
Curriculum Vitae

NAME: Thomas Charles Dowling

WORK ADDRESS Ferris State University
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EDUCATION

Sept. 1994- July 1999	Doctor of Philosophy – Pharmaceutical Sciences School of Pharmacy, Department of Pharmaceutical Sciences, University of Pittsburgh, Pittsburgh, PA
July 1993-July 1994	Pharmacy Practice Residency, University of Maryland Medical System, Baltimore, MD
May 1988-May 1993	Doctor of Pharmacy (High Distinction); May 1993 Associate of Arts and Sciences (Distinction); May 1990 Ferris State University College of Pharmacy, Big Rapids, MI
May 1987- May 1988	Alpena Community College, Alpena, MI

EMPLOYMENT

Nov 2014 – Present	Assistant Dean, Research Professional Development (2014 -) Department Head – Pharmacy Practice (2014-2015) Professor (Tenured) Director, Office of Research and Sponsored Programs (2014 -) Institutional Official for IRB and IBC (2021 -) Ferris State University, College of Pharmacy Grand Rapids, MI
July 2014 – Oct 2014	Professor (tenured) Vice Chair for Research and Scholarship (2008 - 2014) Department of Pharmacy Practice and Science University of Maryland School of Pharmacy, Baltimore MD
July 2005 – June 2014	Associate Professor (tenured) Vice Chair for Research and Scholarship (2008 - 2014) Department of Pharmacy Practice and Science University of Maryland School of Pharmacy, Baltimore MD

Aug. 1999 – Jul. 2005	Assistant Professor Department of Pharmacy Practice and Science University of Maryland School of Pharmacy, Baltimore MD
Nov. 1994- June 1997	Pharmacist, Veteran's Administration Hospital, Pittsburgh PA
July - Sept. 1994	Clinical Pharmacist (Nephrology), University of Maryland Medical System, Baltimore MD

SCHOLARLY ACTIVITY

Publications (peer-reviewed journals):

1. Morris JG, Shay DK, Hebden JN, McCarter RJ, Perdue BE, Jarvis W. Johnson JA, **Dowling TC**, Polish LB, Schwalbe RS. Enterococci resistant to multiple agents, including vancomycin: establishment of endemicity in a University Medical Center. *Ann Intern Med* 1995;123:250-259.
2. **Dowling TC**, Frye RF, Zemaitis M. Simultaneous determination of p-aminohippuric acid, acetyl-p-aminohippuric acid and iothalamate in human plasma and urine by high-performance liquid chromatography. *J Chromatogr B* 1998;716:305-313.
3. **Dowling TC**, Frye RF. Determination of famotidine in human plasma and urine by HPLC. *J Chromatogr B* 1999; 732:239-243.
4. **Dowling TC**, Frye RF, Fraley DS, Matzke GR. Comparison of iothalamate clearance methods for measuring GFR. *Pharmacotherapy* 1999;19(8):943-950.
5. **Dowling TC**, Frye RF, Fraley DS, Matzke GR. Characterization of tubular functional capacity in man using PAH and famotidine. *Kidney Int* 2001;59:295-303.
6. Raje S, **Dowling TC**, Eddington ND. Determination of the benztropine analog AHN-1055, a dopamine uptake inhibitor, in rat plasma and brain by HPLC with UV detection. *J Chromatogr B* 2002;768:305-313.
7. Karyekar CS, Eddington ND, **Dowling TC**. Effect of St. John's Wort on CYP1A2 in LS180 cells. *J Postgrad Med* 2002;48:100-104.
8. Karyekar CS, Fasano A, Raje S, Lu R, **Dowling TC**, Eddington ND. Zonula occludens toxin increases the permeability of molecular weight markers and chemotherapeutic agents across the bovine brain microvessel endothelial cells. *J Pharm Sci* 2003 Feb;92(2):414-23.
9. Karyekar CS, Garimella T, Eddington ND, **Dowling TC**. Evaluation of the P-glycoprotein-mediated interactions between cimetidine, PSC833 and itraconazole in MDR1-MDCK cells. *Pharmacotherapy* 2003 Apr;23(4):436-42.
10. **Dowling TC**, Briglia A, Fink J, Hanes D, Light P, Stackewicz L, Karyekar CS, Eddington N, Weir M, Henrich WL. Characterization of hepatic CYP3A activity in ESRD patients. *Clin Pharmacol Ther* 2003 May;73(5):427-34.

11. Iqbal T, Karyekar CS, Kinjo M, Ngan G, **Dowling TC**. Validation of a simplified method for determination of cimetidine in human plasma and urine by HPLC with ultraviolet detection. *J Chromatogr B* 2004;799(2):337-341.
12. Karyekar CS, Eddington ND, Briglia AE, Gubbins PO, **Dowling TC**. Renal interaction between itraconazole and cimetidine. *J Clin Pharmacol* 2004;44:919-927.
13. Wang DJ, **Dowling TC**, Meadows D, Ayala T, Marshall J, Minshall S, Greenberg N, Thattassery E, Fisher ML, Rao K, Gottlieb SS. Nesiritide Does Not Improve Renal Function in Patients with Chronic Heart Failure and Worsening Serum Creatinine. *Circulation* 2004 Sep 21;110(12):1620-5.
14. **Dowling TC**, Arjomand M, Lin ET, Allen LV, McPherson ML. Systemic absorption of topically applied single dose ketoprofen 20% in pluronic lecithin organogel (PLO). *Am J Health Syst Pharm* 2004 Dec 1;61(23):2541-4.
15. Iqbal T, Kinjo MT, **Dowling TC**. Determination of Rhodamine-123 in cell lysate buffer using HPLC with visible UV detection. *J Chromatogr B* 2005 Jan 25;814(2):259-262.
16. **Dowling TC**, Edelman R, Chavallaz P, Young D, O'Brien A, Khazaeli D, Roberson C, Tackett CO. Phase I safety and pharmacokinetic study of chimeric murine-human monoclonal antibody α Stx2 in healthy adults. *Antimicrob Agents Chemother* 2005;49:1808-1812.
17. Jones JM, Johnson JJ, Vizcaino D, Park JJ, Hand BD, Ferrell RE, Weir MR, **Dowling T**, Obisesan TO, Brown MD. Renin-Angiotensin System Genes and Exercise Training-Induced Changes in Sodium Excretion in African American Hypertensives. *Ethnic Dis* 2006;16(3):666-674.
18. Jones J, Park JJ, **Dowling T**, Phares D, Park JY, Brown MD. Role of potassium excretion and percent body fat on ethnic differences in plasma aldosterone levels. *Ethnic Dis* 2006;16(3 suppl 4):S4-S10.
19. Jones-Burton C, Vessal G, **Dowling TC**, Brown J, Fink JC. Urinary Cotinine as an Objective Measure of Cigarette Smoking in Chronic Kidney Disease. *Nephrol Dial Transplant* 2007 Jul;22(7):1950-4.
20. Jones JM, **Dowling TC**, Park JJ, Roth S, Phares DA, Park JY, Brown MD. Differential Aerobic Exercise-Induced Changes in Plasma Aldosterone between African Americans and Whites. *Exp Physiol* 2007 Sep;92(5):871-9.
21. **Dowling TC**. Prevalence, etiology, and consequences of anemia and clinical and economic benefits of anemia correction in patients with chronic kidney disease: an overview. *Am J Health Syst Pharm* 2007 Jul 1;64(13 Suppl 8):S3-7.
22. Dittrich HC, Gupta DK, Hack TC, **Dowling T**, Callahan J, Thomson S. The effect of KW-3902, an adenosine A1 receptor antagonist, on renal function and renal plasma flow in ambulatory patients with heart failure and renal impairment. *J Card Fail* 2007 Oct;13(8):609-17.
23. Rogers HL, Marshall J, Brock J, **Dowling TC**, Feller E, Robinson S, Gottlieb SS. A Randomized, Controlled Trial of the Renal Effects of Ultrafiltration as Compared to Furosemide. *J Card Fail* 2008 Feb;14(1):1-5.

