrition (ASPEN) annual meeting, Las Vegas, NV; February 2010.
  42. "Taking a Scholarly Approach to Your Practice," speaker and facilitator for Clinical Career Advancement symposium, American College of Clinical Pharmacy Annual Meeting, Austin, TX; Oct 2010.

43. "Using Portfolios to Guide and Document Your Continuous Professional Development," facilitator for Clinical Career Advancement symposium, American College of Clinical Pharmacy Annual Meeting, Austin, TX; Oct 2010.
44. "Inadequate Analgesia for the Opioid Tolerant Patient in the ED to the ICU Setting," presented at the American College of Clinical Pharmacy Annual Meeting, Austin, TX; Oct 2010.
45. "Guidelines: When and Where Do They Apply," presented at the ASHP Midyear Clinical Meeting; Anaheim, CA; Dec 2010.
46. "Pain Management in the Intensive Care Unit and Case Discussion," presented at the ASHP Midyear Clinical Meeting, Anaheim, CA; Dec 2010.
47. "General Principles of Drug Dosing in Obesity," presenter and Program Chair for session at the ASHP Midyear Clinical Meeting, Anaheim, CA; Dec 2010.
48. "Residency Accreditation," presented at the Society of Critical Care Medicine's Pre-Congress Symposium, San Diego, CA; January 2011.
49. "Line Infections: When to Treat or Pull," presented at the Society of Critical Care Medicine's 40<sup>th</sup> Annual Critical Care Congress, San Diego, CA; January 2011.
50. "Supportive Care: Analgesia and Beyond," presenter and Program Chair for session at the ASHP Summer Meeting, Denver, CO; June 2011.
51. "The Renal Panel: Beyond the Normal Range," presenter and Program Chair for session at the ASHP Summer Meeting, Denver, CO; June 2011.
52. "Taking a Scholarly Approach to Your Practice," speaker and facilitator for Clinical Career Advancement symposium, American College of Clinical Pharmacy Annual Meeting, Pittsburgh, PA; Oct 2011.
53. "Using Portfolios to Guide and Document Your Continuous Professional Development," facilitator for Clinical Career Advancement symposium, American College of Clinical Pharmacy Annual Meeting, Pittsburgh, PA; Oct 2011.
54. "Fluid Resuscitation and Bleeding Cessation," presented at the ASHP Midyear Clinical Meeting, New Orleans, LA; December 2011.
55. "Determining Appropriate Drug Dosing in Obesity and Other Special Populations," presented at the ASHP Midyear Clinical Meeting, New Orleans, LA; December 2011.
56. "Medication Errors and Adverse Drug Events in the ICU," presented and moderated at the ASHP Midyear Clinical Meeting, New Orleans, LA; December 2011.
57. "Management of Pain in the Intensive Care Unit," presented at the ASHP Midyear Clinical Meeting, New Orleans, LA; December 2011.
58. "Neuromuscular Blockade for all ARDS Patients?," presented at the Society of Critical Care Medicine's 41<sup>th</sup> Educational and Scientific Symposium, Houston, TX; February 2012.
59. "Clinical Interpretation of Common Laboratory Parameters," presented at the Vital Care Home Infusion Services Annual Meeting, New Orleans, LA; March 2012.
60. "General Principles of Drug Dosing in Obesity," presented at the ASHP Summer Meeting, Baltimore, MD; June 2012.
61. "Medication Dosing in Obese and Overweight Patients," presented at the The Obesity Society's 30<sup>th</sup> Annual Scientific Meeting, San Antonio, Tx; September 2012.
62. "Pain, Agitation, Delirium Guideline," moderator and panelist at the Society of Critical Care Medicine's Pharmacotherapy in Critical Illness meeting (co-chair for entire meeting), New Orleans, LA; October 2012.
63. "Fluid Resuscitation: New Drugs and Technologies," presented at the American College of Clinical Pharmacy Annual Meeting, Hollywood, FL; October 2012.
64. "Taking a Scholarly Approach to Your Practice," speaker and facilitator for Clinical Career Advancement symposium, American College of Clinical Pharmacy Annual Meeting, Pittsburgh,

- PA; Oct 2012.
65. "Using Portfolios to Guide and Document Your Continuous Professional Development," facilitator for Clinical Career Advancement symposium, American College of Clinical Pharmacy Annual Meeting, Pittsburgh, PA; Oct 2012.
  66. "So You Wanna Be a Preceptor: Old Dog New Tricks," presented at the ASHP Midyear Clinical Meeting, Las Vegas; December 2012.
  67. "Precepting PGY-2 Pharmacy Residents: Above and Beyond PGY-1 Precepting," presented at the ASHP Midyear Clinical Meeting, Las Vegas; December 2012.
  68. "Residency Precepting: Strategies Worth Sharing," presented at the ASHP Midyear Clinical Meeting, Las Vegas; December 2012.
  69. "Pain Management in the ICU," presented at the ASHP Midyear Clinical Meeting, Las Vegas; December 2012.

## **Postgraduate Preceptorship/Mentorship**

Preceptor for general pharmacy residents

Residency Program Director for critical care pharmacy residency (accredited since 1998)