

Curriculum Vitae

GLEN THOMAS SCHUMOCK, PHARMD, MBA, PHD, FCCP

CONTACT INFORMATION

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LICENSURE AND CERTIFICATION

Professional Licensure (Registered Pharmacist): States of Washington (current), Wisconsin (expired), and Illinois (current).

Board Certification: Pharmacotherapy Specialist (BCPS), granted by the Board of Pharmaceutical Specialties, No. 293320, December 31, 1993. Recertified 2000, 2007, expired in 2014 (not renewed).

EDUCATION AND POST-GRADUATE TRAINING

- 1982-87 Bachelors of Pharmacy (Cum Laude), College of Pharmacy, Washington State University, Pullman, WA.
- 1987-89 Doctor of Pharmacy, School of Pharmacy, University of Washington, Seattle, WA.
- 1987-89 Residency in Hospital Pharmacy (ASHP-Accredited), University of Washington Hospital and Harborview Medical Center, Seattle, WA.
- 1990-91 Specialized Residency in Hospital Pharmacy Administration (ASHP-Accredited), University of Illinois and Michael Reese Hospitals, Chicago, IL.
- 1991-92 Fellowship in Hospital Pharmacy Administration, Department of Pharmacy Practice, College of Pharmacy, University of Illinois at Chicago, Chicago, IL.
- 1991-94 Master of Business Administration (with concentration in Health Services Administration), College of Business Administration, University of Illinois at Chicago, Chicago, IL.
- 2005-12 Doctor of Philosophy in Public Health Sciences, Department of Epidemiology and Biostatistics, School of Public Health, University of Illinois at Chicago, Chicago, IL. Dissertation: Association between leukotriene-receptor modifying agents and suicide.

ACADEMIC AND PROFESSIONAL POSITIONS HELD

- 1987-1989 Staff Pharmacist, University of Washington Hospital, Seattle, WA.
- 1989-1990 Clinical Pharmacist-Adult Medicine, Michael Reese Hospital and Medical Center, Chicago, IL.
- 1991-1992 Chief Pharmacy Resident, Clinical Pharmacy Residency/Fellowship Programs, University of Illinois Hospital, Chicago, IL.
- 1992-1995 Clinical Assistant Professor, Department of Pharmacy Practice, College of Pharmacy, University of Illinois at Chicago, Chicago, IL.

- 1992-1995 Assistant Director of Pharmacy, University of Illinois Hospital, University of Illinois at Chicago, Chicago, IL.
- 1995-1996 Director of Pharmacy, Community Health Care-Wausau Hospital, Wausau, WI. An Affiliate of the University of Wisconsin Hospital and Clinics.
- 1996-2000 Director of Pharmacy and Respiratory Care, Community Health Care-Wausau Hospital, Wausau, WI. An Affiliate of the University of Wisconsin Hospital and Clinics.
- 2000-2003 Associate Professor (not tenured, 100% appointment), Department of Pharmacy Practice, College of Pharmacy, University of Illinois at Chicago, Chicago, IL.
- 2000-2003 Associate Professor (not tenured, 0% appointment), Department of Pharmacy Administration, College of Pharmacy, University of Illinois at Chicago, Chicago, IL.
- 2002-2013 Director, Center for Pharmacoepidemiology and Pharmaco-economic Research (name changed in 2012 from "Center for Pharmaco-economic Research"), College of Pharmacy, University of Illinois at Chicago, Chicago, IL.
- 2003-2009 Associate Professor (tenured, 100% appointment), Department of Pharmacy Practice, College of Pharmacy, University of Illinois at Chicago, Chicago, IL.
- 2003-2009 Associate Professor (tenured, 0% appointment), Department of Pharmacy Administration, College of Pharmacy, University of Illinois at Chicago, Chicago, IL.
- 2009-2015 Professor (100% appointment 2009-2013, 0% appointment 2013-2015), Department of Pharmacy Practice, College of Pharmacy, University of Illinois at Chicago, Chicago, IL.
- 2009-present Professor (0% appointment 2009-2013, 100% appointment 2013-present), Department of Pharmacy Systems, Outcomes and Policy (name changed from "Department of Pharmacy Administration" in 2013), College of Pharmacy, University of Illinois at Chicago, Chicago, IL.
- 2013-present Head, Department of Pharmacy Systems, Outcomes and Policy, College of Pharmacy, University of Illinois at Chicago, IL. (Interim Head Designate May 16 to August 15, 2013, Permanent thereafter)
- 2014-present Departmental Affiliate, Division of Epidemiology and Biostatistics, School of Public Health, University of Illinois at Chicago, Chicago, IL.

AWARDS AND HONORS

- 1991 *Upjohn Research Award*, College of Pharmacy, University of Illinois at Chicago, Chicago, IL. June 1991.
- 1997 *Award for Literature Achievement in the Professional Practice of Pharmacy*. American Society of Health-System Pharmacists Foundation. Presented at the 1997 ASHP Midyear Clinical Meeting, Atlanta, GA. December 1997.
- 2000 *Best Practices in Health-System Pharmacy Management Award*. American Society of Health-System Pharmacists. Presented at the 2000 ASHP Annual Meeting, Philadelphia, PA. June 2000.

- 2003 *Certificate of Appreciation.* The Centers for Medicare and Medicaid Services (CMS), for contribution to CMS multi-site Pharmacy Preceptorship. Chicago, IL. June 17, 2003.
- 2003 *Fellow.* American College of Clinical Pharmacy. Presented at the ACCP Annual Meeting, Atlanta, GA. November 2003.
- 2005 *Honorable Mention.* American Association of Colleges of Pharmacy, Council of Faculties, 2005 Innovations in Teaching Competition. May 2005.
- 2008 *Inaugural Member.* University of Illinois at Chicago, Center for Clinical and Translational Science's Translational Research Academy. July 31, 2008.
- 2008 *Teacher of the Semester.* University of Illinois at Chicago, College of Pharmacy, Class of 2010. December 2008.
- 2011 *Honorary Fellow.* Institute for Health Research and Policy, University of Illinois at Chicago. January 8, 2011.
- 2014 *Clinical Research Paper Award.* American Pharmacists Association (APhA) – Academy of Pharmaceutical Research and Science. Presented at the APhA Annual meeting, Orlando, FL. March 30, 2014.
- 2014 *Award for Sustained Contribution to the Literature.* American Society of Health-System Pharmacists Foundation. Presented at the ASHP Midyear Clinical Meeting, Anaheim, CA. December 10, 2014.

MAJOR OFFICES OR COMMITTEE ASSIGNMENTS (selected)

- 1997-1998 Member (appointed), National Pharmacy and Therapeutics Committee, Wausau Insurance Companies, Wausau, WI.
- 1997-1999 Delegate (elected), State of Wisconsin, American Society of Health-Systems Pharmacists House of Delegates, Bethesda, MD.
- 1997-1999 Member (appointed), Scientific Program Committee for ACCP-ESCP International Congress on Clinical Pharmacy, American College of Clinical Pharmacy, Kansas City, MO.
- 2000-2002 Chair Elect (2000-2001) and Chair (2001-2002) (elected), Economics and Outcomes Practice Resource Network, American College of Clinical Pharmacy, Kansas City, MO.
- 2001-2002 Chair (appointed), Task Force on Economic Evaluations of Clinical Pharmacy Services, American College of Clinical Pharmacy, Kansas City, MO.
- 2003-2006 Treasurer and Member (elected), Board of Regents, American College of Clinical Pharmacy, Kansas City, MO.
- 2003-2006 Secretary (appointed), FCCP Committee, American College of Clinical Pharmacy, Lenexa, KS.

- 2007-2008 Member (appointed), Educating Clinical Scientists Task Force II, American Association of Colleges of Pharmacy, Alexandria, VA.
- 2007-2008 Vice President (elected) and Founding Member, Chicago Regional Chapter of the International Society of Pharmacoeconomics and Outcomes Research, Chicago, IL.
- 2008-2013 Member (appointed), Board of Directors, Pharmacotherapy Publications Inc of the American College of Clinical Pharmacy, Boston, MA.
- 2008-2011 Co-Chair (appointed), Scientific Program Committee, 27th (2001) Annual International Conference on Pharmacoepidemiology and Therapeutic Risk Management, International Society of Pharmacoepidemiology, Bethesda, MD
- 2008-present Member (appointed), Health Services Research Network Steering Committee, IMS Institute of Healthcare Informatics, IMS Health, Collegeville, PA.
- 2009-2010 Chair (appointed), Publications Committee, American College of Clinical Pharmacy, Lenexa, KS.
- 2010-2014 Member (appointed), Comparative Effectiveness Research Key Function Committee (UIC representative) of the National Consortium of Clinical and Translational Sciences Award Institutions, National Center for Research Resources, National Institutes of Health, Bethesda, MD.
- 2015-present Member (appointed), Fellowship Committee, American College of Clinical Pharmacy, Lenexa, KS.
- 2016-present Regional Advisor (appointed), Governance Initiative, International Society of Pharmacoeconomics and Outcomes Research, Lawrenceville, NJ.
- 2016-2017 Chair (appointed), Organizing Committee for Conference titled “Comparative Effectiveness and Patient-Centered Outcomes Research: Enhancing Update and Use by Patients, Clinicians, and Payers.” PhRMA Foundation, Washington, DC.

EDITORIAL BOARDS

- 1995-2000 Editorial Board Member and Column Editor, *Pharmacy Management Practice Quarterly*. Published by Wolters Kluwer Health, Hagerstown MD.
- 1996-present Editorial Board Member, *Pharmacotherapy: The Journal of Human Pharmacology and Drug Therapy*. Published by the American College of Clinical Pharmacy, Boston, MA.
- 1999-2002 Editorial Board Member, *Pharmacotherapy Self-Assessment Program (PSAP)*, 4th Edition. Published by the American College of Clinical Pharmacy, Lenexa, KS.
- 2001-present Editorial Board Member, *Pharmacoeconomics* (The International Journal of Pharmacoeconomics). Published by Adis (Wolters Kluwer), Auckland, New Zealand.
- 2002-2006 Chairman, Editorial Board Member, *Pharmacotherapy Self-Assessment Program (PSAP)*, 5th Edition. Published by the American College of Clinical Pharmacy, Lenexa, KS.

- 2004-2007 Editorial Board Member, *Research in Social and Administrative Pharmacy*. Published by Elsevier B.V., Amsterdam, The Netherlands.
- 2011-present Associate Editor, *Journal of Comparative Effectiveness Research*. Published by Future Medicine Ltd, London, United Kingdom.
- 2013-2014 Co-Field Editor (with Stephanie Y. Crawford, PhD, MPH, BSPHarm), *American Journal of Health-System Pharmacy*. Published by the American Society of Health-System Pharmacists, Bethesda, MD. [For series of articles focusing on pharmacy practice in small and rural hospitals]

RESEARCH AND AWARD REVIEW BOARDS

- 2005-2007 Member (appointed), Campus Research Board, University of Illinois at Chicago, Chicago, IL. (2005, 2006, 2007)
- 2006-2007 Reviewer (invited). Health Services Research Grant Program. Israel National Institute for Health Policy and Services Research, Tel Aviv, Israel.
- 2006-2007 Reviewer (invited). Pilot Grant Program. Institute for Healthcare Research and Policy, University of Illinois at Chicago, Chicago, IL. (2006, 2007)
- 2007 Panelist (invited). Literature Awards Program. American Society of Health-System Pharmacists Foundation, Bethesda, MD.
- 2008-2011 Reviewer (invited). UIC Center for Clinical and Translational Science Pilot Grant Program, Chicago, IL. (2008, 2009, 2010, 2011)
- 2009 Reviewer (invited). National Cancer Institute, R13 Conference Grant Special Emphasis Panel (SEP) Review, ZCA1 PCRB-G (P1).
- 2011-2013 Member (invited), American Society of Health-System Pharmacists Foundation, Pharmacy Practice Model Initiative Demonstration Grant Program, Bethesda, MD.(2011, 2012, 2013)
- 2012, 2017 Member (appointed), Vahlteich Research Award Review Committee, College of Pharmacy, University of Illinois at Chicago, Chicago, IL.
- 2015 Reviewer (invited). National Institutes of Health, Center for Scientific Review Special Emphasis Panel, PAR13-309-311: Translational Research in Pediatric and Obstetric Pharmacology and Therapeutics.
- 2016-present Panelist (invited). Literature Awards Program. American Society of Health-System Pharmacists Foundation, Bethesda, MD.

JOURNAL REVIEWER

- American Journal of Health System Pharmacy*. (2004-2016)
- American Journal of Pharmaceutical Education*. (2004, 2005, 2007, 2012, 2013)
- Annals of Pharmacotherapy*. (2003)
- BMC Health Services Research*. (2010)

Current Research and Medical Opinion. (2012)
Disease Management and Health Outcomes. (2004)
Drugs and Aging. (2003)
Drug Safety. (2013)
Expert Opinions in Pharmacotherapy. (2007)
Journal of the American Medical Association. (2003, 2004, 2006, 2015)
Journal of Applied Economics and Health Policy. (2013)
Journal of Medical Economics. (2012)
Medical Affairs. (2007)
P&T Journal. (2013)
Pediatrics. (2014)
PharmacoEconomics. (2003-2016)
Pharmacoepidemiology and Drug Safety. (2014)
Pharmacotherapy. (2003-2017)
Research in Social and Administrative Pharmacy. (2004, 2005, 2009)
Value in Health. (2006)

MEMBERSHIPS IN PROFESSIONAL ASSOCIATIONS

American Association of Colleges of Pharmacy.
American College of Clinical Pharmacy.
American Society of Health-Systems Pharmacists.
Chicago Regional Chapter of the International Society for Pharmacoeconomic and Outcomes Research.
International Society for Pharmacoeconomic and Outcomes Research.
International Society of Pharmacoepidemiology.