24. Howell CD, **Dowling TC**, Paul M, et al. Peginterferon pharmacokinetics in African American and Caucasian American in patients with hepatitis C virus genotype 1 infection. *Clin Gastroenterol Hepatol* 2008 May;6(5):575-83.
25. Sturgeon KM, Fenty-Stewart NM, Diaz KM, Brinkley TE, **Dowling TC**, Brown MD. The Relationship of Oxidative Stress and Cholesterol with Dipping Status Before and After Aerobic Exercise Training. *Blood Pressure* 2009 Jun 18:1-9.
26. Bivins A, Hou K, Ayesu N, Ellsworth B, Montenegro S, Tu X, Boyle C, **Dowling T**, Shaya FT. Clinical evaluation of natalizumab for formulary consideration. *Expert Opin Biol Ther* 2010 Aug;10(8):1279-87.
27. **Dowling TC**, Murphy JE, Matzke GR, Burkhart GJ. Evaluation of renal drug dosing: Prescribing information and clinical pharmacist approaches. *Pharmacotherapy* 2010;30(8):776–786.
28. Klein-Schwartz W, Doyon S, **Dowling TC**. Drug Adsorption Efficacy and Palatability of a Novel Charcoal Cookie Formulation. *Pharmacotherapy* 2010; 30(9):888–894.
29. Denetclaw T, Oshima N, **Dowling TC**. Dofetilide Dose Calculation Errors in Elderly Associated with Use of the MDRD eGFR Equation. *Ann Pharmacother* 2011;45(7-8):e44.
30. Nyman HA, **Dowling TC**, Hudson JQ, St. Peter WL, Joy MS, Nolin TD. Use of the Cockcroft-Gault versus the MDRD Study Equation to Dose Medications: An Opinion of the Nephrology Practice and Research Network of the American College of Clinical Pharmacy. *Pharmacotherapy* 2011 Nov;31(11):1130-44.
31. Jin R, Fossler MJ, McHutchison JG, Howell CD, **Dowling TC**. Population Pharmacokinetics and Pharmacodynamics of Ribavirin in Patients with Chronic Hepatitis C Genotype 1 Infection. *AAPS J* 2012;14(3):571-80.
32. Shao C, **Dowling TC**, Haidar S, Yu LX, Polli JE, Kane MA. Quantification of acyclovir in human plasma by ultraperformance liquid chromatography – heated electrospray ionization – tandem mass spectrometry for bioequivalence evaluation. *J Anal Bioanal Techniques* 2012;3(4):1-6. doi:10.4172/2155-9872.1000139
33. Jin R, Cai L, Tan M, McHutchison JG, **Dowling TC**, Howell CD. Optimum ribavirin exposure overcomes racial disparity in efficacy of peginterferon and ribavirin treatment for hepatitis C genotype 1. *Am J Gastroenterol* 2012 Nov;107(11):1675-83. doi: 10.1038/ajg.2012.306.
34. **Dowling TC**, Rodriguez de Bittner M, Perez Z, Briglia A, Peralta L. Evaluation of Drug Metabolism in Hispanic Americans with Type 2 Diabetes. *Diab Res Clin Metab* 2012; Dec 21:doi:10.7243/2050-0866-1-22.
35. Congdon HB, **Dowling TC**, Cheng I, Truong HA. Impact of Medication Therapy Management (MTM) Visit Frequency on Diabetes Control in a Health Resources and Services Administration Patient Safety and Clinical Pharmacy Services Collaborative. *Ann Pharmacother* 2013 May;47(5):665-70.
36. **Dowling TC**, Wang ES, Ferrucci L, Sorkin JD. Glomerular Filtration Rate Equations Overestimate Creatinine Clearance in Older Individuals Enrolled in the Baltimore Longitudinal Study on Aging: Impact on Renal Drug Dosing. *Pharmacotherapy* 2013;33(9):912-21. doi: 10.1002/phar.1282.

37. Sheth N, **Dowling TC**, Congdon H. Evaluation of synchronous versus live instructional delivery methods on student academic outcomes and perceptions at a multi-campus school. *Curr Pharm Teach Learn* 2013;5(5):381-386. doi: 10.1016/j.cptl.2013.03.005
38. Chang Y, Burckart GJ, Lesko LJ, **Dowling TC**. Evaluation of Hepatic Impairment Dosing Recommendations in FDA-Approved Product Labels. *J Clin Pharmacol* 2013 Sep;53(9):962-6. DOI: 10.1002/jcph.128.
39. Denetclaw T, **Dowling TC**, Steinke D. Evaluation of a Divided-Load Intravenous Vancomycin Dosing Strategy for Critically Ill Patients. *Ann Pharmacother* 2013 Dec;47(12):1611-7. doi: 10.1177/1060028013510395.
40. Volpe DA, Tobin GA, Tavakkoli F, **Dowling TC**, Light PD, Parker RJ. Effect of uremic serum and uremic toxins on drug metabolism in human microsomes. *Regul Toxicol Pharmacol* 2014; 68(2):297-303. doi: 10.1016/j.yrtph.2013.10.006.
41. Mindikoglu AL, **Dowling TC**, Weir MR, Seliger SL, Christenson RH, Magder LS. Performance of chronic kidney disease epidemiology collaboration (CKD-EPI) creatinine-Cystatin C equation for estimating kidney function in cirrhosis. *Hepatology* 2014;59(4):1532-42. doi: 10.1002/hep.26556.
42. Mindikoglu AL, **Dowling TC**, Cheong JJ, Christenson RH, Magder LS, Hutson W, Seliger SL, Weir MR. A Pilot Study to Evaluate Renal Hemodynamics in Cirrhosis by Simultaneous Glomerular Filtration Rate, Renal Plasma Flow, Renal Resistive Indices and Biomarkers Measurements. *Am J Nephrol* 2014; 39 (6), pp. 543-552. doi: 10.1159/000363584
43. Mindikoglu AL, **Dowling TC**, Magder LS, Christenson RH, Weir MR, Seliger SL, Hutson WR, Howell CD. Estimating Glomerular Filtration Rate in Patients with Cirrhosis: Refinement of the Chronic Kidney Disease Epidemiology Collaboration Creatinine-Cystatin C Equation. *Clin Gastroenterol Hepatol*. 2015 Jun 29. pii: S1542-3565(15)00845-9. doi: 10.1016/j.cgh.2015.06.021.
44. Hollis AL, Heil EL, Nicolau DP, Odonkor P, **Dowling TC**, Thom KA. Validation of a Dosing Strategy for Cefazolin for Surgery Requiring Cardiopulmonary Bypass. *Surg Infect* 2015 Dec;16(6):829-32.
45. Matzke GR, **Dowling TC**, Marks SA, Murphy JE. Influence of kidney disease on drug disposition: An assessment of industry studies submitted to FDA for new chemical entities 1999-2010. *J Clin Pharmacol*. 2015 Aug 4. doi: 10.1002/jcph.604.
46. Mindikoglu AL, **Dowling TC**, Schaub DJ, Hutson WR, Potosky DR, Christenson RH, Barth RN, LaMattina JC, Hanish SI, Weir MR, Raufman JP. Pharmacokinetics and Tolerability of Intravenous Sildenafil in Two Subjects with Child-Turcotte-Pugh Class C Cirrhosis and Renal Dysfunction. *Dig Dis Sci* 2015;60(11):3491-4. doi: 10.1007/s10620-015-3771-0.
47. Denetclaw TH, Yu MK, Moua M, **Dowling TC**, Steinke D. Performance of a Divided-Load Intravenous Vancomycin Dosing Strategy for Obese Patients. *Ann Pharmacother* 2015 Aug;49(8):861-8. doi: 10.1177/1060028015586423
48. Vaithianathan S, Haidar SH, Zhang X, Jiang W, Avon C, **Dowling TC**, Shao C, Kane M, Hoag SW, Flasar MH, Ting TY, Polli JE. Effect of Common Excipients on the Oral Drug Absorption of

49. Martinez, M., Mistry, B., Lukacova, V., Polli, J., Hoag, S., **Dowling, T. C.**, Kona, R., Fahmy, R. Use of Modeling and Simulation Tools for Understanding the Impact of Formulation on the Absorption of a Low Solubility Compound: Ciprofloxacin. *AAPS Journal* 2016;18(4), 886-897.
50. Martinez MN, Mistry B, Lukacova V, Lentz KA, Polli JE, Hoag SW, **Dowling T**, Kona R, Fahmy RM. Exploring Canine-Human Differences in Product Performance. Part II: Use of Modeling and Simulation to Explore the Impact of Formulation on Ciprofloxacin In Vivo Absorption and Dissolution in Dogs. *AAPS J.* 2017; May;19(3):712-726.
51. Medina-Moreno S, **Dowling TC**, Zapata JC, Le NM, Sausville E, Bryant J, Redfield RR, Heredia A. Targeting of CDK9 with indirubin 3'-monoxime safely and durably reduces HIV viremia in chronically infected humanized ice. *PLoS One* 2017; Aug 17;12(8):e0183425.
52. Mindikoglu AL, Opekun AR, Putluri N, Devaraj S, Sheikh-Hamad D, Vierling JM, Goss JA, Rana A, Sood GK, Jalal PK, Inker LA, Mohnhey RP, Tighiouart H, Christenson RH, **Dowling TC**, Weir MR, Seliger SL, Hutson WR, Howell CD, Raufman JP, Magder LS, Coarfa C. Unique metabolomic signature associated with hepatorenal dysfunction and mortality in cirrhosis. *Transl Res.* 2018 May;195:25-47.
53. Mindikoglu AL, Opekun AR, Mitch WE, Magder LS, Christenson RH, **Dowling TC**, Weir MR, Seliger SL, Howell CD, Raufman JP, Rana A, Goss JA, Khaderi SA, Vierling JM. Cystatin C is a gender-neutral GFR marker in patients with cirrhosis. *Dig Dis Sci.* 2018 Mar;63(3):665-675.
54. Stockton WM, Nguyen T, Zhang L, **Dowling TC**. Etoposide and etoposide phosphate hypersensitivity in children: Incidence, risk factors, and prevention strategies. *J Oncol Pharm Pract.* 2019 Jul 18:1078155219858390. <https://doi.org/10.1177/1078155219858390>
55. Chen AMH, Sweeney M, Sprague JE, **Dowling TC**, Durst SW, Eberle MM, Stolte SK, Talbot JN. Stimulating and sustaining scholarly activity at teaching-intensive institutions. *Currents Pharm Teach Learn* 2020;13(3):228-237. <https://doi.org/10.1016/j.cptl.2020.10.005>
56. Schultz CR, Swanson MA, **Dowling TC**, Bachmann AS. Probenecid increases renal retention and antitumor activity of DFMO in neuroblastoma. *Cancer Chemother Pharmacol* 2021;88(4):607-617. <https://doi.org/10.1007/s00280-021-04309-y>
57. Cucci MD, Gerlach AT, Mangira C, Murphy CV, Roberts JA, Udy AA, **Dowling TC**, Mullen CL. Performance of different body weights in the Cockcroft-Gault equation in critically ill patients with and without augmented renal clearance: A multicenter cohort. *Pharmacotherapy* 2023;43(11):1131-1138. <https://doi.org/10.1002/phar.2743>
58. **Dowling TC**, Thomas A, Gums J. Survey of direct patient care and payment models among pharmacy practice faculty. *Journal of the American College of Clinical Pharmacy* 2022; 5(5):490-495. <https://doi.org/10.1002/jac5.1605>
59. Bayles CE, Hale DE, Konieczny A, Anderson VD, Richardson CR, Brown KV, Nguyen JT, Hecht J, Schwartz N, Kharel MK, Amissah F, **Dowling TC**, Nybo SE (2023). Upcycling the

anthracyclines: New mechanisms of action, toxicology, and pharmacology. *Toxicol Appl Pharmacol* 2023;459:116362. <https://doi.org/10.1016/j.taap.2022.116362>.

Publications Other Than Refereed Articles:

Invited Reviews:

1. **Dowling TC**. Drug metabolism considerations in patients with chronic kidney disease. *J Pharmacy Practice* 2002;15(5):415-423.
2. Hess HM, **Dowling TC**, Schwartz MJ. Clinical implications of the differences in dissolution and absorption characteristics of oral estrogen therapy agents. *Today's Therapeutic Trends* 2003;21(1):85-96.
3. Bauer KS, **Dowling TC**. Update on clinical pharmaceutical sciences programs: University of Maryland experience. *AAPS Newsmagazine* 2004;7(8):14-17.
4. **Dowling TC**. Controversies in Renal Function Assessment. In PSAP VI Nephrology, American College of Clinical Pharmacy, St. Louis, MO, USA, July 2007.
5. **Dowling TC**. Disclosure and the Ethical Conduct of Clinical Research. *Am J Health Syst Pharm* 2008 Oct 1;65(19):1851-3.
6. **Dowling TC**, Murphy JE, Kalus J, et al. Recommended education for pharmacists as competitive clinical scientists: A commentary from the American College of Clinical Pharmacy. *Pharmacotherapy* 2009 Feb;29(2):236-44.
7. **Dowling, T. C.** Predicting the risk of kidney failure. Pharmacotherapy Update (Sept. 12, 2016.) In Dipiro JT, Talbert RL, Yee GC, Matzke GR, Wells BG, Posey LM (eds), *Pharmacotherapy: A pathophysiologic approach*, 10th edition, McGraw-Hill, New York, NY.
8. **Dowling, T. C.**, Ding, Q. (2022). Research and Scholarly Methods: Subgroup Analysis. *J Am College Clin Pharm* 2022.

Book Chapters:

9. **Dowling TC**, Comstock TJ. Quantification of renal function. In Dipiro JT, Talbert RL, Yee GC, Matzke GR, Wells BG, Posey LM (eds), *Pharmacotherapy: A pathophysiologic approach*, 6th edition, McGraw-Hill, New York, NY, **2005**.
10. Haines S, **Dowling TC**, Harvey D. Pharmacokinetics and pharmacodynamics of warfarin. In Evans W, Shentag J, Jusko W (eds), *Applied Pharmacokinetics. Principles of Therapeutic Drug Monitoring*, Applied Therapeutics, Inc., Vancouver, WA, **2005**.
11. **Dowling TC**, Matzke GR. Dosing Concepts in Renal Dysfunction. In Murphy JE, *Clinical Pharmacokinetics* 3rd, 4th, 5th, 6th Editions, American Society of Health System Pharmacists, Bethesda, MD, 2004, **2008, 2011, 2012, 2017**.
12. **Dowling TC**. Evaluation of Kidney Function. In Dipiro JT, Talbert RL, Yee GC, Matzke GR, Wells BG, Posey LM (eds), *Pharmacotherapy: A pathophysiologic approach*, 7th, 8th, 9th, 10th, 11th editions, McGraw-Hill, New York, NY, **2008, 2011, 2014, 2017, 2020**.
13. **Dowling TC**. Basic Biopharmaceutics, Pharmacokinetics and Pharmacodynamics. In Fred LY (editor), *Manual for Pharmacy Technicians*, 4th Edition, American Society of Health System Pharmacists, Bethesda, MD, **2011**.
14. **Dowling TC**. Randomized Clinical Trials. In *Principles of Research Design and Drug Literature Evaluation*. 1st Edition, Aparasu RR, Ed. Jones & Bartlett Learning, Burlington, MA, **2014**.
15. **Dowling TC**, Smith CL. Acute Kidney Injury. In B. Erstad (Ed.), *Critical Care Pharmacotherapy*. ACCP Publisher. Lanexa, KS. **2016**.
16. **Dowling TC**. Assessment of Kidney Function (NKF). In J. Hudson & D. Mason (Eds.), *Nephrology Pharmacotherapy: A Pharmacist's Guide to Advanced Kidney Disease and*

Medication Management. Franklin, TN: FreseniusRx. **2016**.

17. **Dowling TC**. In Beringer PM (ed), *Winter's Basic Clinical Pharmacokinetics*, 6th edition, Wolters Kluwer Health, Philadelphia, PA. **2018**
18. **Dowling TC**. Chapter 8: Drugs and the Body: Basic Biopharmaceutics, Pharmacokinetics and Pharmacodynamics. *ASHP Manual for Pharmacy Technicians, 5th Edition*, pp. 263-281. ASHP, Bethesda, MD. **2019**
19. Nguyen T, Tran T, **Dowling TC**. Chapter 21. Principles of Drug Therapy in Reduced Kidney Function. *Kidney Protection: A Practical Guide to Preserving Renal Function in Acute and Chronic Disease* (1st Edition ed.). New York, NY: Oxford University Press. **2019**
20. Bernknopf AC, **Dowling TC**. Randomized Controlled Trials (Ch. 4). *Principles of Research Design and Drug Literature Evaluation*, 2nd edition. New York, NY: McGraw-Hill. **2019**
21. Vanloo DA, **Dowling TC**. Renal Drug Dosing Concepts (Chapter 3). In J. E. Murphy (Ed.), *Clinical Pharmacokinetics (7th Ed)*. ASHP, Bethesda, MD. **2022**
22. Smith CL, **Dowling TC**. Acute Kidney Injury: Prevention and Management. In B. E. (Ed.), *Critical Care Pharmacotherapy*, 2nd edition. ACCP, Lanexa, KS. **2022**
23. Awdishu L, **Dowling TC** (2023). Evaluation of Kidney Function. In Dipiro JT, Yee GC, Posey LM, Haines ST, Nolin TD, Ellingrod V (eds), *Pharmacotherapy: A pathophysiologic approach*, 12th edition, McGraw-Hill, New York, NY, **2023**.
24. **Dowling TC**. Drug Dosing in Kidney Disease and Dialysis. In Beringer PM (ed), *Winter's Basic Clinical Pharmacokinetics*, 7th edition, Wolters Kluwer Health, Philadelphia, PA. **2024**

Monographs, Letters and Published Conference Proceedings:

25. Cohen HI, **Dowling TC**, Goodin S. Anemia in cancer and chronic kidney disease: Clinical and financial considerations. *ASHP Advantage*, Bethesda, MD, 2005. (1.5 CEU)
26. **Dowling TC**, Matzke GR, Murphy JE. Estimated GFR vs. creatinine clearance for drug dosing. *Am J Kidney Dis* 2009 Nov;54(5):984-5. (Letter)
27. Howell CD, Jin R, **Dowling TC**. Reply to: Understanding triphasic HCV decline during treatment in the era of IL28B polymorphisms and direct acting antiviral agents via mathematical modeling. *J Hepatol* 2012 Dec 11 (Letter) doi:pii: S0168-8278(12)00923-3. 10.1016/j.jhep.2012.12.004.
28. Dorshow, R. B., Debreczeny, M. P., **Dowling, T. C.** Results of the first-in-human clinical trial for MB-102, a novel fluorescent tracer agent for real-time measurement of glomerular filtration rate (SPIE, vol. 9339, pp. 933906).
29. Vaithianathan, S., Haidar, S. H., Zhang, X., Jiang, W., Avon, C., **Dowling, T. C.**, Shao, C., Kane, M., Hoag, S. W., Flasar, M. H., Ting, T. Y., Polli, J. E. Reply to "On the Effect of Common Excipients on the Oral Absorption of Class 3 Drugs". *J Pharm Sci* 2016;105:1355-7.