PUBLICATIONS*[†]

Published Articles in Peer-Reviewed Journals

1. Schumock G, Baker D. Pepcid: A new H₂ antagonist. *Practical Gastroenterology* 1987 Mar;1(2):43-53.
2. Schumock G, Baker D. Famotidine: An H₂ antagonist. *Infusion* 1988 Jan;12(1):14-16.
3. Schumock G, Leister K,[†] Edwards W, Wareham P, Burkhart P. Method for evaluating performance of clinical pharmacists. *American Journal of Hospital Pharmacy* 1990 Jan;47:127-31.
4. Schumock G,[†] Martinez E. Acute oculogyric crisis after administration of prochlorperazine. *Southern Medical Journal* 1991 Mar;84(3):47-8.
5. Schumock G,[†] Frazier J. Drug-induced alterations in body temperature. *Pharmacy & Therapeutics Journal* 1991 Mar;264-77.
6. Schaff R, Schumock G, Nadzam D.[†] Development of the Joint Commission's indicators for monitoring the medication use system. *Hospital Pharmacy* 1991 Apr;26:326-9,350.
7. Schumock G,[†] Thornton J, Witte K. Comparison of pharmacy-based concurrent surveillance and medical record retrospective reporting of adverse drug reactions. *American Journal of Hospital Pharmacy* 1991 Sep;48:1974-6.

* indicates that the individual is/was a fellow or trainee at the time of publication

[†] indicates corresponding author

8. Hutchinson R, Schumock G. Basic bibliography: Clinical practice administration. *Hospital Pharmacy* 1992;27:64.
9. Schumock G, Hutchinson R. Basic bibliography: Clinical interventions. *Hospital Pharmacy* 1992;27:547.
10. Thornton J, Schumock G, Kanafotska C. Development of a computerized pharmacy therapeutic recommendation tracking program. *Topics in Hospital Pharmacy Management* 1992 Apr;11(4):44-51.
11. Schumock G, Thornton J.† Focusing on the preventability of adverse drug reactions. *Hospital Pharmacy* 1992 Jun;27:547.
12. Bauer L,† Schumock G, Horn J, Opheim K. Verapamil inhibits ethanol elimination and prolongs the perception of intoxication. *Clinical Pharmacology and Therapeutics* 1992 Jul;52:6-10.
13. Schumock G,† Hutchinson R, Bilek B. Comparison of two systems for documenting pharmacist interventions in patient care. *American Journal of Hospital Pharmacy* 1992 Sep;49:2211-14.
14. Schumock G,† Manasse H, Hutchinson R. Pharmaceutical services in rural hospitals in Illinois-1991. *American Journal of Hospital Pharmacy* 1992 Sep;49:2187-92.
15. Schumock G, Guenette A, Clark T, McBride J. Hospital mainframe computer documentation of pharmacist interventions. *Topics in Hospital Pharmacy Management* 1993 Feb;13(2):16-24.
16. American College of Clinical Pharmacy (O'Connell MB, Rudd C, Schumock G, et al.) Template for the evaluation of a clinical pharmacist. *Pharmacotherapy* 1993 Jun;13(6):61-667.
17. Schumock G,† Crawford S, Giusto DA, Hutchinson R. Evaluating the performance of clinical pharmacy faculty: Putting the ACCP template to use. *Pharmacotherapy* 1993 Jun;13(6):668-672.
18. Schumock G, Marwaha T, McBride J, Clark T. Automated order-entry mechanisms to influence prescribing. *Topics in Hospital Pharmacy Management* 1994 Mar;14(3):21-29.
19. Schumock G, Guenette A, Keys T, Hutchinson R. Prescribing errors for patients about to be discharged from a university teaching hospital. *American Journal of Hospital Pharmacy* 1994 Sep;51:2288, 2290.
20. Clark T,† Hutchinson R, Schumock G. Hospital pharmacy operational review. *International Pharmacy Journal* 1994 Mar;8(3):109-11.
21. Hatoum H,† Schumock G, Kendzierski D. Meta analysis of controlled trials of drug therapy in mild chronic asthma: The role of inhaled corticosteroids. *Annals of Pharmacotherapy* 1994 Nov;28:1285-9.
22. Schumock G,† Raber S, Crawford S, Rodvold K. National survey of once-daily dosing of aminoglycoside antibiotics. *Pharmacotherapy* 1995 Feb;15(2):201-9.
23. Schumock G,† Seeger J, Kong S. Control charts to monitor rates of adverse drug reactions. *Hospital Pharmacy* 1995 Dec;30(12):1088-96.
24. Seeger J,† Schumock G, Kong S. Estimating the rate of adverse drug reactions with capture-recapture analysis. *American Journal of Health-System Pharmacy* 1996 Jan;53(2):178-180.

25. Schumock G,[†] Lam N, Winkler S, Kong S. Pharmacoeconomic analysis of stress ulcer prophylaxis for critically ill patients. *Pharmacoeconomics* 1996 May;9(5):455-465.
26. Schumock G,[†] Vermeulen L, Meek P, Ploetz P. Economic evaluations of clinical pharmacy services: 1988-1995. *Pharmacotherapy* 1996 Jun;16(6):1188-1208.
27. Fiscella R,[†] Mui S, Labib S, Schumock G, Keiner K, Stella S. Utilization and costs of viscoelastic agents. *Hospital Pharmacy* 1996 Jul;31:831-834.
28. Kong SX,[†] Crawford SY, Gandhi SK, Seeger JD, Schumock GT, Lam NP, Stubbings J, Schoen MD. Efficacy of 3-hydroxy-3-methylglutaryl coenzyme A reductase inhibitors in the treatment of patients with hypercholesterolemia: A meta-analysis of clinical trials. *Clinical Therapeutics* 1997 Mar;19(4): 778-97.
29. Schumock G,[†] Kafka P, Tormo V. Design, construction, implementation and cost of a hospital pharmacy cleanroom. *American Journal of Health-System Pharmacy* 1998 Mar;55:458-63.
30. Meek PD,[†] McKeithan EK, Schumock GT.[†] Economic considerations in Alzheimer's disease. *Pharmacotherapy* 1998 Feb;18(2 Pt 2):68S-73S.
31. Schumock G.[†] Economic considerations in the treatment and management of Alzheimer's disease. *American Journal of Health-System Pharmacy* 1998 Nov;55(Suppl 2):S17-S21.
32. Seeger JD,[†] Kong SX, Schumock GT. Characteristics associated with ability to prevent adverse drug reactions in hospitalized patients. *Pharmacotherapy* 1998 Jun;18(6):1284-1289.
33. Schumock G,[†] Michaud J, Guenette A. Re-engineering: An opportunity to advance clinical practice in a community hospital. *American Journal of Health-System Pharmacy* 1999 Oct;56:1945-9.
34. Murdock DK,[†] Schumock GT, Kaliege J, Olson K, Guenette AJ. Clinical and cost comparison of ibutalide and direct-current cardioversion for atrial fibrillation and flutter. *American Journal of Cardiology* 2000 Feb;85:503-6.
35. Scheife R,[†] Schumock G, Burstein A, Gottwald M, Luer M. The impact of Parkinson's disease and its pharmacologic treatment on quality of life and economic outcomes. *American Journal of Health-System Pharmacy* 2000 May;57:953-62.
36. Schumock G.[†] Methods to assess the economic outcomes of clinical pharmacy services. *Pharmacotherapy* 2000 Oct;20(10 Pt 2):243S-252S.
37. Goldstein J,[†] Pramode M, Larson L, Yamashite B, Fain J, Schumock G. Low molecular weight heparin versus unfractionated heparin in the colonoscopy peri-procedure period: A cost modeling study. *American Journal of Gastroenterology* 2001 Aug;96(8):2360-66.
38. Walton S,[†] Arondekar B,^{*} Johnson N, Schumock G. A model for comparing unnecessary costs associated with various prescription fill quantity policies: Illustration using VA data. *Journal of Managed Care Pharmacy* 2001 Sep;7(5):384-90.
39. Schumock G,[†] Nutescu E, Walton S, Arondekar B,^{*} Lewis R. Policies for use of low-molecular-weight heparins. *American Journal of Health-System Pharmacy* 2002 Mar;59:534-8.

40. Bennett CL,[†] Schumock GT, Desai AA, Kwaan HC, Raisch D, Newlin R, Stalder W. Thalidomide-associated deep vein thrombosis and pulmonary emboli. *American Journal of Medicine* 2002 Nov;113(7):603-6.
41. Schumock G,[†] Butler M,^{*} Meek P, Vermeulen L, Arondekar B,^{*} Bauman J. Evidence of the economic benefit of clinical pharmacy services: 1996-2000. *Pharmacotherapy* 2003 Jan;23(1):113-132.
42. Schumock G,[†] Walton S, Sarawate C,^{*} Crawford S. Pharmaceutical services in rural hospitals in Illinois – 2001. *American Journal of Health-System Pharmacy* 2003 Apr;60:666-74.
43. Bennett CL,[†] Schumock GT. Cost analyses of adjunct colony stimulating factors for older patients with acute myeloid leukemia: Can they improve clinical decision making? *Drugs & Aging*. 2003 Apr;20(7):479-483.
44. Nutescu EA, Lewis R, Finley J, Schumock GT.[†] Hospital guidelines for use of low-molecular-weight heparins. *Annals of Pharmacotherapy* 2003 Jul;37:1072-81.
45. Schumock G,[†] Nair V,^{*} Lewis R, Finley J. Penetration of medication safety technology in community hospitals. *Journal of Medical Systems* 2003 Dec;27(6):533-543.
46. Schumock G,[†] Walton S. Expenditures for prescription drugs: Too much or not enough? *Healthcare Financial Management* 2003 Oct;34-41.
47. Ladewski L, Belknap SM, Nebeker JR, Sartor O, Lyons A, Kuzel T, Tallman MS, Raisch D, Auerbach A, Schumock G, Kwaan H, Bennett CL.[†] Dissemination of information on potentially fatal adverse drug reactions for cancer drugs: 2000-2002. *Journal of Clinical Oncology* 2003 Oct;21(20):3859-66.
48. Park HA,^{*} Schumock GT,[†] Pickard AS, Akhras K. A structured review of the relationship between microalbuminuria and cardiovascular events in patients with diabetes mellitus and hypertension. *Pharmacotherapy* 2003 Dec; 23(12):1161-6.
49. Schumock G,[†] Park H,^{*} Nutescu E, Blackburn J,^{*} Lewis J, Finley J, Walton S. Factors that influence prescribing decisions. *Annals of Pharmacotherapy* 2004 Apr;38:557-62.
50. DiDomenico RJ, Park HY,^{*} Southworth MR, Eyrich HM, Lewis RK, Finley JM, Schumock GT.[†] Guidelines for acute decompensated heart failure. *Annals of Pharmacotherapy* 2004 Apr;38:649-60.
51. Arozullah A,[†] Calhoun E, Wolg M, Finley D, Fitzner K, Heckinger E, Gorby N, Schumock G, Bennett C. The financial burden of cancer: estimates from a study of insured women with breast cancer. *Journal of Supportive Oncology* 2004 Jul;2:271-78.
52. Nutescu E,[†] Pickard S, Blackburn J,^{*} Wittkowsky A, Ansell J, Schumock G. Implications of oral direct thrombin inhibitors for anticoagulation clinics. *Pharmacotherapy* 2004 Sep; 2499:1204-1212.
53. Bennett C,[†] Luminari S, Nissenson A, Tallman M, Klinge S, McWilliams N, McKoy J,^{*} Kim B, Lyons A, Trifilio S, Raisch D, Evens A, Kuzel T, Schumock G, Belnap S, Locatelli F, Rossert J, Casadevall N. Pure red cell aplasia and epoetin therapy. *New England Journal of Medicine* 2004 Sep; 351:29-34.
54. Schumock G,[†] Nutescu E, Walton S, Blackburn J,^{*} Lewis R. Impact of prescribing guidelines for inpatient anticoagulation. *Annals of Pharmacotherapy* 2004 Oct;38(10):1570-5.