Papers Read at Scientific or Professional meetings (national/international; *trainee, presenter):

1. **Dowling, T. C.**, Shultz, C., Swanson, M., Bachmann, A., "Probenecid Increases Renal Retention and Antitumor Activity of DFMO in Neuroblastoma," 2021 Translational Oncology Research Conference, Michigan State University, East Lansing, MI. (November 11, 2021).
2. **Cucci, M.**, Roberts, J., Murphy, C., Gerlach, A., Udy, A., Mangira, C., **Dowling, T. C.**, Mullen, C., 2020 ACCP Spring Virtual Poster Symposium, "Performance of the Cockcroft-Gault equation using different body weights in ICU patients with augmented renal clearance: A preliminary analysis," American College of Clinical Pharmacy, Virtual. (May 27, 2020).
3. ***Swanson, M.**, Szarowicz, C., **Dowling, T. C.**, Pike, S., Shultz, C., Bachmann, A., West Michigan Research Undergraduate Symposium (WMRUGS), "Development of an LCMS Assay to Quantify DFMO in Mouse Plasma," Van Andel Research Institute, Grand Rapids, MI. (November 4, 2019).
4. ***Swanson, M.**, Szarowicz, C., **Dowling, T. C.**, Pike, S., Shultz, C., Bachmann, A., Society of

- Toxicology, "Development of an LCMS Assay to Quantify DFMO in Mouse Plasma," Society of Toxicology, Ann Arbor, MI. (October 18, 2019).
5. Stockton W, Nguyen T, Zhang L, **Dowling T**. 2018 ACCP Global Conference, "Etoposide hypersensitivity in pediatric patients," American College of Clinical Pharmacy, Seattle, WA. (October 22, 2018).
 6. **Dowling TC**, Reger M, Roff B, Durst SW, Robertson J, 2017 AACP Annual Meeting, "Student Pharmacist's Competencies Achieved During a Pilot Co-Curricular Training Program in Precision-Based Behavioral Medicine," American Association of Colleges of Pharmacy, Nashville, TN. (July 16, 2017).
 7. **Dowling TC**, Mindikoglu A, et al. 2017 AASLD Digestive Disease Week, "Robust Metabolomic Signature is Associated with Altered Renal Hemodynamics in Patients with Cirrhosis," AASLD, Chicago, IL. (May 7, 2017).
 8. **Dowling TC**, Mindikoglu A, et al. 2017 AASLD Digestive Disease Week, "Serum Creatinine in Female Patients with Cirrhosis Unfairly Bias Liver Transplant Wait List Ranking: Implications for Elimination of Gender Disparities in Access to Orthotopic Liver Transplantation," AASLD, Chicago, IL. (May 7, 2017).
 9. *Rungkitwattanakul, J., **Dowling, TC**. 2016 ACCP Annual Meeting, "Comparative review of tertiary medical sources on dialysis of drugs for patients receiving intermittent hemodialysis," ACCP, Hollywood, FL. (October 23, 2016).
 10. Dorshow RB, Debreczeny M, Fink JC, **Dowling TC**. Initial Clinical Trial Results of a Real-Time Point-of-Care Glomerular Filtration Rate Measurement Utilizing a Novel Fluorescent Tracer Agent. Presented at the 2015 American Society of Nephrology Annual Scientific Meeting, San Diego, CA, Nov. 12, 2015.
 11. Seliger SL, Diggs CE, **Dowling TC**, Christenson R, Watnick TJ. Accuracy of Traditional and Novel Renal Filtration Markers for Estimating GFR in ADPKD Patients. Presented at the 2015 American Society of Nephrology Annual Scientific Meeting, San Diego, CA, Nov. 14, 2015.
 12. Dorshow RB, Debreczeny MP, **Dowling TC**. Results of the First-in-Human Clinical Trial for MB-102, a Novel Fluorescent Tracer Agent for Real-Time Measurement of Glomerular Filtration Rate. Presented at the 2015 SPIE BiOs Expo, San Francisco, CA, Feb. 9, 2015.
 13. Seliger SL, Pham AT, **Dowling TC**, Diggs CE, Watnick TJ. Accuracy of creatinine-based estimating equations for GFR in ADPKD. Presented at the 2014 American Society of Nephrology Kidney Week® meeting, Philadelphia, PA, Nov. 15, 2014.
 14. *Hollis A, Heil E, Nicolau DP, Okondor P, **Dowling TC**, Thom K. Validation of a Dosing Strategy for Cefazolin for Surgery Requiring Cardiopulmonary Bypass. Presented at the 2014 ACCP Annual Meeting, Austin, TX, Oct. 16, 2014.
 15. Heredia A, Medina-Moreno S, *Gao X, Le NM, Zapata JC, Reitz M, Bryant J, **Dowling TC**, Redfield RR. Inhibition of drug-resistant HIV by targeting cellular CDK9 in humanized mice. Presented at the 16th Annual International Meeting of the Institute of Human Virology, Baltimore, MD, Sept. 15, 2014.
 16. *Hollis A, Heil E, Nicolau DP, Okondor P, **Dowling TC**, Thom K. Validation of a Dosing Strategy for Cefazolin for Surgery Requiring Cardiopulmonary Bypass. Presented at the 54th Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC), Washington, DC, Sept 6, 2014.
 17. Zhang S, **Dowling TC**. Review of web-based direct to consumer (DTC) resources for pharmacogenomics testing. Presented at the 2013 ASHP midyear meeting, Orlando, FL, Dec. 9, 2013.
 18. Huang E, Spiegel A, Yang H, Wang H, **Dowling TC**. Renal n-acetyl-transferase activity and expression in HK-2 cells. Presented at the 2013 ACCP Annual meeting, Albuquerque, NM, October 16, 2013. Poster. Reviewed. Original Research.

19. Huang E, Chang Y, Lliang L, **Dowling TC**. Drug metabolism of PAH by NAT2 in human kidney (HK-2) cells. Presented at the 2012 ASHP midyear meeting, Las Vegas, NV, Dec. 4, 2012.
20. Chang Y, Lliang L, Chan M, **Dowling TC**. Optimization of human kidney (HK-2) cell culture for OAT-mediated drug transport studies. Presented at the 2012 ASHP midyear meeting, Las Vegas, NV, Dec. 4, 2012.
21. Matzke GR, Marks SA, **Dowling TC**, Murphy JE, Burckart GJ. Influence of Kidney Disease on Drug Pharmacokinetics: An Assessment of Industry Studies submitted to Food Drug Administration for New Molecular Entities 1999-2010. Presented at the American Society of Nephrology 2012 Annual Meeting, San Diego, CA, November 2, 2012.
22. Volpe DA, Tobin GA, Tavakkoli F, **Dowling TC**, Parker RJ. Effect of Uremic Serum and Uremic Toxin on In Vitro Microsomal Metabolism. Presented at the 18th North American Regional ISSX Meeting, Dallas, TX, October 18, 2012.
23. Agness C, **Dowling TC**, Hise M, Wang H, Li L. Influence of BSMI Vitamin D Receptor Gene Polymorphism on Response to Oral Vitamin D Therapy in Predialysis Patients American Journal of Kidney Diseases. Presented at the National Kidney Foundation 2012 Spring Clinical Meeting, Washington, DC, May 10, 2012.
24. *Wang ES, **Dowling TC**. Comparison of Cockcroft-Gault (CG), Modification of Diet in Renal Disease (MDRD), and the Chronic Kidney Disease-Epidemiology Collaboration (CKD-EPI) Equations for Renal Dose Adjustment in the Elderly. (Poster). Presented at the 2011 ASHP Midyear Meeting, December 6, 2011, New Orleans, LA.
25. *Kitsul T, **Dowling TC**. Review of Renal Dosing Recommendations in FDA Product Labeling Information of Drugs Approved in 2006-2010.(Poster). Presented at the 2011 ASHP Midyear Meeting, December 6, 2011, New Orleans, LA.
26. **Dowling TC**, Sorkin J, Ferrucci L. GFR Equations Overestimate Creatinine Clearance in Elderly Individuals Enrolled in the NIA-Baltimore Longitudinal Study on Aging (BLSA).(Invited, Podium) Great Eight Presentation at 2011 ACCP Annual Meeting, October 17, 2011, Pittsburgh, PA.
27. Watson K, Gonzales J, Trovato JA, **Dowling TC**, Grover BE, Brandt NJ. Implementation of a structured residency/fellowship research development program. Presented at the 2011 ASHP Midyear Meeting, December 7, 2011, New Orleans, LA.
28. Congdon HB, **Dowling TC**, Cheng I, Truong HA, Zarfeshan F. Evaluation of a Medication Therapy Management Program on Hemoglobin A1c Values in a Health Resources and Services Administration Patient Safety and Clinical Pharmacy Services Collaborative. (Poster). Presented at 2011 ACCP Annual Meeting, October 17, 2011, Pittsburgh, PA.
29. **Dowling TC**, Allison S. Evaluation of renal function estimation methods to predict vancomycin pharmacokinetics. ACCP Annual Meeting, Oct. 19, 2010, Austin, TX.
30. **Dowling TC**, Rodriguez de Bittner M, Perez Z, Briglia A, Peralta L. Pilot Evaluation of Renal Function in Hispanic Americans with Diabetes. 2010 ACCP Annual Meeting, Oct. 20, 2010, Austin, TX.
31. *Jin R, Fossler MJ, Goldstein D, McHutchison JG, Howell CD, **Dowling TC**. Population Pharmacodynamic Model in Patients with Chronic Hepatitis C Virus Genotype 1. Presented at the 2010 American College of Clinical Pharmacology Meeting, Baltimore, MD, September 13, 2010.
32. Klein Schwartz W, Doyon S, **Dowling T**. Evaluation of a Novel Charcoal Cookie Formulation for Drug Adsorption. Presented at the 2010 ACCP Spring Research Meeting, Charlotte, NC, April 2010.
33. *Jin R, Fossler M, **Dowling TC**, Howell CD. Development of a Population Pharmacokinetic Model for Ribavirin. Presented at the 2009 American College of Clinical Pharmacology Meeting, San Antonio, TX, September 2009.

34. *Jin R, Fossler M, **Dowling TC**, Howell CD. Ribavirin Population Pharmacokinetics in African American and Caucasian American Patients Infected with Chronic Hepatitis C Genotype 1. 2009 Digestive Disease Week, AASLD, Chicago, IL, June 2009.
35. **Dowling TC**, Matzke GR, Murphy JE, Burckart GJ. Evaluation of renal dosing recommendations in FDA product labeling information of approved and marketed drugs. 2008 ACCP Annual Meeting, Louisville, KY, October 2008.
36. *Rogers HL, Robinson S, **Dowling TC**, Liggett S, Gottlieb S. The role of Beta-1 adrenergic receptor SNPs in the treatment of heart failure with beta-blockers. 37th Annual Meeting of the American College of Clinical Pharmacology, Philadelphia, PA, September 2008. (*Student Award 1st Prize Winner)
37. *Jin R, **Dowling TC**, Howell CD. A Pharmacokinetic evaluation of ribavirin in African American and Caucasian patients with chronic hepatitis C. 37th Annual Meeting of the American College of Clinical Pharmacology, Philadelphia, PA, September 2008.
38. *Rogers HL, Marshall J, Bock J, **Dowling TC**, Feller E, Robinson S, Gottlieb SS. A Randomized, Controlled Trial of the Renal Effects of Ultrafiltration as Compared to Furosemide. 11th Annual Scientific meeting of the Heart Failure Society of America, Washington, DC, September 16, 2007.
39. *Kinjo M, *Iqbal T, **Dowling TC**. Relative Bioavailability of Ketoprofen 20% in PLO gel in Healthy Women. American Association of Pharmaceutical Scientists 2007 San Diego, CA, November 2007.
40. Jones-Burton C, *Vessal G, **Dowling TC**, Fink JC. Urinary cotinine as an objective measure of cigarette smoking in chronic kidney disease. Presented at the 39th Annual Meeting and Scientific Exposition of the American Society of Nephrology, San Diego, CA, November 15, 2006.
41. Dittrich HC, Gupta DK, Hack TE, **Dowling T**, Tansey M, Callahan J, Thompson SC. The effect of KW-3902, an adenosine A1 receptor antagonist, on renal function and renal plasma flow in subjects with heart failure and renal impairment: A randomized, double-blind, placebo-controlled, two-way crossover study. Presented at the 2006 American Heart Association Scientific Session, Chicago, IL, November 14, 2006.
42. *Kinjo M, **Dowling TC**. Evaluations of renal drug transport and drug-induced nephrotoxicity in a human kidney (HK-2) model. Presented at the 2006 AAPS Annual Meeting and Exposition, San Antonio, TX, November 1, 2006.
43. *Rogers HL, **Dowling TC**, Marshall J, Gottlieb SS. Ultrafiltration vs. IV diuretics for patients hospitalized for acute decompensated congestive heart failure: a prospective randomized clinical trial. Presented at 2006 ACCP Annual Meeting, St. Louis, MO, October 27, 2006.
44. *Shemmeri E, **Dowling TC**, Wilson S. Modification of diet in renal disease versus Cockcroft-Gault equation use in assessment of antibiotic pharmacokinetics. Presented at 2006 ACCP Annual Meeting, St. Louis, MO, October 27, 2006.
45. Dittrich HC, Gupta DK, Hack TE, **Dowling T**, Tansey M, Callahan J, Thompson SC. The effect of KW-3902, an adenosine A1 receptor antagonist, on renal function and renal plasma flow in subjects with heart failure and renal impairment: A randomized, double-blind, placebo-controlled, two-way crossover study. Presented at the 10th Annual Scientific Meeting of the Heart Failure Society of America, September 2006.
46. Howell C, **Dowling T**, Haritos M, Therrault N, Thelma WL, Taylor M. Relationship between serum peginterferon and 2,5-OAS kinetics and virologic responses in African Americans and Caucasians patients with chronic hepatitis C, genotype 1, during peginterferon combination therapy. Presented at the 107th Annual Meeting of the American Gastroenterological Association Institute, Los Angeles, CA, May 2006 (see: GASTROENTEROLOGY 130 (4): A755-A755 Suppl. 2 APR 2006).
47. *Vessal G, Jones-Burton C, Brown J, **Dowling TC**, Fink JC. Urinary cotinine excretion as a measure of smoking exposure in patients with chronic kidney disease. Presented at 2006 ACCP Spring Practice and Research Forum, Monterey, CA, April 2006.

48. Howell C, **Dowling T**, Jeffers L, Norah T, Wiley-Lucas T, Haritos M. Peginterferon Alpha-2a Pharmacokinetics in African American and Caucasians Infected with HCV genotype 1. Presented at the 56th Annual Meeting of the American Association for the Study of Liver Diseases, San Francisco, CA, November 2005. (see: HEPATOLOGY 42 (4): 658A-659A Suppl. 1 OCT 2005).
49. *Kinjo M, *Iqbal T, **Dowling TC**. Effects of Immunosuppressants and Cidofovir on Human Kidney (HK-2) Cell Function. Presented at the 2005 AAPS Annual Meeting and Exposition, Nashville, TN, November 2005.
50. *Vessal G, Wali R, Matzke GR, **Dowling TC**. Evaluation of precision and accuracy of MDRD equation compared to GFR in CKD patients. Presented at the 2005 AAPS Annual Meeting and Exposition, Nashville, TN, November 2005.
51. Matzke GR, **Dowling TC**, Schonder K, Vessal G, Venkataramanan R, Palevsky P. Renal reserve is maintained in patients with hepatitis C. Presented at the 2005 ACCP Annual Meeting, San Francisco, CA, October 2005.
52. *Vessal G, Wiland A, Klassen D, Philosophe B, **Dowling TC**, Weir M. Steroid withdrawal improves one-year outcomes in pancreas transplantation. Presented at the 2005 ACCP Annual Meeting, San Francisco, CA, October 2005.
53. *Jones JM, **Dowling TC**, Phares DA, Brown MD. Role of potassium excretion and body mass on ethnic differences in aldosterone levels. Presented at the 20th Annual International Interdisciplinary Conference on Hypertension and Related Cardiovascular Risk Factors in Ethnic Populations, ISHIB, San Juan, Puerto Rico, July 2005.
54. *Jones J, Hagberg J, **Dowling T**, Roth S, Phares D, Brown M. Influence of the CYP11B2-344C/T polymorphism on plasma aldosterone, sodium excretion and blood pressure responses to aerobic exercise training in middle-aged to older prehypertensives. Presented at the 20th Annual Scientific Meeting of the American Society of Hypertension, San Francisco, CA, May 2005. (see: AMERICAN JOURNAL OF HYPERTENSION 18 (5): 232A-232A Part 2 Suppl. S MAY 2005).
55. *Kinjo M, *Iqbal T, **Dowling TC**. OAT-mediated PAH Transport in Human Kidney (HK-2) Cells. Presented at the 2004 AAPS Annual Meeting and Exposition, Baltimore, MD, November 2004.
56. *Jones JM, **Dowling TC**, Phares DA, Brown MD. Six Months of Aerobic Exercise Training Reduces Plasma Aldosterone Levels in Caucasian Prehypertensives but Not in Prehypertensives of African Descent. Presented at the American Physiological Society meeting: The Integrative Biology of Exercise, Austin TX, October 2004.
57. Wang DJ, **Dowling TC**, Ayala T, Marshall J, Minshall S, Greenberg N, Thattassery E, Gottlieb SS. Nesiritide does not improve renal function in patients with chronic heart failure and worsening creatinine. Presented at the American College of Cardiology Annual Scientific Session, New Orleans, LA, March 2004 (see *J Am Coll Cardiol* 2004 Mar 3;43 (5):191A)
58. **Dowling TC**, *Iqbal T, *Kinjo M. Evaluation of OAT activity in a human-derived renal proximal tubule (HK-2) cell line. Presented at the ACCP Annual Meeting, Atlanta, GA, November 2003.
59. (see *Pharmacotherapy* 2003;23(10):1349A.)
60. **Dowling TC**, *Iqbal T, *Kinjo M. Evaluation of organic anion transport in HK-2 cells. Presented at the American Society of Nephrology (ASN) Scientific Meeting, San Diego, CA, November 2003. (see *J Am Soc Nephrol* 2003;14:308A.)
61. Wali R, Nguyen J, Saffary R, Nahar A, Lakkis J, **Dowling TC**, Henrich WL. Prognosis of Acute Renal Failure (ARF) in Medical Intensive Care Units (MICU) vs. Surgical Intensive Care Unit (SICU): Preliminary Report of Ongoing Prospective Study. Presented at the ASN Scientific Meeting, San Francisco, CA, November 2003. (see *J Am Soc Nephrol* 2003;14:745A.)
62. Brown MD, Weir MR, **Dowling TC**, Ferrell RE, Johnson JJ, Vizcaino D, Jones JM, Park JJ, Hand BD, Obisesan TO. ACE gene polymorphism is associated with exercise training-induced changes in Na⁺ excretion in African American hypertensives. Presented at the 18th Annual Scientific Meeting of the American Society of Hypertension, New York, May 2003. (see *Am J Hypertension* 2003;16(5):109.)