55. Pickard S,[†] Nau D, McKercher P, Schumock G. The reimportation of prescription medications: Experiences, opinions and intended behaviors of US retail pharmacists? *Journal of the American Pharmacists Association* 2004 Nov;44:666-72.
56. Bennett C,[†] Nebeker J, Lyons E, Samore M, Feldman M, McKoy J, Carson K, Belnap S, Trifilio S, Schumock G, Yarnold P, Davidson C, Evens A, Kuzel T, Parada J, Cournoyer D, West D, Sartor O, Tallman M, Raisch D. The research on adverse drug events and reports (RADAR) project. *JAMA* 2005 May;293(17):2131-40.
57. Calhoun EA,[†] Schumock GT, McKoy JM, Pickard S, Fitzner KA, Heckinger EA, Powell EF, McCaffrey KR, Bennett CL. Granulocyte colony-stimulating factor for chemotherapy-induced neutropenia in patients with small cell lung cancer : the 40% rule revisited. *Pharmacoeconomics* 2005 Aug;23(8):767-75.
58. Nutescu E, Schumock G,[†] Park H,^{*} Blackburn J,^{*} Lewis J, Finley J, Walton S. Factors that influence the prescribing within a therapeutic drug class. *Journal of Evaluation in Clinical Practice* 2005 Aug; 11(4):357-65.
59. Pickard AS,[†] Hung SY, McKoy JM,^{*} Witt WP, Arseven A, Sharifi R, Wu Z, Knight S, McWilliams N, Utukari S, Schumock GT, Bennett CL. A disease state management program framework for prostate cancer. *Disease Management* 2005 Apr;8(4):235-44.
60. McKoy J,^{*†} Lyons E, Obadina E, Carson K, Pickard S, Schellhammer P, McLeod D, Boyd C, McWilliams N, Sartor O, Schumock G, McCaffery K, Bennett C. Caveat medicus: Consequences of prostate cancer pharmaceutical suppliers pleading guilty to marketing violations and settling without admission of guilt to allegations of Medicare fraud. *Journal of Clinical Oncology* 2005 Dec;23(34):8894-8905.
61. Wolf M,[†] Fitzner K, Powell EF, McCaffrey K, Pickard S, McCoy J,^{*} Lindenberg G, Schumock G, Carson K, Ferreira M, Dolan N, Bennett C. Costs and cost-effectiveness of a health care provider-directed intervention to promote colorectal cancer screening among Veterans. *Journal of Clinical Oncology* 2005 Dec;23(34):8877-8883.
62. Hoffman J, Shah N, Vermeulen L,[†] Schumock G, Grim P, Hunkler R, Hontz K. Projecting future drug expenditures – 2006. *American Journal of Health-System Pharmacy* 2006 Jan;63:123-38.
63. Gupta S,^{*} Wojtynek J, Walton S, Botticelli J, Shields K, Quad J, Schumock G.[†] Monitoring of pharmacy staffing, workload, and productivity in Community Hospitals. *American Journal of Health-System Pharmacy* 2006 Sep; 63:1728-34.
64. Hoffman JM, Shah ND, Vermeulen LC,[†] Schumock GT, Grim P, Hunkler RJ, Hontz KM. Projecting future drug expenditures--2007. *American Journal of Health-System Pharmacy* 2007 Feb 1;64(3):298-314.
65. Vats V,^{*} DiDomenico RJ, Wojtynek JE, Theobald JC, Schumock GT.[†] Hospital policies for treatment of acute decompensated heart failure. *Annals Pharmacotherapy* 2007 Apr;41(4):562-7.
66. Gupta SR, ^{*} Wojtynek JE, Walton SM, Botticelli JT, Shields KL, Quad JE, SchumockGT.[†] Association between hospital size and pharmacy department productivity. *American Journal of Health-System Pharmacy* 2007 May 1;64(9):937-44.
67. Walton SM,[†] Knapp KK, Miller L, Schumock GT. Examination of state-level changes in the pharmacist labor market using Census data. *Journal of the American Pharmacists Association* 2007 May;47(3):348-57.

68. Vats V,* Nutescu EA, Theobald JC, Wojtynek JE, Schumock GT.† Survey of hospitals for guidelines, policies, and protocols for anticoagulants. *American Journal of Health-System Pharmacy* 2007 Jun;64(11):1203-8.
69. Schumock GT,† Sprague SM. Clinical and economic burden of fractures in patients with renal osteodystrophy. *Clinical Nephrology* 2007 Apr;67(4):201-8.
70. Hutchinson RA,† Schumock GT. Need to develop a legal and ethical base for pharmaceutical care. 1994. *Annals Pharmacotherapy* 2007 Jul;41(7):1281-3. (reprinted)
71. Schumock GT,† Walton SM, Gupta SR,* Cramer JA. Cost analysis of divalproex sodium extended-release compared to valproic acid in the treatment of bipolar disorder. *Current Medical Research and Opinion* 2007 Aug;23(8):1997-2004.
72. Schumock G,† Arruda J, Marx S, Melnick J, Sterz R, Williams L. Pharmacoeconomic analysis of paricalcitol and calcitriol in the treatment of secondary hyperparathyroidism in haemodialysis: impact of hospitalisations and survival. *Journal of Medical Economics* 2007 Apr;10(4):393-409.
73. Pickard AS, Becker RC, Schumock GT, Frye CB.† Clopidogrel-associated bleeding and related complications in patients undergoing coronary artery bypass grafting. *Pharmacotherapy* 2008 Mar;28(3):372-92.
74. Hoffman JM, Shah ND, Vermeulen LC,† Doloresco F, Grim P, Hunkler RJ, Hontz KM, Schumock GT. Projecting future drug expenditures--2008. *American Journal of Health System Pharmacy* 2008 Feb;65(3):234-53.
75. Didomenico RJ, Perez A,* Schumann HM, Fontana DR, Kondos GT, Schumock GT.† Impact of treatment guidelines on clinical and economic outcomes of acute decompensated heart failure. *Annals of Pharmacotherapy* 2008 Mar;42(3):327-33.
76. Masica AL,† Touchette DR, Dolor RJ, Schumock GT, Kliethermes MA, Rodgers PT, Craft JL, Choi YK, Lux LJ, Smith SR. Evaluation of a Medication Therapy Management Program in Medicare Beneficiaries at High Risk of Adverse Drug Events: Study Methods. In: Henriksen K, Battles JB, Keyes MA, Grady ML, editors. *Advances in Patient Safety: New Directions and Alternative Approaches* (Vol. 4: Technology and Medication Safety, Publication Nos. 08-0034). Rockville (MD): Agency for Healthcare Research and Quality (US); Aug 2008. (available at <http://www.ahrq.gov/qual/advances2/>).
77. Schumock GT,† Andress D, Marx SE, Sterz R, Joyce AT, Kalantar-Zadeh K. Impact of secondary hyperparathyroidism on disease progression, healthcare resource utilization, and costs in predialysis CKD patients. *Current Medical Research and Opinion* 2008;24(11):3037-3048.
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66. Doloresco F, Perez A,* Meek PD, Touchette DR, Hoffman JM, Vermeulen LC, Schumock GT. Economic evaluations of clinical pharmacy services from 1988 to 2005: setting, service type, and methodology. Annual Meeting, American College of Clinical Pharmacy, Denver CO, October 15, 2007. Abstract published in: *ACCP Annual Meeting Guide 2007*, p.267. Available at http://www.pharmacotherapy.org/pdf/free/ACCP_Abstracts_Fall2007.pdf (accessed 7/29/08). (poster)

67. Stein BD, Meltzer DO, Holguin F, Lindenauer PK, Bautista A,* Schumock GT, Charbeneau JT, Krishnan JA. How You Count Hospitalizations for Acute Exacerbations of COPD (AE-COPD) Matters. 2008 International Conference of the American Thoracic Society, Toronto, CANADA, May 18, 2008. Abstract published in: *American Journal of Respiratory and Critical Care Medicine* 2008; 177:A133. Available at: http://www.abstracts2view.com/ats08/view.php?nu=ATS08L_4295. (poster)

68. Perez A,* Schumock GT, DiDomenico R, Theobald JC, Wojtynek JE. Evaluation of the effect of acute decompensated heart failure guidelines in community hospitals. 13th Annual International Meeting,

International Society of Pharmacoeconomics and Outcomes Research, Toronto, Canada, May 6, 2008. Abstract published in: *Value in Health* 2008;11(3):A211. (poster)

69. Vats V,* Nutescu E, Theobald JC, Wojtynek JE, Schumock GT. Impact of guidelines for treatment and prophylaxis of venous thromboembolism in community hospitals. 13th Annual International Meeting, International Society of Pharmacoeconomics and Outcomes Research, Toronto, Canada, May 6, 2008. Abstract published in: *Value in Health* 2008;11(3):A218. (poster)

70. Vats V,* Nutescu E, Blackburn JC,* Ansell J, Wittkowsky A, Shapiro N, Schumock GT. Efficacy and safety of warfarin management in US anticoagulation clinics. National Meeting of the Anticoagulation Forum, Chicago, IL. May 4, 2007. Abstract published in: *Journal of Thrombosis and Thrombolysis* 2008 Nov;25:131. (poster)

71. Dolor RJ, Touchette D, Masica A, Schumock GT, Smith SR. Evaluation of a medication therapy management program modeled on patient safety in Medicare beneficiaries at high risk of adverse drug events. Agency for Healthcare Research and Quality, 2008 Practice Based Research Network Research Conference, Bethesda, MD, June 11, 2008. (poster)

72. Stubbings J, Schumock G. Teaching business planning skills to pharmacy students. American Association of Colleges of Pharmacy (AACP/AFPC) Annual Meeting, Chicago, IL, July 21, 2008. (poster)

73. Walton SM, Schumock GT, Lee TA, Marx SE, Audhya P, Andress DL. Comparison of parathyroidectomies with paricalcitol or cinacalcet for treatment of secondary hyperparathyroidism in hemodialysis patients. National Kidney Foundation. NKF 2009 Spring Clinical Meetings. Nashville, TN. March 25-29, 2009. Abstract available at: http://www.kidney.org/news/meetings/abstracts/review/embed/Walton_Comparison.pdf. (poster)

74. Lee TA, Wilke CT, Joo M, Stroupe KT, Krishnan JA, Schumock GT, Pickard AS. Outcomes associated with tiopropium use in CPOD patients. 14th Annual International Meeting International Society of Pharmacoeconomics and Outcomes Research, Orlando, FL. May 19, 2009. Abstract published in: *Value in Health* 2009;12(3):A19. (podium)

75. Bautista A,* Stein BD, Lee TA, Meltzer DO, Didomenico RJ, Krishnan JA, Schumock GT. Specificity of administrative data for identifying heart failure patients for hospital quality performance initiatives. 14th Annual International Meeting International Society of Pharmacoeconomics and Outcomes Research, Orlando, FL. May 20, 2009. Abstract published in: *Value in Health* 2009;12(3):A161. (poster)

76. Lee TA, Wilke CT,* Joo M, Stroupe KT, Krishnan JA, Schumock GT, Pickard AS. Comparative effectiveness of ipratropium in COPD patients. 14th Annual International Meeting International Society of Pharmacoeconomics and Outcomes Research, Orlando, FL. May 19, 2009. Abstract published in: *Value in Health* 2009;12(3):A121. (poster)

77. Vats V,* Ziang J, Lee KY, Schumock GT, Khandelwal NG. Comparison of adherence, persistence and medication wastage in 30-day versus 90-day refill channels. 14th Annual International Meeting International Society of Pharmacoeconomics and Outcomes Research, Orlando, FL. May 20, 2009. Abstract published in: *Value in Health* 2009;12(3):A167. (poster)

78. Stein BA, Bautista A,* Schumock GT, Lee TA, Meltzer DO, Naureckas ET, Krishnan JA. Specificity of ICD-9 diagnosis codes for identifying patients hospitalized for COPD. American Thoracic Society International Conference. San Diego, CA. May 17, 2009. Abstract published in *American Journal of Respiratory and Critical Care Medicine* 2009;179(1):A2159 (poster)

79. Stein BD, Bautista A, * Schumock GT, Lee TA, Shah LM, Krishnan JA. Under-treatment of tobacco dependence in hospitalized adults. American Thoracic Society International Conference. San Diego, CA. May 19, 2009. Abstract published in *American Journal of Respiratory and Critical Care Medicine* 2009;179(1):A5202 (poster)
80. Masica A, Touchette D, Dolor R, Rayan N, Amboise K, Murphy C, Kim Y, Schumock G, Smith S. DEcIDE Center Project: Evaluation of medication therapy management program in Medicare beneficiaries at high risk for adverse drug events. Agency for Healthcare Research and Quality Annual Meeting, Bethesda, MD. September 14, 2009. (poster)
81. Parker BM, Steinke D, Paladino JA, Schumock GT, Bungay K, McCollum M, Touchette DR. What's Hot in ACCP" A history of the American College of Clinical Pharmacy's Health Outcomes Practice and Research Network. American College of Clinical Pharmacy Annual Meeting. Anaheim, CA. October 19, 2009. Abstract published in *Pharmacotherapy* 2009;29(1):290e. (poster)
82. Yang Y, * McBride M, Youngs C, Tverdek FP, Rodvold KA, Pillen HA, Sheth A, Shah P, Schumock GT. Policies on vancomycin use: a national survey of community hospitals in the United States. American Society of Health-System Pharmacists Clinical Midyear Meeting. Las Vegas, NV. December 8, 2009. (poster)
83. Nutescu EA, Tiryaki F, * Lambert B, Schumock G. Compliance of US hospitals with national guidelines and performance measures for anticoagulant therapy in venous thrombosis prevention and management. 21st International Thrombosis Congress, Milan, Italy. July 9, 2010. Abstract published in *Pathophysiol Haemost Thromb* 2010;37(suppl 1):A26 – OC564. (podium)
84. Stein BD, Bautista A, Charbeneau JT, Schumock GT, Lee TA, Lauderdale DS, Krishnan JA. Validity of ICD-9 code algorithms for identifying patients hospitalized for acute exacerbation of COPD. 2010 American Thoracic Society International Conference, New Orleans, LA. May 19, 2010. Abstract published in *American Journal of Respiratory and Critical Care Medicine*, May 2010; 181: A5350. (podium)
85. Lee TA, Joo MJ, Krishnan JA, Wilke CT, * Schumock GT, Pickard S. Risk of stroke associated with ipratropium and tiotropium use in patients with COPD. 2010 American Thoracic Society International Conference, New Orleans, LA. May 2010. Abstract published in *American Journal of Respiratory and Critical Care Medicine*, May 2010; 181: A5349. (podium)
86. Nutescu EA, Bautista A, Gao W, Galanter W, Schumock G, Bookhart B, Moody S, Lambert B. Warfarin Anticoagulation After Total Hip or Knee Replacement in Real-World Clinical Practice: INR Patterns and Clinical Outcomes. Chest 2010 – American College of Chest Physicians, Vancouver, BC, Canada. November 2, 2010. Abstract published in *Chest* 2010;138:397A. [doi:10.1378/chest.10747] (poster)
87. Tiryaki F, * Schumock G, Hennefent JA, Karageanes AM, Koesterer LJ. Utilization of injectable anticoagulant therapy in hospitalized patients. 45th ASHP Midyear Clinical Meeting, American Society of Health-System Pharmacists, Anaheim, CA. December 6, 2010. 5-050. (poster)
88. Nutescu AE, Bautista A, * Schumock G, Moody S, Lambert B. Clinical and resource utilization outcomes of warfarin management after total hip or knee replacement surgery in a university-based antithrombosis clinic. 45th ASHP Midyear Clinical Meeting, American Society of Health-System Pharmacists, Anaheim, CA. December 6, 2010. 5-028. (poster)