63. *Jones JM, Vizcaino D, **Dowling TC**, Weir MR, Johnson JJ, Park JJ, Hand BD, Obisesan T, Brown MD. Baseline serum creatinine levels predict renal hemodynamic response to short-term endurance exercise training in African American hypertensives. Presented at the 18th Annual Scientific Meeting of the American Society of Hypertension, New York, May 2003. (see *Am J Hypertension* 2003;16 (5): P157.)
64. *Karyekar CS, Briglia A, Gubbins PO, Eddington ND, **Dowling TC**. Itraconazole inhibits P-glycoprotein mediated tubular secretion of cimetidine in humans. Presented at the ACCP Spring Practice and Research Forum, Palm Springs, CA, April 2003. (see *Pharmacotherapy* 2003).
65. *Karyekar CS, Fasano A, **Dowling TC**, Lu R, Eddington ND. Zonula Occludens Toxin (ZOT) and its active fragment, Delta G, enhances brain uptake of paclitaxel in rats by reversible tight junction modulation. Abstract presented at the AAPS Annual Meeting, Toronto, Canada, November, 2002.
66. Wali R, *Brace K, *Ngan G, *Bakshi A, *Unterman M, **Dowling TC**, Onuigbo M, Hamzeel O, Briglia A, Salzberg D, and Henrich W. Prognosis of acute renal failure (ARF) in medical intensive care unit versus surgical intensive care units; preliminary report of an ongoing prospective study. Presented at the ASN Scientific Meeting, Philadelphia, PA, November 2002 (see *J Am Soc Nephrol* 2002;13:692A.)
67. *Turner K, **Dowling TC**. Interaction of the transport para-aminohippurate (PAH) and acetyl-para-aminohippurate (aPAH) in OK cells. Presented at the AACP Annual Meeting, Kansas City, MO, July 2002.
68. *Karyekar CS, Eddington ND, *Garimella T, Gubbins PO, **Dowling TC**. Effect of itraconazole on P-glycoprotein-mediated transport of cimetidine in MDR1-MDCK cells. Presented at the 2002 ACCP Spring Practice and Research Forum, Savannah, GA, April 2002.
69. *Karyekar CS, Eddington ND, *Garimella T, Gubbins PO, **Dowling TC**. Effect of itraconazole on p-glycoprotein-mediated transport of cimetidine in MDR1-MDCK cells. Presented at the American Society of Nephrology (ASN) Scientific Meeting, San Francisco, CA, October 2001. *J Am Soc Nephrol* 2001;12:50A.
70. *Ngan G, **Dowling TC**, Bauer KS, Weir MR. Evaluation of the MDRD equation to estimate renal function in kidney transplant recipients. Presented at the ASHP Midyear Clinical Meeting, New Orleans, LA, December 2001. (see *Am J Health-Syst Pharm* 2001)
71. **Dowling TC**, Briglia AE, Hanes DS, Light PD, Hise MK, Watkins PB, Henrich WL. Cytochrome P4503A (CYP3A)-Mediated Drug Metabolism Is Reduced in ESRD Patients. Presented at the ASN Scientific Meeting, Toronto, CA, October 2000.
72. **Dowling TC**, *Karyekar CK, Eddington ND. Characterization of p-glycoprotein-mediated transport of famotidine in MDCK cells. Presented at the ACCP Spring Practice and Research Forum, Monterey, CA, April 3, 2000.
73. *Karyekar CK, Eddington ND, **Dowling TC**. Novel approach to characterizing the effects of PSC-833 on cimetidine transport in MDCK cells. Presented at the FIP Millenium World Congress, San Francisco, CA, April 18, 2000.
74. *Arjomand M, McPherson ML, **Dowling TC**, Wertheimer DS. Bioavailability of oral vs. topical ketoprofen in lecithin organogel. Presented at the AAHPM 12th Annual Assembly, Atlanta, GA, June 15, 2000.
75. **Dowling TC**, Frye RF, Fraley DS, Matzke GR. Tubular secretion of famotidine in man is not capacity-limited. Presented at the American Society of Nephrology Scientific Meeting, Philadelphia, PA, November 1998.
76. **Dowling TC**, Frye RF, Fraley DS, Matzke GR. Validation of a sequential PAH infusion method to characterize anionic tubular secretion in man. Presented at the American Society of Nephrology Scientific Meeting, Philadelphia, PA, November 1998. (see *J Am Soc Nephrol* 1998;9:70A.)

77. **Dowling TC**, Frye RF, Matzke GR, Fraley DS. Bolus administration of nonradiolabeled iothalamate (NRI) provides an accurate index of glomerular filtration rate (GFR). Presented at the 1998 National Kidney Foundation Annual Meeting, Nashville, TN, April 1998.
78. **Dowling TC**, Frye RF, Matzke GR, Fraley DS. Para-aminohippuric acid renal clearance after an intravenous bolus is not an accurate marker of effective renal plasma flow. Presented at the 1997 American Society of Clinical Pharmacology and Therapeutics Scientific Meeting, San Diego, CA, March 1997.
79. **Dowling TC**, Frye RF, Matzke GR, Fraley DS, Rabinovitz M. Reduced acetylation of para-aminohippuric acid in liver disease. Presented at the American Society of Clinical Pharmacology and Therapeutics Scientific Meeting, San Diego, CA, March 1997.
80. **Dowling TC**, Frye RF, Matzke GR, Fraley DS. Characterization of saturable renal elimination of para-aminohippurate (PAH) and its acetyl metabolite in man. Presented at the ACCP Spring Research Forum, April, 1997.
81. **Dowling TC**, Purdue BE, Weidle PJ, Orsini MJ. Case management series: Analysis of the development and implementation of an intravenous vancomycin use restriction policy. Presented at the ASHP Midyear Meeting, Atlanta, 1994.

Special Lectures (invited); *denotes CE or CME credits awarded to attendees

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| 2022 | <p>"Payment models for direct patient care among pharmacy practice departments" (May 24, 2022), JACCP Podcast (Spotify)</p> <p>*"Role of Hypoxia-Inducible Factor Prolyl Hydroxylase Inhibitors in the Treatment of Anemia of CKD: Key Considerations for Pharmacists", Pharmacy Times CE Live Videocast, Cranberry, NJ (April 25, 2022)</p> |
| 2021 | <p>"Overview of Anemia in CKD: The Potential Role of HIF-PH Inhibitors," Academy of Managed Care Pharmacy (AMCP) 2021 Annual Meeting, Virtual. (April 15, 2021).</p> <p>"FLITE Pilot Project: Embedded Librarian Arrangement has Taken Off," Klepser, M. E., Dowling, T. C., Durst, S. W., Damari, D. A., Konieczny, A. M., 2021 FSU HatchEd, Ferris State University, Webinar (February 18, 2021).</p> <p>"Pursuing External Grants@Ferris: Matchmaking 101," Dowling, T. C., Stapp, W., Stakley, D., Peterson, A., Herrington, H., Russo, T., Konieczny, A. M., Buys, A. M., HatchEd Ferris State University, Webinar (February 18, 2021).</p> <p>"Pitfalls in Estimating Kidney Function," Spring Seminar, FSU College of Pharmacy, Virtual. (May 25, 2021).</p> <p>"Payment for Direct Patient Care - Are We (Still) Giving Away Services for Free?," 2021 AACP Annual Meeting, Virtual. (July 22, 2021).</p> <p>"Medical Research and Pharmacokinetics," ACC Talks, Alpena Community College, Oscoda, MI. (September 30, 2021).</p> |
| 2020 | <p>"National Trends in Direct Patient Care and Payment Models Among Pharmacy," 2020 American College of Clinical Pharmacy Annual Meeting, Virtual. (October 20, 2020).</p> |

- 2019 *2019 ASHP Midyear Clinical Meeting, "Defining the Role of Pharmacists in the Evolving Treatment Landscape for Anemia in CKD," ASHP, Las Vegas, NV. (December 9, 2019).
- 2018 *2018 ASHP Midyear Clinical Meeting, "Moving Forward with Novel Treatments for Anemia: The Potential Role of HIF-PH Inhibitors", Anaheim, CA. (December 4, 2018).
- 2018 ACCP MeRIT Research Program, "Research Objectives, Specific Aims and Hypothesis," ACCP, Ann Arbor, MI. (June 25, 2018).
- 2018 ACCP MeRIT Research Program, "Research Approaches: Clinical Trials," ACCP, Ann Arbor, MI. (June 27, 2018).
- 2017 2017 ACCP MeRIT Research Program, "Research Objectives, Specific Aims and Hypothesis," ACCP, Ann Arbor, MI. (June 27, 2017).
- 2016 *2016 ASHP Midyear Clinical Meeting, "Comprehensive Assessment of Kidney Function," Las Vegas, NV. (December 6, 2016).
- *GVSU Biomedical Lecture Series, "Building a Collaborative Program in Clinical/Translational Research," Grand Valley State University (GVSU). (November 18, 2016).
- *2016 ACCP MeRIT Research Program, "Research Objectives, Specific Aims and Hypothesis," ACCP, Ann Arbor, MI. (June 26, 2016).
- *Devuyst-Miller, S. A., Dowling, T. C., 2016 AACP Annual Meeting, "Preventing Chronic Diseases in Underserved Populations through a Collaborative Health Impact Alliance," Anaheim, CA. (July 26, 2016).
- 2015 *The Skinny on Estimating Kidney Function in Obesity. Presented at the 2015 ASHP Midyear Clinical Meeting, New Orleans, LA, December 9, 2015
- 2013 Building a Collaborative Program in Clinical and Translational Research. Faculty development seminar, presented at Ferris State University, November 15, 2013.
- IRB Policies in Clinical Research. Presented at ORD's Drug Development Processes and Regulatory Approaches: A Program for Korea's leading pharmaceutical company executives and the Pharmaceutical and Medical Device Agency, Baltimore, MD, March 18, 2013.
- 2012 *Update on GFR estimation and renal biomarkers, presented at the 2012 ASHP midyear meeting, Las Vegas, NV, Dec 5, 2012. (Invited Podium)
- *Should MDRD equation be used for renal drug dosing?, presented at the 2012 ASHP midyear meeting, Las Vegas, NV, Dec 5, 2012. (Invited Podium)
- *Publishing and Presenting: Tips for Pharmacy Residents and New Practitioners, presented at the 2012 Maryland Society of Health-System Pharmacists Fall Seminar, Ellicott City, MD, Nov 9, 2012.

Renal Perfusion Studies in Clinical Trials. University of Maryland Clinical & Translational Science Institute (CTSI) Speaker Series. November 2, 2012.

*Can Someone Please Interpret All of this IRB Jargon? 2012 UMSOP Preceptor Development Series on Research, May 29, 2012.

Role of Pharmacokinetics in Drug Development and Translational Research. University of Maryland Clinical & Translational Science Institute (CTSI) Speaker Series. April 27, 2012.

- 2011 *GFR Equations Overestimate Creatinine Clearance in Elderly Individuals Enrolled in the NIA-Baltimore Longitudinal Study on Aging (BLSA). Great Eight Presentation at 2011 ACCP Annual Meeting, October 17, 2011, Pittsburgh, PA.
- *Kidney Dialysis: Just What is it?. Presented at the MD-ASCP Spring Spectacular, April 16, 2011, Conference Center at the Maritime Institute, Linthicum, MD (Invited Podium)
- *CKD and Renal Drug Dosing. Presented to XL Health Pharmacists, Apr. 5, 2011, Baltimore, MD. (Invited CE Program)
- *Use of Cockcroft-Gault vs. MDRD for Renal Drug Dosing. Presented at the 2011 Maryland Society of Health-System Pharmacists Meeting, Mar. 26, 2011, Linthicum, MD (Invited Podium)
- 2010 *Creatinine clearance should continue to be used for renal drug dosing. Therapeutic Debates 2010. ASHP Midyear Clinical Meeting, Dec. 6, 2010, Anaheim, CA (Invited Podium)
- *Use of creatinine clearance for renal drug dosing. ACCP Annual Meeting, Oct. 18, 2010, Austin, TX (Invited Podium)
- Keynote Address: "Research Careers in Pharmacy: Getting Started"
St. Louis College of Pharmacy Research Day, February 27, 2010. (Invited Podium)
- 2009 Update on renal dosing controversies. Presented at 2009 ASHP Midyear Clinical Meeting, Las Vegas, NV, December 9, 2009*
- Dowling TC**, Matzke GR, Murphy JE, Burckart GJ. Clinical and regulatory aspects of renal drug dosing. Presented at 2009 FDA OCP Science Day, Rockville, MD, October 23, 2009
- 2008 Current controversies in renal drug dosing. Presented at the 2008 ASHP Midyear Clinical Meeting, Orlando, FL, December 5, 2008.*
- Applying acute renal definitions to critically ill patients.
Presented at Critical Care-Nephrology Symposium, 2008 ACCP Annual Meeting, Louisville, KY, October 18, 2008.*
- Drug therapy to reduce/prevent acute kidney injury in critically ill patients. Presented at Critical Care-Nephrology Symposium, 2008 ACCP Annual Meeting, Louisville, KY, October 18, 2008.*

Matzke GR, **Dowling TC**, Murphy JE, Burckart GJ. Compliance of industry with FDA Renal Guidance recommendations. Presented at 2008 ACCP Annual Meeting, Louisville, KY, October 20, 2008.*

Dowling TC, Matzke GR, Murphy JE. "Development of Rational Drug Therapy Regimens for Patients with Renal Insufficiency". Presented at FDA, Office of Clinical Pharmacology, Grand Rounds, Rockville, MD, April 30 2008.

"IRB Policies in Clinical Research". Presented at ORD's Drug Development Processes and Regulatory Approaches III: A Program for Japan's leading pharmaceutical company executives and the Pharmaceutical and Medical Device Agency, Baltimore, MD, May 21, 2008.

2007 Medscape WebMD Spotlight: "Achieving Positive Outcomes Through Pharmacy: New Directions in the Management of Anemia of Chronic Kidney Disease", January 2, 2007 (<http://www.medscape.com/viewprogram/6428>).*

2006 Drug Dosing in Acute Kidney Injury (Post-Graduate Education Session)
2006 Scientific Meeting of the American Society of Nephrology, November 18, 2006.*

To MDRD or Not to MDRD: That is the Question (Clinical Pearls Session)
2006 ASHP Midyear Clinical Meeting, Anaheim, CA, December 5, 2006.*

2005 Drug Dosing in Renal Disease (Clinical Sciences Session)
2005 ASHP Midyear Clinical Meeting, Las Vegas, NV, December 8, 2005.*

Overview of Methods to Quantify Renal Function
2005 ACCP Annual Meeting, San Francisco, CA, October 22, 2005.*

2003 Evaluation of OAT activity in human proximal tubule (HK-2) cells
2003 ACCP Annual Meeting, Atlanta, GA, November 3, 2003.*

2002 Drug Metabolism in Renal Failure, Women's Health Research Group
Department of Epidemiology and Preventive Medicine Conference, University of Maryland, Baltimore, February 7, 2002.

2001 Significant Papers in Nephrology: Progression of Renal Disease
2001 ACCP Annual Meeting, Tampa, FL, October 21, 2001.*

1999 Clinical Drug Interactions, National Conference for Nurse Practitioners, Washington DC, November 10-13, 1999.

Scientific Sessions Chaired or Organized

2018 Program Chair, "Insights into Anemia in Chronic Kidney Disease: New Discoveries, Strategies, and Models of Care", 2018 ASHP Midyear Clinical Meeting, Anaheim, CA, December 4, 2018.