90. Nutescu EA, Bautista A, * Gao W, Galanter W, Schumock G, Lambert BL. Warfarin Anticoagulation after total hip or knee replacement – INR patterns and clinical outcomes. 2011 Clinical and Translational Research and Education Meeting, Society for Translational and Clinical Science, Washington, DC. April 28, 2011. (poster)
90. Nutescu E, Sharp L, Bathija S, Dotiwala Z, Cavallari L, Schumock G, Meltzer D, Fitzgibbon M. Factors that influence adoption of anticoagulation self-monitoring in underserved minority patients. 11th National Conference, Anticoagulation Forum. Boston, MA, May 5-7, 2011. (poster)
91. Campbell CJ, * Pickard AS, Schumock GT. FDA regulations and antidepressant utilization. International Society of Pharmacoeconomics and Outcomes Research 16th Annual International Meeting, Baltimore, MD. May 19, 2011. Abstract published in *Value in Health* 2011 May;14(3):A198. (poster)
92. Samp J, * Pickard A, Schumock G. Fraudulent studies of medications in the literature: issues, trends and factors. 46th ASHP Midyear Clinical Meeting, American Society of Health-System Pharmacists, New Orleans, LA. December 6, 2011. 5-243. (poster)
93. Ursan I, * Crawford S, Walton A, Donnelly A, Schumock G. Trends in pharmacy practice in Illinois small and rural hospitals over the past two decades. UIC College of Pharmacy Research Days, Chicago, IL. March 8-9, 2012. (poster)
94. Bathija S, * Schumock GT, Sharp L, Gerber B, Fitzgibbon ML, Cavallari LH, Nutescu E. Patient factors affecting non-adherence to anticoagulation therapy in an inner-city underserved minority population. UIC College of Pharmacy Research Day, Chicago, IL. March 8-9, 2012. (poster)
95. Samp J, * Pickard A, Schumock G. Fraudulent studies of medications in the literature: issues, trends and factors. UIC College of Pharmacy Research Day, Chicago, IL. March 8-9, 2012. (poster)
96. Bathija S, * Schumock GT, Sharp L, Gerber B, Fitzgibbon ML, Cavallari LH, Nutescu E. Patient factors affecting non-adherence to anticoagulation therapy in an inner-city underserved minority population. International Society of Pharmacoeconomics and Outcomes Research 17th Annual International Meeting, Washington, DC. June 5, 2012. Abstract published in *Value in Health* 2012 May;15(4):A126. (poster)
97. Adimadhyam S, * Schumock GT, Walton SM, Joo JL, McKell JL, Lee TA. Increased risk of arrhythmias associated with inhaled anticholinergics in children, adolescents, and young adults with asthma. American Thoracic Society 2012 International Conference, San Francisco, CA. May 22, 2012. Abstract published in *American Journal of Respiratory and Critical Care Medicine* 2012;185:A5147. (poster)
98. Ursan ID, * Nutescu EA, Schumock GT, Touchette DR. Cost-effectiveness of dabigatran, rivaroxaban, apixaban, and warfarin for stroke prevention in non-valvular atrial fibrillation. 47th ASHP Midyear Clinical Meeting and Exhibition, Las Vegas, NV. December 3, 2012. (poster)
99. Ursan ID, * Crawford SY, Walton SM, Donnelly AJ, Schumock GT. Trends in pharmacy practice in Illinois small and rural hospitals over the past two decades. 47th ASHP Midyear Clinical Meeting and Exhibition, Las Vegas, NV. December 3, 2012. (poster)
100. Crawford SY, Ursan ID, * Walton SM, Donnelly AJ, Schumock GT. Rural hospital pharmacy services in Illinois: Comparisons between critical access hospitals and small general community hospitals. 47th ASHP Midyear Clinical Meeting and Exhibition, Las Vegas, NV. December 4, 2012. (poster)

101. Lee WJ,* Schumock G, Lee T. Drugs associated with adverse drug events in children: Analysis of the United States FDA Adverse Event Reporting System (AERS) database. 18th Annual International Meeting, International Society of Pharmacoeconomics and Outcomes Research, New Orleans, LA. May 20, 2013. Abstract published in *Value in Health* 2013; 16(3):A70. (poster)
102. Cheng WH,* Galanter W, Schumock G, Lambert B, Cavallari L, Nutescu E. The impact of race on quality of anticoagulation after major orthopedic surgery in an inner-city underserved population. 18th Annual International Meeting, International Society of Pharmacoeconomics and Outcomes Research, New Orleans, LA. May 20, 2013. Abstract published in *Value in Health* 2013; 16(3): A114. (poster)
103. Cheng WH,* Galanter W, Schumock G, Lambert B, Cavallari L, Nutescu E. Risk factors and incidence of symptomatic venous thromboembolism after total hip and total knee replacement in an inner-city minority population. 12th National Conference on Anticoagulant Therapy, Anticoagulation Forum, Phoenix, AZ. May 9, 2013. (poster)
104. Bathija S,* Walton S, Lau D, Galanter WL, Schumock GT, Nutescu E. Referral patterns for patients treated with warfarin thromboprophylaxis after hip and knee replacement surgery. 18th Annual International Meeting, International Society of Pharmacoeconomics and Outcomes Research, New Orleans, LA. May 21, 2013. Abstract published in *Value in Health* 2013; 16(3): A201. (poster)
105. Bathija S,* Schumock G, Walton S, Galanter B, Lau D, Nutescu E. Patient outcomes with anticoagulation therapy after hip and knee replacement: Comparison of two models of care. XXIV Congress of the International Society on Thrombosis and Haemostasis, Amsterdam, the Netherlands. June 29, 2013. (podium)
106. Dilokthornsakul P,* Chaiyakunapruk N, Schumock GT, Lee TA. Estimating time-specific propensity scores: A case study of the effectiveness of inhaled long-acting beta-agonist on asthma exacerbations. 29th International Conference on Pharmacoepidemiology & Therapeutic Risk Management, Montreal, Canada. August 25, 2013. (podium)
107. Qato DM, Wilder JR, Lee TA, Lambert B, Schumock G. Residential segregation and disparities in the availability of community pharmacies. 141st American Public Health Association Annual Meeting, Boston, MA. November 5, 2013. (poster)
108. Cheng WH, Manzoor B, Cavallari L, Sharp L, Gerber B, Fitzgibbon M, Schumock G, Nutescu E. Quality of pharmacist-managed anticoagulation therapy in long-term ambulatory settings: a systematic review. 19th Annual International Meeting, International Society of Pharmacoeconomics and Outcomes Research, Montreal, Canada. June 3, 2014. Abstract published in *Value in Health* 2014;17(3):A126-A127. (poster)
109. Sarangpur S,* Sharp L, Gerber B, Schumock G, Fitzgibbon M, Cavallari L, Bathija S, Nutescu E. The impact of missed clinic appointments on the quality of anticoagulation control in an inner-city underserved minority population. 19th Annual International Meeting, International Society of Pharmacoeconomics and Outcomes Research, Montreal, Canada. June 3, 2014. Abstract published in *Value in Health* 2014;17(3):A151. (poster)
110. Lee WJ,* Lee TA, Pickard SA, Shoaibi A, Schumock GT. Feasibility of alternative methods for health outcomes of interest algorithm validation. 30th Anniversary International Conference on Pharmacoepidemiology & Therapeutic Risk Management (ICPE), Taipei, Taiwan. October 27, 2014. (poster)
111. Patel VA,* Galanter WL, Lee TA, Schumock G, Nutescu EA, Hohmann SF, Walton SM. Comparative effectiveness and safety of agratroban and bivalirudin in patients with suspected heparin-induced

thrombocytopenia. International Society of Pharmacoeconomics and Outcomes Research 20th Annual International Meeting. Philadelphia, PA, USA. May, 2015. Abstract published in *Value in Health* 2015; 18(3):A293. DOI: 10.1016/j.jval.2015.03.1708. (poster)

112. Suda KJ, Hunkler RJ, Matusiak L, Vermeulen L, Schumock G. Spending on hepatitis C antivirals in the United States, 2008-2014. International Society of Pharmacoeconomics and Outcomes Research 20th Annual International Meeting. Philadelphia, PA, USA. May, 2015. Abstract published in *Value in Health* 2015; 18(3):A228. DOI: 10.1016/j.jval.2015.03.1322. (poster)

113. Patel VA,* Walton SM, Galanter WL, Lee TA, Schumock G, Nutescu EA. The validity of algorithms for identifying suspected and confirmed heparin-induced thrombocytopenia. International Society of Pharmacoeconomics and Outcomes Research 20th Annual International Meeting. Philadelphia, PA, USA, May, 2015. Abstract published in *Value in Health* 2015;18(3):A292. DOI: 10.1016/j.jval.2015.03.1703. (poster)

114. Suda K, Hicks L, Roberts RM, Hunkler R, Matusiak L, Schumock G. Antibiotic expenditures by medication and healthcare setting in the United States, 2010-2013. IDWeek 2015. San Diego, CA. October 7, 2015. (poster)

115. Lee W, Briars LA, Lee TA, Calip GS, Suda KJ, Schumock G. Utilization of tumor necrosis factor alpha inhibitors in children and young adults with juvenile idiopathic arthritis. International Society of Pharmacoeconomics and Outcomes Research 21th Annual International Meeting. Washington, DC, USA. May 2016. Abstract published in *Value in Health* 2016;19(3):A227. DOI: 10.1016/j.jval.2016.03.1174. (poster)

116. Lee WJ,* Briars L, Lee TA, Calip GS, Suda KJ, Schumock GT. Top-down versus Step-up Strategy of Tumor Necrosis Factor-Alpha Inhibitors in Children and Young Adults with Inflammatory Bowel Disease. 32nd International Conference on Pharmacoepidemiology & Therapeutic Risk Management, Dublin, Ireland. August 25-28, 2016. Abstract published in *Pharmacoepidemiology and Drug Safety* 2016; 25(Suppl. 3):518. DOI: 10.1002/pds. (poster)

117. Bellfi L,* Saffore C,* Edwards SA, Schumock GT. Identification of unapproved prescription drug products and the impact of the FDA's Unapproved Drugs Initiative on approval status. American Society of Health-System Pharmacy Midyear Clinical Meeting, Las Vegas, NC. December 6, 2016.

118. Li EC, Hong S,* Schumock GT. Spending on antineoplastic agents in the United States: 2011-2016. 2017 ASCO Annual Meeting, Chicago, IL. June 5, 2017. Abstract published in *Journal of Clinical Oncology* 2017;35(15 suppl):6618. (poster)

119. Saffore C,* Bellfi L,* Edwards S, Walton S, Schumock G. The impact of the FDA's unapproved drugs initiative on expenditures for oral colchicine in the United States. International Society of Pharmacoeconomics and Outcomes Research 22nd Annual International Meeting. **Washington, DC**, USA. May 2017. Abstract published in *Value in Health* 2017; **19(3):A227. DOI: 10.1016/j.jval.2016.03.1174.** (poster)

INVITED PRESENTATIONS

1. *Drug Fever and Thermoregulation*. Annual Symposium on Clinical Pharmacy, University of Washington, School of Pharmacy. Seattle, WA. June 12, 1989.

2. *Development and Testing of JCAHO Medication Use Indicators*. Great Lakes Residency Conference. Ypsilanti, MI. April 6, 1991.

3. *Clinical Outcomes and the Drug Use Process*. Invited Speaker: Springfield Society of Hospital Pharmacists, Springfield, IL. April 17, 1991.
4. *Drug Usage Evaluation Standards: Interdisciplinary Involvement for Quality Improvement*. Invited Faculty: Educational program sponsored by JCAHO and various state hospital associations. Cities/Dates presented: New Orleans, LA (6/7/91); San Antonio, TX (11/1/91).
5. *Drug Use Evaluation: Meeting JCAHO requirements*. Invited Speaker: University of Washington Hospitals, Seattle, WA. Apr. 9-10, 1992.
6. *Implementation of Medication Use Indicators*. Invited Speaker: Roundtable discussion at 13th Annual Meeting of ACCP, Toronto, Canada. August 12, 1992.
7. *Drug Usage Evaluation Standards: Interdisciplinary Involvement for Quality Improvement*. Invited Faculty: Educational program sponsored by JCAHO and various state hospital associations. Cities/Dates presented: Cleveland, OH (1/10/92); Nashville, TN (4/3/92); Atlanta, GA (6/8/92); Baltimore, MD (11/19/92).
8. *Drug Use Evaluation: Improving the Medication Use System*. Invited Speaker: National Institutes of Health, Clinical Center Pharmacy, Bethesda, MD. March 1, 1993.
9. *Automating the Documentation of Pharmaceutical Care*. Invited Speaker: Illinois Council of Hospital Pharmacists-Annual Meeting. Chicago, IL. May 18, 1993.
10. *Taking Responsibility for Pharmaceutical Care: Putting it in Writing*. Keynote Speaker: Seminar and Workshop sponsored by Indiana Society of Hospital Pharmacists. Indianapolis, IN. May 21, 1993.
11. *Taking Responsibility for Pharmaceutical Care: Putting it in Writing*. Invited Speaker: Illinois College of Clinical Pharmacy Summer Meeting. Chicago, IL. July 21, 1993.
12. *Drug Usage Evaluation Standards: Strategies for Implementation*. Invited Faculty: Educational program sponsored by JCAHO and various state Hospital associations. Cities/Dates presented: Kansas City, MO (3/19/93); Virginia Beach, VA (7/29/93).
13. *Drug Misadventuring and the Role of the Clinical Pharmacist*. Invited Speaker: Meiji College of Pharmacy. Tokyo, Japan. September 8, 1993.
14. *The Role of Clinical Pharmacy*. Invited Speaker. National Symposium on Clinical Pharmacy, Beijing Medical University, Beijing, China. September 14, 1993.
15. *Adverse Drug Reactions*. Invited Speaker. National Symposium on Clinical Pharmacy, Beijing Medical University, Beijing, China. September 15, 1993.
16. *Medications Errors in Institutional and Ambulatory Care Practice: Prevention through Quality Improvement*. Invited Speaker: Focus on Pharmacy Practice Continuing Education Program for Pharmacists, sponsored by the UIC College of Pharmacy. Oakbrook, IL. November 13, 1993.
17. *Development and Adaptation of the ACCP Template for Evaluation of a Clinical Pharmacist at the University of Illinois Hospital*. Invited Speaker and Session Moderator: Practice Management Session, American College of Clinical Pharmacy 1994 Winter Practice and Research Forum. San Diego, CA. February 7, 1993.

18. *JCAHO Medication Use Indicators: Implications for Pharmacy Practice*. Invited Speaker: Annual Meeting of the Idaho Society of Hospital Pharmacists. Sun Valley, ID. September 30, 1994.
19. *ACCP Template for Evaluation of a Clinical Pharmacist: Case Study*. Invited Speaker and Session Moderator: Performance Evaluation of Clinical Practitioners. 1994 ASHP Midyear Clinical Meeting. Miami Beach, FL. December 8, 1994.
20. *Application of Pharmacoeconomics to Stress Ulcer Prophylaxis*. Invited Speaker: Program sponsored by University of Missouri-Kansas City and Hoechst Marion Roussel. Exhibitors Theater. 1995 ASHP Midyear Clinical Meeting. Las Vegas, NV. December 4, 1995.
21. *Adverse Drug Reaction Reporting and Monitoring Systems*. Invited faculty: Educational program sponsored by the Wisconsin Peer Review Organization (WIPRO). Presented in various Cities/Dates: Sturgeon Bay, WI (9/9/96); Tomah, WI (9/11/96); and Menomonee Falls, WI (11/17/96).
22. *Re-engineering the Medication Use Process*. Invited Speaker: Wisconsin Society of Health-System Pharmacists, 1997 Fall Meeting. Milwaukee, IL. September 24, 1997.
23. *Working Effectively in Teams*. Invited Speaker: Roche Skills Development Program. University of Wisconsin Hospital and Clinic, Department of Pharmacy. Madison, WI. October 2, 1997.
24. *Economic Evaluations of Clinical Pharmacy Services*. Invited Speaker: Premier Purchasing Group, Pharmacy Directors Meeting. Atlanta, GA. December 6, 1997.
25. *Economic Considerations in the Treatment and Management of Alzheimer's Disease*. Invited Speaker: ASHP Satellite Symposium at 1997 Midyear Clinical Meeting, program titled: Clinical Frontiers – New Advances in the Treatment of Alzheimer's Disease, produced by Professional Postgraduate Services. Atlanta, GA. December 8, 1997.
26. *Capitalizing on Opportunity: Examples of Success in Clinical Pharmacy Practice in the Modern Financial Environment*. Invited Speaker: American College of Clinical Pharmacy 1998 Spring Practice and Research Forum. Palm Springs, CA. April 6, 1998.
27. *Capitalizing on Opportunity: Examples of Success in Clinical Pharmacy Practice in the Modern Financial Environment*. Invited Speaker: California Society of Health-System Pharmacists Annual Meeting. Anaheim, CA. October 24, 1998.
28. *Optimizing Parkinson's Disease Outcomes While Minimizing Overall Cost*. Invited Speaker: ASHP Satellite Symposium at 1998 Midyear Clinical Meeting, program titled: Parkinson's Disease Medication Management: Considerations of Quality of Life, Cost, and Outcomes, produced by Integrated Communications, Las Vegas, NV. December 8, 1998.
29. *Pharmacoeconomic Consideration in the Long-Term Care of Parkinson's Disease Patients*. Invited Speaker: American Medical Director's Association Annual Symposium, Orlando, FL. March 4, 1999.
30. *Methods to Assess the Economic Outcomes of Clinical Pharmacy Services*. Invited (Keynote) Speaker: International Congress on Clinical Pharmacy: Documenting the Value of Clinical Pharmacy Services. Sponsored by the American College of Clinical Pharmacy and the European Society of Clinical Pharmacy, Orlando, FL. April 11, 1999.

31. *Re-Engineering to Improve the Medication Use Process*. Invited Speaker: ASHP Best Practices in Health-System Pharmacy Management Award Symposium. American Society of Health-System Pharmacists Annual Meeting 2000, Philadelphia, PA. June 6, 2000.
32. *Pharmacoeconomics and Formularies: What is the Rational Choice*. Invited Speaker: Premier Inc, Oakbrook, IL. October 11, 2000.
33. *Re-Engineering to Improve the Medication Use Process*. Invited Speaker: Pfizer, Inc, Continuing Education Program, Chicago, IL. February 1, 2001.
34. *Introduction to Pharmacoeconomics*. Invited Speaker: Northwestern University Health Policy Lecture Series, sponsored by the Cancer Policy Research Team of the Robert H. Lurie Comprehensive Cancer Center, Chicago, IL. September 20, 2001.
35. *Using Pharmacoeconomics in Formulary Decision Making*. Moderator: Educational Session of the ACCP Outcomes and Economics Practice Resource Network. American College of Clinical Pharmacy Annual Meeting, Tampa, FL. October 22, 2001.
36. *Pharmacoeconomics and Alzheimer's Disease*. Invited Speaker: Midwest Neuro-Psych Conference, Oakbrook, IL. February 22, 2002.
37. *Pharmacoeconomics of Low Molecular Weight Heparins*. Invited Speaker: Continuing Education Meeting of Pharmacy Managers. Oakbrook, IL. May 15, 2002.
38. *The Rising Cost of Pharmaceuticals*. Invited Speaker: National Meeting of McKesson-HBO Company Managers Meeting, Chicago, IL. October 5, 2002.
39. *The Rising Cost of Pharmaceuticals – Strategies to Curb the Trend*. Invited Speaker: Mercy Resource Management Annual Meeting, St. Pete's Beach, FL. October 28, 2002.
40. *The Making of a Dream - Designing and Evaluating Pharmaceutical Care Services*. Invited Speaker: Meeting of the Pharmacy Division of the Hong Kong Hospital Authority. Hong Kong, China. November 14, 2002.
41. *Business Planning for Clinical Pharmacy Services*. Invited Speaker: Meeting of the Pharmacy Division of the Hong Kong Hospital Authority. Hong Kong, China. November 15, 2002.
42. *The Value of Clinical Pharmacy Services, and the VClinRx Project*. Invited Speaker: Seminar Series of the UIC Center for Pharmacoeconomic Research. Chicago, IL. December 20, 2002.
43. *Contemporary Issues in Pharmacy Practice*. Invited Speaker: Centers for Medicare & Medicaid Pharmacy Preceptorship Program, Region V. Chicago, IL. June 12, 2003.
44. *Case Study: Writing a Business Plan for Your Clinical Service*. Invited Speaker: 2003 Annual Meeting, American College of Clinical Pharmacy. Atlanta, GA. November 2, 2003.
45. *Using a Business Plan to Justify a Clinical Pharmacy Service*. Invited Speaker: 2003 Annual Meeting, American College of Clinical Pharmacy. Atlanta, GA. November 2, 2003.

46. *Justifying Clinical Pharmacy Services: An Evidence Based Review*. Invited Speaker: 2003 Annual Meeting, American College of Clinical Pharmacy. Atlanta, GA. November 3, 2003.
47. *Pharmaceutical Expenditures: Trends and Strategies*. Invited Speaker: 8th Annual Pharmacy Purchasing Networking Conference. Las Vegas, NV. August 18, 2004.
48. *National Trends in Health Care and Pharmaceutical Expenditures*. Invited Speaker: 2005 Midyear Clinical Meeting, American Society of Health-System Pharmacists. Las Vegas, NV. December 5, 2005.
49. *Evaluating and Justifying Clinical Pharmacy Services*. Invited Speaker: 2006 Annual Convention of the Michigan Pharmacists Association. Detroit, MI. February 17, 2006.
50. *Generating New Knowledge: The AHRQ DEcIDE Research Network and the Chicago-Area DEcIDE Center*. Invited Speaker: Novartis National Regional Account Scientific Directors. Chicago, IL. April 25, 2006.
51. *Pharmacoeconomics 101*. Invited Speaker: Abbott Laboratories Neuropsychiatric Team. Chicago, IL. April 25, 2006.
52. *Overview of Pharmacoeconomics*. Invited Speaker: Teleconference for Hospital Pharmacy Directors in Oregon. Sponsored by MedAssets. April 27, 2006.
53. *Comparative Effectiveness and AHRQ's DEcIDE Research Network*. Invited Speaker: Northwestern University Health Services Research Seminar. Robert H. Lurie Medical Research Center, Chicago, IL. October 2, 2006.
54. *AHRQ, MMA, and the Chicago-Area DEcIDE Research Center*. Invited Speaker: Inaugural Meeting of the Chicago Regional Chapter of the International Society of Pharmacoeconomics and Outcomes Research. TAP Pharmaceutical Products Corporate Headquarters, Lake Forest, IL. April 19, 2007.
55. *Comparative Effectiveness Research and the Chicago-Area DEcIDE Center: Study of Off-Label Prescribing*. Invited Speaker: Research Seminar of the Section of Pulmonary, Critical Care, and Sleep Medicine of the Department of Medicine, College of Medicine, University of Illinois at Chicago, Chicago, IL. January 11, 2008.
56. *Design and Evaluation of a Medication Therapy Management (MTM) Program to Improve Patient Safety in Medicare Beneficiaries*. Invited Speaker: AHRQ Effective Health Care Program Spring Methods Meeting, Session on Research Collaborations and Multicenter Studies for Addressing Comparative Effectiveness. Agency for Healthcare Research and Quality, Rockville, MD. May 1, 2008.
57. *Comparative Effectiveness and the Chicago-Area DEcIDE Center* (Roundtable). Invited Speaker (with Todd Lee): Society of Epidemiology Research 41st Annual Meeting, Chicago, IL. June 25, 2008.
58. *Off-Label Prescribing*. Invited Speaker: 2009 American College of Clinical Pharmacy/European Society of Clinical Pharmacy International Congress on Clinical Pharmacy, Session titled: Hot Topics and Late Breaking Papers. Orlando, FL. April 27, 2009.
59. *Comparative Effectiveness Research: Relevance and Applications to Pharmacy*. Invited Speaker: Agency for Healthcare Research and Quality, National Webinar. September 9, 2009.

60. *What is the Added Value of Pharmacists in the Supply of Medicines to Patients*. Invited Speaker: World Congress of Pharmacy and Pharmaceutical Sciences 2010, 70th International Congress of the International Pharmaceutical Federation (FIP), Session titled The Journey Towards Better Outcomes. Lisbon, Portugal. September 1, 2010.
61. *Comparative Effectiveness 101*. Invited Speaker: Symposium and Workshops on Comparative Effectiveness Research, Sponsored by the Center for Clinical and Translational Sciences at the University of Illinois at Chicago, Chicago, IL. November 1, 2010.
62. *Outcomes Research at UIC*. Invited Speaker: Rush University College of Health Sciences Research Retreat, Union League Club of Chicago, Chicago, IL. December 6, 2010.
63. *Comparative Effectiveness Research*. Invited Speaker: Clinical and Translational Research Lecture Series, Sponsored by the Center for Clinical and Translational Sciences at the University of Illinois at Chicago, Chicago, IL. January 25, 2011.
64. *Comparative Effectiveness Research and the Chicago-Area DEcIDE Center*. Invited Speaker: Institute for Healthcare Studies Seminar Series, Sponsored by the Institute for Healthcare Studies, Feinberg School of Medicine, at Northwestern University, Chicago, IL. March 10, 2011.
65. *Comparative Effectiveness Research: What Is It and Where Is It Going*. Invited Speaker: 2011 Annual Meeting of the Midwest Consortium for Education and Research Collaborations. Chicago, IL. July 10, 2011.
66. *Turn Your Bright Idea into a Service Proposal*. Invited Speaker (with Jo Ann Stubbings): 2011 Annual Meeting of Dominick's Pharmacy Managers, Safeway Inc. Oakbrook, IL. August 9, 2011.
67. *Comparative Effectiveness Research – What is it and How is it Relevant to Pharmacy?* Invited Speaker: 2011 Annual Meeting of the Illinois Council of Health-System Pharmacists. Oakbrook Terrace, IL. September 17, 2011.
68. *Red Pill or Blue Pill? Comparative Effectiveness Research: What is it and How is it Relevant to Pharmacy*. Invited Speaker: University of Nebraska Medical Center, College of Pharmacy, Omaha, NE. October 5, 2011.
69. *Principles for Pharmacoeconomics* (Series of lectures totaling 12 hours). Invited Visiting Professor: Keio University, Faculty of Pharmacy, Tokyo, Japan. July 9-12, 2012.
70. *Industry and Academia: A Health Marriage?* Invited Speaker and Session Moderator: 2012 Midwest Meeting of The International Publication Planning Association (TIPPA), Chicago, IL. July 24, 2012.
71. *Approaches to Studying Drug Safety: The Case of Leukotriene-Modifying Agents and Suicide*. Invited Speaker: Department of Health Studies Weekly Seminar, Division of Biological Sciences, University of Chicago, Chicago, IL. November 14, 2012.
72. *Red Pill or Blue Pill? Comparative Effectiveness and Patient-Centered Outcomes Research*. Invited Speaker: Symposium titled “Research for Better Patient Outcomes: What Librarians Should Know”, Greater Midwest Region, National Network of Libraries of Medicine, Chicago, IL. November 15, 2012.
73. *Using IMS Data to Study Drug Safety: The Case of Leukotriene-Modifying Agents and Suicide*. Invited Speaker: IMS Health Inc., and IMS Institute for Health Informatics, Collegeville, PA. December 6, 2012.

74. *Approaches to Studying Drug Safety: The Case of Leukotriene-Modifying Agents and Suicide*. Invited Speaker: Department of Epidemiology and Biostatistics Weekly Seminar, School of Public Health, University of Illinois at Chicago, Chicago, IL. December 7, 2012.
75. *Red Pill or Blue Pill? Comparative Effectiveness Research: What is it and How is it relevant to Pharmacy?* Invited Speaker: National Continuing Education Teleconference/Webinar, MedAssets Clinical Pharmacy Services, a Division of MedAssets Supply Chain Systems LLC, Centennial, CO. April 23, 2013.
76. *Approaches to Studying Drug Safety in Children: The Case of Leukotriene-Modifying Agents and Suicide*. Invited Speaker: Safety, Value and Innovation Seminar Series, Center for Drug Safety and Effectiveness, School of Public Health, Johns Hopkins University, Baltimore, MD. December 16, 2013.
77. *National Trends in Prescription Drug Expenditures and Projections: How to Apply to Your Institution*. Invited Speaker: American Society of Health-System Pharmacists Webinar. May 7, 2014.
78. *National Trends in Prescription Drug Expenditures and Projections: How to Apply to Your Institution*. Invited Speaker: MedAssets Midwest Regional Pharmacy Meeting at Advocate-Lutheran General Hospital, Park Ridge, IL. September 26, 2014.
79. *Exploring Medication Safety in Children*. Invited Speaker: China Medical University, Taichung, Taiwan. October 22, 2014.
80. *Exploring Medication Safety in Children*. Invited Speaker: Taipei Medical University, Taipei, Taiwan. October 23, 2014.
81. *Exploring Medication Safety in Children*. Invited Speaker: National Taiwan University, Taipei, Taiwan. October 27, 2014.
82. *Pharmacoepidemiology as a Career*. Invited Speaker: Regulatory Affairs Professionals Society Midwest Regional Career Day, Libertyville, IL. April 18, 2015.
83. *National Trends in Prescription Drug Expenditures and Projections for 2015*. Invited Speaker: American Society of Health-System Pharmacists Webinar. May 6, 2015.
83. *Forecasting Drug Expenditures in Hospitals: Tarot Cards, Chiromancy and Scrying*. Invited Speaker: Dutch Hospital Pharmacists Association (during ASHP Midyear Clinical Meeting), New Orleans, LA. December 8, 2015.
84. *National Trends in Prescription Drug Expenditures and Projections for 2016*. Invited Speaker: American Society of Health-System Pharmacists Webinar. August 23, 2016.
85. *Pharmacovigilance: Risk Assessment, Management and Communication*. Invited Speaker: II Simposio Cientifico ILSI Mesoamerica-UCIMED, En el marco del Congreso Medico Nacional. San Jose, Costa Rica. November 9, 2016.
86. *Make Drugs Great Again*. Invited Speaker: II Simposio Cientifico ILSI Mesoamerica-UCIMED, Auditorio de la UCIMED. San Jose, Costa Rica. November 10, 2016.
87. *How to Develop a Business Plan for Clinical Pharmacy Services*. Invited Speaker: European Association of Hospital Pharmacists, 22nd European Congress, Cannes, France. March 23 and 24, 2017.

89. *National Trends in Prescription Drug Expenditures and Projections for 2017*. Invited Speaker: American Society of Health-System Pharmacists Webinar. August 23, 2017.

TEACHING EXPERIENCE

Undergraduate or Professional Courses (entry-level PharmD)

Principles of Pharmacoeconomics and Drug Treatment Outcomes (UIC PHAR 356). Instructor (1-3 lecture hours per semester). Fall Term 2000, 2001; Spring Term 2003, 2004, 2005, 2012, 2013, 2014, 2015.

Pharmacy Services and Reimbursement (UIC PHAR 346). Instructor/Co-Coordinator (10-16 lecture hours per semester). Spring Term 2002; Fall Term 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017.

Pharmacy Management (UIC PHAR 343). Instructor (4 lecture hours per semester). Spring Term 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013.

Pharmacy Practice Undergraduate Research (UIC PMPR 380/390, PMAD 380/390). Instructor (variable credit hours). Spring Term 2001, 2002, 2004, 2012, 2013, 2015, 2016, 2017; Fall Term 2002, 2003, 2004, 2009, 2010, 2012, 2013, 2014, 2015, 2016, 2017.

Advanced Specialty Clerkship (UIC PMPR 388). Preceptor. Spring Term 2003, 2011, 2014; Fall Term 2002, 2004, 2005, 2010, 2011, 2012, 2014, 2015, 2016, 2017.

Graduate Level Courses (MS, PhD)

Pharmacoeconomics (UIC PHAR 600 – part of “Continuation Curriculum Option” [Post BS PharmD]). Course Coordinator/Instructor (2 credit hours, on-line). Spring Term 2001, 2002.

Principles of Economic Evaluations of Health Care Interventions (PSOP 573). Instructor (4 lecture hours per semester). Spring Term 2004, 2005.

Advanced Methods and Grant Writing in Health Outcomes Research (PSOP 594). Instructor (4-8 lecture hours per semester). Spring Term 2006, 2008, 2010, 2012. Fall Term 2016.

Pharmacoepidemiology (UIC EPID 426/PSOP 426). Instructor (2-6 lecture hours per semester). Summer Term 2010. Spring Term 2012, 2013.

Master’s Thesis Research (UIC PSOP 598). Instructor (variable credit hours). Spring Term 2011; Fall Term 2011.

PhD Thesis (UIC PSOP 599). Instructor (variable credit hours). Spring Term 2015, 2016, 2017; Fall Term 2015, 2016, 2017

Graduate Research/Independent Study (UIC IPHS 598, PSOP 596). Instructor (variable credit hours 5-11). Spring Term 2012, 2013, 2014, 2015, 2015, 2016, 2017; Summer Term 2012, 2103, 2014, 2015, 2016, 2017; Fall 2012, 2013, 2104, 2015, 2016, 2017.

Research Seminar (UIC PSOP 595). Coordinator. Fall Term 2013, 2014, 2015, 2016, 2017; Spring Term 2014, 2015, 2015, 2016, 2017.

Post-Doctoral Fellows, Residents, and Visiting Scholars Mentored (primary advisor)

1. Grace Shin, PharmD, MPH; Pharmacoeconomic and Drug Therapy Outcomes Fellow. University of Illinois at Chicago and Pharmacia Corporation. 7/99-6/01. Current position (last known): Consultant, self-employed.
2. Nima Patel-Shori, PharmD; Specialty Resident in Outcomes Research. University of Illinois at Chicago, Veterans Affairs Pharmaceutical Benefits Management and Strategy Group, and TAP Pharmaceutical Products Inc. 7/01-6/02. Current position (last known): Clinical Professor, Temple University School of Pharmacy.
3. Bhakti Arondekar, B.Pharm, MS, MBA, PhD Candidate; Pharmacoeconomic and Drug Therapy Outcomes Fellow. University of Illinois at Chicago and Pharmacia Corporation. 7/00-6/02. Current position (last known): Senior Director, Global Health and Value, Pfizer.
4. Melissa Butler, PharmD; Pharmacoeconomic and Drug Therapy Outcomes Fellow. University of Illinois at Chicago and Pharmacia Corporation. 7/01-6/03. Current position (last known): VP, Commercial Strategy, Roivant Sciences Inc.
5. Hayley Park, PharmD; Pharmacoeconomics Research Fellow. University of Illinois at Chicago. 7/02-6/04. (Second year partially funded by Walgreen's Health Initiatives). Current position (last known): Regional Healthcare Director, Walgreens.
6. Juan Blackburn, MD; Pharmacoeconomics Research Fellow. University of Illinois at Chicago. 7/03-9/05. Current position (last known): Director Health Economics and Reimbursement – Latin America, Acelity.
7. Antonis Kermontis, MSc.; Fulbright Scholar (Cyprus). 8/04-11/04. Current position (last known): Director, Pharmaceutical Policy, Cyprus Ministry of Health.
8. Vivian Shih, PharmD; Visiting Scholar in Pharmacoeconomics/Pharmacoeconomics Certificate Program (from Singapore). 1/1/07-4/15/07. Current position (last known): Pharmacist, National Cancer Center, Singapore.
9. Shiraz Gupta, PharmD; Pharmacoeconomics Research Fellow. University of Illinois at Chicago and TAP Pharmaceutical Products Inc. 7/05-6/07. Current position (last known): Senior Manager, Health Sciences & Government/Industry/Center for Health Solutions, Deloitte Services, Chicago, IL.
10. Vikrant Vats, PhD; Pharmacoeconomics Research Fellow. University of Illinois at Chicago. 9/05-12/08. (Third year funded by Walgreen's Health Initiatives). Current position (last known): Senior Scientist, Blue Cross Blue Shield Association Technology Evaluation Center, Chicago, IL.
11. Alexandra Perez, PharmD; Cardiovascular Outcomes Research Fellow. University of Illinois at Chicago. 7/06-6/08. Current position (last known): Assistant Professor, Nova Southeastern University, Miami, FL.
12. Yoojung Yang, PharmD; Pharmacoeconomics Research Fellow. University of Illinois at Chicago. 7/08-6/11. Current position (last known): Global HEOR Lead, Oncology, Shire.
13. Shyamala Narayanaswamy, BSc (pharmacy), MSc (clinical pharmacy); Visiting Scholar in Pharmacoeconomics/Pharmacoeconomics Certificate Program (from Singapore). 8/1/08-12/31/08. Current position (last known): Pharmacy Practice Manager, Singapore General Hospital, Singapore.
14. Anthony Eti-Ukwu, BPharm (pharmacy), MSc (clinical pharmacy), MSc (human resources); Visiting Scholar in Pharmacoeconomics/Pharmacoeconomics Certificate Program (from Nigeria). 3/23/09-10/31/09. Current position (last known): Pharmacist, CVS, Illinois.

15. Funda Tiriyaki, PharmD, MSc (education); Pharmacoeconomics Research Fellow. University of Illinois at Chicago. 7/1/09-5/11/11. Current position (last know): Not known.

Graduate Student Thesis or Dissertation Committees

1. Yoojung Yang. Role: Masters Thesis Committee Chair/Advisor. Program: UIC College of Pharmacy, Department of Pharmacy Administration, Master in Pharmacy. Defended: Spring 2010. Thesis Title: “Guideline –concordant policies and methacillin-resistant *Staphylococcus aureus* prevalence in US hospitals.” Current position: Global HEOR Lead, Oncology, Shire.

2. Sruthi Adimadhyam. Role: Masters Thesis Committee Chair/Advisor. Program: UIC College of Pharmacy, Department of Pharmacy Administration, Master in Pharmacy. Defended: December 2011. Thesis Title: “Association between inhaled anticholinergics and arrhythmias.” Current position: PhD student.

3. Edith Nutescu. Role: Masters Thesis Committee Chair/Advisor. Program: UIC School of Public Health, Division of Health Policy and Administration, Master in Clinical and Translational Science. Defended: Fall 2013. Thesis Title: “Impact of transportation barriers on high-quality anticoagulation management in underserved patients.” Current position: Associate Professor, University of Illinois at Chicago.

4. Christine Bagley. Role: PhD Dissertation Committee Member. Program: University of Colorado, PhD in Health Services Research. Defended: March 2016. Dissertation Title: “Association between psychostimulant agents and suicide related events in individuals with attention-deficit hyperactivity disorder.” Current position: Clinical Solutions Analytic Director, Anthem Inc.

5. Vardhaman Patel. Role: PhD Dissertation Committee Member. Program: UIC College of Pharmacy, Department of Pharmacy Systems, Outcomes and Policy, PhD in Pharmacy (pharmacoeconomics and outcomes research). Defended: February 2015. Thesis Title: “Comparative effectiveness of drugs for treatment of heparin-induced thrombocytopenia.” Current position: Scientist, Health Economics & Outcomes Research, Pharmerit International.

6. Matt Moberg. Role: PhD Dissertation Committee Member. Program: UIC School of Public Health, Division of Epidemiology and Biostatistics, PhD in Epidemiology. Defended: February 2016. Thesis Title: “A SEER Medicare analysis of anemia during first-line radiotherapy of head and neck cancers.” Current position: Director, Outcomes Research, Merck.

8. Yash Jalundhwala. Role: PhD Dissertation Committee Member. Program: UIC College of Pharmacy, Department of Pharmacy Systems, Outcomes and Policy, PhD in Pharmacy (pharmacoeconomics and outcomes research). Defended: Fall 2015. Thesis Title: "Understanding the relationship between psychological dispositions and perceptions of health and well-being". Current position: Senior Manager, Global Health Economics and Outcomes Research, AbbVie.

7. Wan-Ju Lee. Role: PhD Dissertation Committee Chair/Advisor. Program: UIC College of Pharmacy, Department of Pharmacy Systems, Outcomes and Policy, PhD in Pharmacy (pharmacoepidemiology and drug safety). Defended: October 2016. Thesis Title: Association between TNF-alpha inhibitors and infection in children and adolescents. Current position: Manager, Global Health Economics and Outcomes Research, AbbVie.

8. Jennifer Samp-White. Role: PhD Dissertation Committee Member. Program: UIC College of Pharmacy, Department of Pharmacy Systems, Outcomes and Policy, PhD in Pharmacy (pharmacoepidemiology and drug safety). Defended: April 2017. Thesis Title: “Comparative effectiveness and safety of combination

bronchodilator therapy compared to a long acting beta-2-agonist and an inhaled corticosteroid in patients with chronic obstructive pulmonary disease.” Current position: Assistant Director, Health Economics and Outcomes Research, AbbVie.

9. Hari Patel. Role: PhD Dissertation Committee Member. Program: UIC College of Pharmacy, Department of Pharmacy Systems, Outcomes and Policy, PhD in Pharmacy (pharmacoepidemiology and drug safety). Defended: pending. Thesis Title: “Risk evaluation and prediction of cardiac events among azithromycin users.” Current position: Health Economics and Outcomes Research Consultant, Immensity Consulting.

11. Deval Gor. Role: PhD Dissertation Committee Member. Program: UIC College of Pharmacy, Department of Pharmacy Systems, Outcomes and Policy, PhD in Pharmacy (pharmacoeconomics and outcomes research). Defended: pending. Thesis Title: “Antidiabetic drugs in patients with chronic kidney disease: trends, adherence and economic outcomes.”

12. Rachel Harrington. Role: PhD Dissertation Committee Member. Program: UIC College of Pharmacy, Department of Pharmacy Systems, Outcomes and Policy, PhD in Pharmacy (pharmacoepidemiology and drug safety). Defended: pending. Thesis Title: pending.

13. Shan Xing. Role: PhD Dissertation Committee Member. Program: UIC College of Pharmacy, Department of Pharmacy Systems, Outcomes and Policy, PhD in Pharmacy (pharmacoepidemiology and drug safety). Defended: September 2017. Thesis Title: “Impact of second generation antipsychotics on diabetes outcomes among patients with major depressive disorder and pre-existing diabetes.”

14. Sruthi Adimadhyam. Role: PhD Dissertation Committee Chair/Advisor. Program: UIC College of Pharmacy, Department of Pharmacy Systems, Outcomes and Policy, PhD in Pharmacy. Defended: pending. Thesis Title: pending.

15. Angela Smith. Role: PhD Committee Member. Program University of South Carolina, PhD in Health Services. Defended: April 2017. Thesis Title: “Staffing, workload and productivity benchmark statistics for psychiatric hospital pharmacies.” Current position: Director of Pharmacy, North Carolina Department of Mental Health.

16. Kellyn Moran. Role: PhD Dissertation Committee Chair/Advisor. Program: UIC College of Pharmacy, Department of Pharmacy Systems, Outcomes and Policy, PhD in Pharmacy. Defended: pending. Thesis Title: pending.

FUNDED RESEARCH GRANTS AND CONTRACTS †

1. *The influence of verapamil on the pharmacokinetics and pharmacodynamics of ethanol.* Role: **Co-Investigator**. Investigators: Bauer L (PI), Schumock G, Horn J. Grant. Funded by the Washington State Drug and Alcohol Awareness Society. Period: 1/1/88-12/31/89. Amount funded:‡ \$9,000 (0% funded effort – donated time).

2. *Meta-analysis of drug therapy for chronic asthma: The role of inhaled corticosteroids.* Role: **Co-Investigator**. Investigators: Hatoum H (PI), Kendzierski D, Schumock G. Grant. Funded by Glaxo, Inc. Period: 1/1/90-12/31/90. Amount funded:‡ \$14,880 (0% funded effort –donated time).

‡ Funding amounts are total dollars awarded and amount attributable if co-investigator (\$/\$)

3. *Discharge medication errors in a university teaching hospital.* Role: **Principal Investigator**. Investigators: Schumock G, Guenette A, Keys A, Hutchinson R. Grant. Funded by The Upjohn Company. Period: 1/1/92-12/31/92. Amount funded:‡ \$1,000 (0% funded effort – donated time).
4. *Pharmacoeconomic analysis of therapy for stress ulcer prophylaxis.* Role: **Co-Investigator**. Investigators: Lam N (PI), Schumock G. Grant. Funded by Marion Merrill Dow, Inc. Period: 1/1/94-12/31/94. Amount funded:‡ \$18,000 (0% funded effort – donated time).
5. *Cost-effectiveness analysis of 3-hydroxy-3-methylglutaryl-coenzyme A (HMG-CoA) reductase inhibitors in the treatment of high low-density lipoprotein cholesterol.* Role: **Co-Investigator**. Investigators: Kong S (PI), Schumock G, Stubbings J, Schoen M, Lam N. Grant. Funded by Sandoz Pharmaceutical Corporation. Period: 1/1/95-12/31/95. Amount funded:‡ \$49,863 (0% funded effort – donated time).
6. *Preventable adverse drug reactions.* Role: **Co-Investigator**. Investigators: Kong S (PI), Schumock G, Seeger J. Grant. Funded by the University of Illinois at Chicago Campus Research Board. Period: 1/1/95-12/31/95. Amount funded:‡ \$3,800 (0% funded effort – donated time).
7. *Evaluation of appropriate use of low-molecular-weight heparins in integrated delivery networks.* Role: **Principal Investigator**. Investigators: Schumock G, Lewis R, Nutescu E, Walton S. Grant funded by Aventis Pharmaceuticals. Period: 1/1/00-12/31/02. Amount funded:‡ \$92,000 (10% funded effort)
8. *Evidence based analysis of economic, clinical, and humanistic burden of heart failure and impact of eplerenone.* Role: **Principal Investigator**. Investigators: Schumock G, Ross M, Bauman J. Grant. Funded by the Pharmacia Corporation. Period: 1/1/00-12/31/02. Amount funded:‡ \$80,000 (20% funded effort)
9. *Research training fellowship in drug therapy outcomes (2000-2001).* Role: **Principal Investigator**. Investigators: Schumock G, Walton S. Grant. Funded by the Searle Pharmaceutical Company. Period: 7/1/00-6/30/01. Amount funded:‡ \$45,000 (0% funded effort – donated time).
10. *Pharmacoeconomics and outcomes research in MRMI integrated delivery networks.* Role: **Principal Investigator**. Investigators: Schumock G. Contract. Funded by Mercy Resource Management, Inc. Period: 8/1/00-7/31/04. Amount funded: \$80,000 (20% funded effort).
11. *Research training fellowship in drug therapy outcomes (2000-2002).* Role: **Principal Investigator**. Investigator: Schumock G, Walton S. Grant. Funded by the Pharmacia Corporation. Period: 8/1/00-8/1/02. Amount funded:‡ \$100,000 (0% funded effort – donated time).
12. *Analysis of factors that influence prescribing of low-molecular weight heparins in acute care hospitals.* Role: **Principal Investigator**. Investigators: Schumock G, Lewis R, Nutescu E, Walton S. Grant. Funded by Dupont Pharmaceutical Companies. Period: 1/1/01-12/31/02. Amount funded:‡ \$100,000 (10% funded effort).
13. *Research training fellowship in drug therapy outcomes (2001-2003).* Role: **Principal Investigator**. Investigators: Schumock G, Walton S. Grant. Funded by the Pharmacia Corporation. Period: 7/1/01-6/30/03. Amount funded:‡ \$102,000 (0% funded effort – donated time)
14. *Pharmacy resident training – outcomes research.* Role: **Co-Investigator**. Investigators: Paloucek F (PI), Schumock G, Cunningham F. Grant. Funded by TAP Pharmaceuticals. Period: 7/1/01-6/31/02. Amount funded:‡ \$45,600/\$0 (0% funded effort – donated time).

15. *Microalbuminuria and cardiovascular events: A systematic review of the clinical outcomes and estimation of potential economic impact.* Role: **Principal Investigator**. Investigators: Schumock G, Pickard S. Contract. Funded by the Pharmacia Corporation. Period: 1/1/02-12/31/02. Amount funded:‡ \$52,484 (10% funded effort).
16. *Data repository on the pharmacoeconomic value of clinical pharmacy services.* Role: **Principal Investigator**. Investigators: Schumock G, Bauman J. Grant. Funded by the Merck Company Foundation. Period: 7/1/02-6/31/04. Amount funded:‡ \$48,378 (20% funded effort).
17. *Implications of direct thrombin inhibitors for anticoagulation clinics.* Role: **Co-Investigator**. Investigators: Pickard S (PI), Nutescu E, Schumock G. Grant. Funded by AstraZeneca. Period: 1/1/03-12/31/03. Amount funded:‡ \$34,7000 (0% funded effort – donated time).
18. *Determinants of adherence in asthma – Q methodology.* Role: **Principal Investigator**. Investigators: Schumock G, Butler M, Wilken L, Mrtek R, Jaffe H. Grant. Funded by Pfizer. Period: 4/1/03-7/31/03. Amount funded:‡ \$15,313 (0% funded effort – donated time).
19. *Research on adverse drug events and reports for oncology drugs: The RADAR oncology drugs study.* Role: **Co-Investigator**. Investigators: Bennett C (PI), Schumock G, et al. Funded by the National Cancer Institute, NIH (1R01CA102713-01). Period: 7/1/03-7/1/05. Amount funded:‡ \$906,066 (total)/\$40,109 (UIC) (10% funded effort).
20. *Economic model for use of LMWHs in community hospitals.* Role: **Principal Investigator**. Investigators: Schumock G, Nutescu E, Walton S. Grant. Funded by Mercy Resource Management Inc. Period: 8/1/03-7/31/04. Amount funded:‡ \$15,000 (0% funded effort – donated time).
21. *Research fellowship in pharmaceutical and health outcomes.* Role: **Principal Investigator**. Investigators: Schumock G. Grant. Funded by Mercy Resource Management Inc. Period: 1/1/04-12/31/05. Amount funded:‡ \$18,855 (0% funded effort – donated time).
22. *Cost-effectiveness of early therapy with nesiritide in hospitalized patients with acute decompensated heart failure.* Role: **Principal Investigator**. Investigators: Schumock G, Didomenico. Grant. Funded by Scios Inc. Period: 7/1/04-6/30/05. Amount funded:‡ \$24,962 (0% funded effort – donated time).
23. *Implementation of intervention tool to increase pharmacist's documentation of patient use of herbal medications.* Role: **Co-Investigator**. Investigators: Roland S (PI), Schumock G. Grant. Funded by the American Pharmacists Association Foundation. Period: 1/1/05-12/31/05. Amount funded:‡ \$1,000 (0% effort – donated time).
24. *Seed funding for a strategic translational research intercollege program grant.* Role: **Co-Investigator**. Investigators: Beam C, Goldstein J, Beck W, Schumock G, and others. Grant. Funded by UIC Multidisciplinary Seed Grant Program. Period: 1/1/05-10/31/08. Amount funded:‡ \$199,598 (0% funded effort – donated time).
25. *Pharmacoeconomics and outcomes research in Consorta hospitals.* Role: **Principal Investigator**. Investigators: Schumock G. Service Contract. Funded by Consorta, Inc. Period: 2/1/05-12/31/07. Amount funded:‡ \$72,917 (20% funded effort).
26. *The value of multiple medication therapy management services.* Role: **Co-Investigator**. Investigators: Kliethermis M (PI), Stubbings J, Schumock G, Walton S. Grant. Funded by the UIC Institute for Health Research and Policy. Period: 6/1/05-5/31/05. Amount funded:‡ \$49,797 (0% funded effort – donated time).

27. *Prescription drug expenditures: Too much or not enough?* Role: **Co-Investigator**. Investigators: Stubbings J (PI), Schumock G. Small Conference Grant. Funded by Agency for Healthcare Research and Quality. Period: 7/1/05-6/30/06. Amount funded:‡ \$25,000 (0% funded effort – donated time).
28. *Improving anticoagulation in community hospitals*. Role: **Principal Investigator**. Investigators: Schumock G, Nutescu E. Funded by GlaxoSmithKline Inc. Period: 7/1/05-6/30/06. Amount funded:‡ \$69,000 (10% effort).
29. *WHI-UIC fellowship in pharmaceutical outcomes and pharmacoeconomics, 2005-2007*. Role: **Principal Investigator**. Investigators: Schumock G. Grant. Funded by Walgreens Health Initiatives. Period: 7/1/05-6/31/07. Amount funded:‡ \$90,055 (0% funded effort – donated time).
30. *TAP-UIC fellowship in health economics and outcomes research, 2005-2007*. Role: **Principal Investigator**. Investigators: Schumock G, Walton S, Pickard AS, Stubbings J. Grant. Funded by TAP Pharmaceutical Products. Period: 7/1/05-6/31/07. Amount funded:‡ \$98,784 (0% funded effort – donated time).
31. *Pharmacists' roles in improving rural health in Illinois*. Role: **Co-Investigator**. Investigators: Crawford S (PI), Walton S, Lin SJ, Schumock G, Bono J. Grant. Funded by Project EXPORT Center for Excellence in Rural Health, National Center for Rural Health Professions. Period: 9/1/05-8/15/07. Amount funded:‡ \$60,000 (2% funded effort)
32. *Developing evidence to inform decisions about effectiveness: The DEcIDE Network*. Role: **Principal Investigator**. Investigators: Schumock G, Stubbings J, others. Contract. Agency for Healthcare Research and Quality (HHS29020050038I Master Contract – Research Center). Period: 9/16/05-9/15/07, extended to 9/15/08, extended to 9/15/10. Funding based on task orders.
33. *Outcomes of COPD management*. Role: **Principal Investigator**. Investigators: Schumock G, Lee T, Weiss T, Pickard S. Contract. Funded by the Agency for Healthcare Research and Quality (HHS29020050038I-1). Period: 9/30/05-6/30/07. Amount funded:‡ \$249,851 (5% funded effort).
34. *Design and evaluation of a medication therapy management program to improve patient safety in Medicare beneficiaries*. Role: **Center PI, Project Co-Investigator**. Investigators: Touchette D (PI), Schumock G, Stubbings J, Walton S. Contract. Funded by the Agency for Healthcare Research and Quality (HHS29020050038I-2). Period: 9/30/05-4/30/07, extended to 3/31/09. Amount funded:‡ \$699,772 (10% funded effort).
35. *Improving treatment of acute decompensated heart failure in community hospitals*. Role: **Principal Investigator**. Investigators: Schumock G, DiDomenico R. Contract. Funded by Scios Inc. Period: 11/1/05-10/31/06. Amount funded:‡ \$74,630 (10% funded effort).
36. *Development and evaluation of a community pharmacy heart failure management program*. Role: **Co-Investigator**. Investigators: Drinnen M (PI), Hendrickson J, Provenzano A, Roland S, Schumock G. Grant. Funded by the American Pharmacists Association Foundation, 2006 Incentive Grants. Period: 1/1/06-12/31/06. Amount funded:‡ \$1,000 (0% effort – donated time).
37. *An RCT to decrease out-of-pocket prescription costs*. Role: **Mentor/Co-investigator**. Investigators: Alexander C (PI), Casalino L, Meltzer D, Piette J, Powell L, Sachs G, Sehgal A, Schumock G. K08 Mentored Training Grant. Funded by NIH (1K08HS015699-01A1). Period: 4/1/06-3/31/11. Amount funded:‡ \$625,049 (0% funded effort – donated time).

38. *Off-label drug use: extent, effectiveness and safety*. Role: **Center PI and Project Co-Investigator**. **Investigators:** Walton S (PI), Stafford T, Meltzer D, Alexander C, Schumock G. Contract (task order). Funded by the Agency for Healthcare Research and Quality (HHS29020050038I-3). Period: 9/30/06-1/29/07, extended to 4/23/07. Amount funded:‡ \$299,772 (2% funded effort).
39. *Broad-based support for the DEcIDE research network*. Role: **Principal Investigator**. **Investigators:** Schumock G, Pickard S, Touchette D, Walton S, Stubbings J. Contract (task order). Funded by the Agency for Healthcare Research and Quality (HHS29020050038I-4). Period: 9/27/06-9/15/08, extended to 8/31/09, extended to 9/15/2010. Amount funded:‡ \$499,999 (funding from this task order is allocated to multiple work assignments below).
40. *TAP-UIC fellowship in health economics and outcomes research 2007-2009*. Role: **Co-Investigator**. **Investigators:** Pickard S (PI), Schumock G. Period: 7/1/07-6/30/09. Amount funded:‡ \$116,563 (0% funded effort – donated time).
41. *Pharmacoeconomic analysis for hemophilia disease management program*. Role: **Principal Investigator**. **Investigators:** Schumock G. Service Contract. Funded by the Indiana Thrombosis & Hemophilia Center. Period: 6/29/07-6/10/08. Amount funded:‡ \$30,000 (20% funded effort).
42. *Comparative effectiveness of anticholinergic medications in patients with chronic obstructive pulmonary disease (COPD)*. Role: **Center PI and Project Co-Investigator**. **Investigators:** Pickard S (PI), Lee T, Krishnan J, Joo M, Schumock G. Contract (work assignment under Broad-based support task order). Funded by the Agency for Healthcare Research and Quality (HHS29020050038I-4-1). Period: 6/1/07-12/31/07, extended to 6/30/08. Amount funded:‡ \$224,051 (5% funded effort).
43. *Design, implementation, and dissemination of medication prescribing guidelines in a national consortium of health systems: translation of evidence into practice*. Role: **Project Leader**. **Investigators:** Schumock G, Walton S, DiDomenico R. Project is part of Tools for Optimizing Medication Prescribing, Monitoring, and Education (TOP-MED) Center for Education and Research on Therapeutics (CERT) (B. Lambert PI, 1U18HS016973-01), Funded by the Agency for Healthcare Research and Quality. Period: 9/1/07-8/31/11. Amount funded:‡ \$4,000,000 (total)/\$235,492 (project) (20% funded effort).
44. *WHI-UIC fellowship in pharmaceutical outcomes and pharmacoeconomics, 2007-2008*. Role: **Principal Investigator**. **Investigators:** Schumock G. Grant. Funded by Walgreens Health Initiatives. Period: 9/16/07-9/15/08. Amount funded:‡ \$35,717 (0% funded effort – donated time).
45. *Validating performance measures for patients hospitalized with COPD exacerbations (project 1) and Using social network analysis to guide quality improvement team formation (project 4)*. Role: **Co-Investigator**. **Investigators:** Krishnan J, Schumock G, Stein B, Meltzer D. Projects are both part of Medical Economics Center for Education and Research on Therapeutics (CERT) (D. Meltzer PI, 1U18HS016973-02), Funded by the Agency for Healthcare Research and Quality, to the University of Chicago (subcontract to UIC). Period: 9/15/07-9/14/11. Amount funded:‡ \$4,000,000 (total)/\$176,847 (project) (35% funded effort).
46. *Adverse drug reactions in geriatric cancer patients*. Role: **Mentor/Co-Investigator**. **Investigators:** McKoy JM (PI), Bennett C, Rosen S, Schumock G. K01 Mentored Training Grant. Funded by NIH/NCI (1K01CA134554-01). Period: 7/1/08-6/30/13. Amount funded:‡ \$652,946 (0% funded effort – donated time).
47. *General DEcIDE network support: methods and dissemination*. Role: **Principal investigator**. **Investigators:** Schumock G, Lee T, Pickard S. Contract. Funded by the Agency for Healthcare Research and Quality (HHS29020050038I-5). Period: 9/1/08-9/15/10. Amount funded:‡ \$20,000 (5% funded effort).

48. *Development of a multicenter prospective study to assess the effectiveness of treatments for chronic obstructive pulmonary disease (COPD)*. Role: **Center PI and Project Co-Investigator**. Investigators: Pickard S (PI), Lee T, Krishnan J, Joo M, Schumock G, Wilke K. Contract (work assignment under Broad-based support task order). Funded by the Agency for Healthcare Research and Quality (HHS290200500381-4-2). Period: 11/7/08-8/1/09. Amount funded:‡ \$276,948 (3% funded effort).
50. *CONCERT-clinical effectiveness research (CONCERT-CER)*. Role: **Co-Investigator**. Principal Investigators: David Au, Shannon Carson, Jerry Krishnan, Todd A. Lee (UIC PI), Peter Lindenauer, Mary McBurnie, Rickard Mularski (site PIs), Pickard S, Schumock G. Funded by NIH National Heart, Lung, and Blood Institute (1RC2HL101618-01). Period: 9/30/09-8/31/2012. Amount funded: ‡ \$7,439,784 (total)/\$1,402,976 (UIC) (15% effort).
51. *The University of Illinois at Chicago (UIC) Center for Clinical and Translational Science (CCTS), CTSA KL2 Scholar*. Role: **Mentor**. Investigators: Nutescu E (awardee), Schumock G. Grant. Funded by National Center for Research Resources (KL2RR029878). Period: 6/16/10-6/15/13. Amount funded: (0% effort).
52. *Developing evidence to inform decisions about effectiveness (DEcIDE) research network-2*. Role: **Principal Investigator**. Investigators: Schumock G, Pickard S, Meltzer D, Lee T, others. Contract. Funded by Agency for Healthcare Research and Quality (HHS290201000011I Master Contract – Research Center). Period: 9/16/10-9/15/13. Funding based on task orders.
53. *DEcIDE-2 administration support*. Role: **Principal Investigator**. Investigators: Schumock G, Lee T, Pickard S. Contract. Funded by Agency for Healthcare Research and Quality (HHS290201000011I Task order #1). Period: 9/16/10-9/15/11. Amount (TC) funded: \$5,000 (% effort variable).
54. *Comparative effectiveness of breast imaging modalities: a natural experiment*. Role: **Co-Investigator**. Investigators: Rausher G (PI), Schumock G, Hynes D, et al. Grant. Funded by Agency for Healthcare Research and Quality (1 R01 HS018366-01A1). Period 9/01/10 – 8/31/15. Amount (TDC) funded: \$1,270,215 (5% effort).
55. *UC/UIC Comparative effectiveness research institutional career development award*. Role: **Co-Principal Investigator**. Investigators: Meltzer D and Schumock G (Co-PIs). Grant. Funded by National Cancer Institute (1KM1CA156717-01). Period: 09/30/10 – 09/29/13. Amount (TC) funded: \$2,435,723 Total, \$861,701 UIC (10% effort)
56. *Takeda Pharmaceuticals International and UIC 2-year fellowship in Health Economics and Outcomes Research, 2010-2012*. Role: **Co-Investigator**. Investigators: Pickard S (PI), Schumock G, Touchette D. Contract: Funded by Takeda Pharmaceuticals International. Period: 7/1/10-6/30/12. Amount funded:‡ \$139,432 (0% funded effort – donated time).
57. *Takeda Pharmaceuticals International and UIC 2-year fellowship in Health Economics and Outcomes Research, 2011-2013*. Role: **Co-Investigator**. Investigators: Pickard S (PI), Schumock G, Touchette D. Period: 7/1/11-6/30/13. Contract: Funded by Takeda Pharmaceuticals International. Amount funded:‡ \$128,402 (0% funded effort – donated time).
58. *Re-engineering Translational Research at The University of Chicago (UL1)*. Role: **Contributor**. Investigators: Solway J (PI), Meltzer DO, Kishnan J. Period: 6/1/11-5/31/12. Grant: Funded by National Institutes of Health. Amount funded:‡ \$299,570 (0% funded effort – donated time).

59. *Alternative Methods for HOI Validation*. Role: **Principal Investigator**. Investigators: Schumock GT, Pickard AS, Lee TA. Period: 10/26/12-8/31/13. Grant: Funded by US Food and Drug Administration (Harvard Pilgrim Health Care Institute, contractor, HHSF22301008T-0009). Amount funded:‡ \$205,200 (25% funded effort).

60. *Patient-Centered Anticoagulation Self-Monitoring in Minority Patients*. Role: **Co-Mentor**. Investigators: Nutescu EA (PI), Fitzgibbons M, Schumock GT. Period: 02/07/2013-1/31/2017. Grant: Funded by National Institutes of Health (1 K23 HL112908-01A1). Amount funded: \$526,567 (0% funded effort).

61. *Sentinel Initiative*. Role: **Site Principal Investigator**. Investigators: Platt R (PI), Lee T and Pickard S (site Co-I). Period: 01/01/2015-12/31/2020. Contract: Funded by the Food and Drug Administration (Harvard Pilgrim Health Care Institute, contractor, HHSF22301008T). Amount funded: Task-order based funding.

62. *2015 Center of Excellence for Comparative Effectiveness Research (CER) Education*. Role: **Co-Principal Investigator**. Investigators: Schumock GT (PI), Pickard AS (PI). Period: 01/01/2015-12/31/2017. Grant: Funded by the Pharmaceutical Research and Manufacturers Association (PhRMA) Foundation. Amount funded:‡ \$250,000 (10% funded effort).

63. *Institute for Clinical and Economic Review Modeling Studies*. Role: **Co-Investigator**. Investigators: Touchette DT (PI), Walton MS, Schumock GT, Lee TA, Pickard AS. Period: 03/16/2017-03/15/2018 (renewed annually). Contract: Funded by the Institute for Clinical and Economic Review (ICER, KC Award #085799). Amount funded: \$125,000/year (% funded effort depends on projects).

64. *Medication Safety Systems in the Community: The Role of Pharmacists*. Role: **Co-Principal Investigator**. Investigators: Schumock GT (PI), Crawford SY (PI). Period: 06/05/2017-12/31/2017. Grant: Funded by the Gordon E. and Betty I Moore Foundation. Amount funded:‡ \$77,130 (15% funded effort).

65. *Second Generation Antipsychotics on Diabetes Outcomes in Major Depression*. Role: **Co-Mentor**. Investigators: Xing S (PI), Lee TA, Calip G, Schumock GT, Kim S, Leow A. Period: 08/08/2017-08/07/2018. Grant: Funded by National Institutes of Mental Health (1F31MH114465-01). Amount funded: \$28,044 (0% funded effort).

66. Greg

INVENTIONS

“Data Repository on the Value of Clinical Pharmacy Services: UIC-VClin RX”. Disclosure submitted to the UIC Office of Technology Management, Identification No. CT 62. 11/00.