- 2016 Program Chair, "Progression of Kidney Disease: Are We Making Any Progress?", 2016 ASHP Midyear Clinical Meeting, Las Vegas, NV, December 7, 2016.
- 2015 Program Chair, "Special Topics in Drug Dosing: The Skinny on Drug Dosing in Obesity", 2015 ASHP Midyear Clinical Meeting, New Orleans, LA, December 9, 2015.
- 2014 Session Moderator, "Pediatric Drug Development: Role of PKPD Modeling", US FDA, White Oak, MD, May 5, 2014.
- 2012 Program Chair, "The Tortoise and Hare of Chronic Kidney Disease: Slowing Kidney Disease Progression", 2012 ASHP Midyear Clinical Meeting, Las Vegas, NV, December 5, 2012.
- 2006 Program Chair, "New therapeutic approaches to improving clinical and economic outcomes in patients with chronic kidney disease and anemia" 2006 ASHP Midyear Clinical Meeting, Anaheim, CA, December 8, 2006
- 2004 Program Chair, "Update on Acute Renal Replacement Therapy", 2004 ACCP Annual Meeting, Dallas, TX, October 27, 2004
- 2002 Program Chair, "Anticoagulation in Renal Failure", 2002 ACCP Spring Forum Meeting, Savannah, GA, April 8, 2002.

Grants and Contracts: (All as PI unless otherwise noted)

- Funded Grants and Contracts

1. Drug metabolism in dialysis patients
National Kidney Foundation of Maryland
6/1/00 – 6/1/01; 5% commitment; \$4,725
Starter grant. Creative Grant.
2. Evaluation of PAH and aceytl-PAH interactions in OK cells
AACP Merck Student Research (Student Trainee: Karalee Turner)
6/1/00 – 6/1/01; 5% commitment; \$5,492
Starter grant. Creative Grant.
3. Comparison of antihypertensive regimens in chronic allograft nephropathy
AstraZeneca (PI: M. Weir)
06/1/00 – 12/1/03; 5% commitment, \$189,000
Full Research Contract.
4. Characterization of the effects of renal insufficiency on drug metabolism
AACP New Investigator Award
6/1/00 – 6/1/01; 10% commitment; \$9,992
Starter grant. Creative Grant.
5. Characterization of hepatic CYP3A activity in patients receiving hemodialysis
Women's Health Research Group, University of Maryland

9/1/00 – 9/1/01; 5% commitment; \$7,500
Starter grant. Creative Grant.

6. Pharmacokinetics of Topical Ketoprofen in Lecithin Organogel as Compared to Oral Ketoprofen

UM DRIF

6/1/02 – 6/1/03; 5% commitment; \$6,500
Starter grant. Creative Grant.

7. Immunosuppressant effects on P-GP activity in HK-2 cells

American College of Clinical Pharmacy - Roche Transplantation Award

6/1/03 – 6/1/04; 10% commitment; \$12,500
Starter grant. Creative Grant.

8. Drug Metabolism in Kidney Disease

National Institutes of Health (NIH) Clinical Research Loan Repayment Program Award

6/1/03 – 5/31/06; \$8,984.15
Research Agreement.

9. Evaluation of OAT activity in HK-2 cells

National Kidney Foundation of Maryland

6/1/03 – 6/1/04; 5% effort; \$6,570
Starter grant. Creative Grant.

10. Renal effects of nesiritide

Scios, Inc. (PI: Gottlieb, Steve)

12/1/03 – 6/1/04; 5% effort; \$55,000
Research Contract.

11. Baltimore VIRAL-HEP-C Clinical Center

National Institutes of Health (NIDDK) – 5 U01 DK060335-04 (PI: Howell, Charles)

5/1/04 - 4/30/06; 5% effort; \$237,608
Full Grant. Creative grant.

12. Analysis of PAH and Iothalamate in Plasma and Urine Samples from the
PITT Liver Study

University of Pittsburgh

9/1/04 – 9/1/06; \$17,057
Research Contract.

13. Pharmacokinetics of Topical Ketoprofen in Women

Women's Health Research Group, University of Maryland

09/04 – 09/05; 5% commitment; \$8,774
Starter grant. Creative Grant.

14. Evaluation of diabetic nephropathy in Hispanic Americans

American College of Clinical Pharmacy Frontiers Award

12/1/04 – 6/30/07; 20% commitment; \$30,555
Full grant. Creative Grant.

15. UNLOAD Trial: Renal Sub-Study

CHF Solutions, Inc.

12/1/04 – 12/1/05; 5% effort; \$16,000

Research Contract.

16. IVIVC model for renal drug clearance

National Institutes of Health (NIGMS) – 1 R15 GM072526-01

2/10/05 – 2/10/08; 20% effort; \$222,750

Full Grant. Creative Grant.

17. Core Laboratory for analysis of PAH and Iothalamate in human plasma and urine samples

NovaCardia, Inc.

9/1/05 – 9/1/07; 10% effort; \$151,343

Research Contract.

18. Evaluation of a novel charcoal cookie

ACCP (PI: W. Klein-Schwartz)

7/07 – 7/09; 5% commitment; \$20,162

Starter Grant. Creative Grant.

19. Ribavirin Pharmacokinetics, Race and HCV Treatment

National Institutes of Health (NIDDK) – 1 R21 DK078100-01 (PI: C. Howell)

4/1/07 – 3/31/09; 10% effort; \$408,375

Full Grant. Creative Grant.

20. Evaluation of Biopharmaceutics Classification System Class 3 Drugs for Possible Biowaivers

US Food and Drug Administration (FDA) – HHSF223200810041C (Co-PI: T. Dowling/J. Polli)

09/22/08 – 09/21/09; 10% effort with CPU Lab support; \$299,000

Research Contract.

21. Development of Immediate Release Oral Formulations Using the Concept of Quality by Design and Predicting in Vivo and in Vitro Corrections for Class II Drugs in Dogs and Humans

US Food and Drug Administration (FDA) – HHSF223200810030C (PI: J. Polli/S. Hoag)

09/19/08 – 09/19/10 (no-cost extension); 1% effort with CPU Lab support; \$299,726

Research Contract.

22. Impact of Kidney Disease on Drug Metabolism

US Food and Drug Administration (FDA) – HHSF223200910425P (PI: T. Dowling)

10/1/09 – 10/1/10; 12% effort; \$28,000

Research Contract.

23. Biopharmaceutics Classification System (BCS): Transporter-mediated Drug Absorption
US Food and Drug Administration (FDA) – HHSF223200910425P (PI: J. Polli)
9/17/09 – 9/17/10; 5% effort with CPU Lab support; \$299,900
Research Contract.

24. Effect of chitosan chewing gum on phosphate absorption in ESRD patients
Maryland Industrial Partnership (MIPS)
Industry Partner: Mastix Medica, LLC (Hunt Valley, MD)
2/1/10 – 2/1/11; 12% effort with CPU Lab support; \$143,941
Full Grant. Creative Grant.

25. Gender Disparity in Liver Transplantation
K23 NIH/NIDDK (PI: A. Mindikoglu)
7/1/10-6/30/15; 2.5% effort with CPU Lab support; \$868,774
Full Grant. Creative Grant.

26. Single-Dose Fasting Bioequivalence Study of Bosentan Tablets In Healthy Subjects
Mylan Labs, Inc
10/1/11 – 6/1/12; 40% effort; \$944,869
Research Contract.

27. Single-Dose Fed Bioequivalence Study of Bosentan Tablets In Healthy Subjects
Mylan Labs, Inc
4/1/12 – 12/1/12; 40% effort; \$1,065,000
Research Contract.

28. Mylan Clinical Research Services Contract
Mylan Labs, Inc
12/2/12 – 4/14/13; \$46,848
Service Contract.

29. Fasting Bioequivalence Study of Nilotinib Capsules (200 mg; Mylan) to Tasigna® Capsules
(200 mg; Novartis) in Healthy Adult Volunteers.
Mylan Labs, Inc.
4/15/13 – 12/1/13; 40% effort; \$1,487,272
Research Contract.

30. Pharmacokinetics of MP-3180 in healthy volunteers.
MediBeacon, LLC
10/22/13 – 3/1/14; 20% effort; \$277,147
Research Contract.

31. Pharmacokinetics of MP-3180 and use of noninvasive fluorescence detection device in healthy
subjects (ORFM-1B)
MediBeacon, LLC
2/15/14 – 10/31/14; 20% effort; \$271,044.
Research Contract.

32. Long-Term Inhibition of HIV transcription by targeting cellular CDK9 in vivo
NIH 1 R21 AI114288-01 (PI: Heredia, A)

Collaborator

7/1/14 – 6/30/16; \$230,250

Research Subcontract.

33. Combinatorial biosynthesis and metabolism studies of novel tetracenomycins
NIH 1 R15 CA252830-01 (PI: Nybo, E)

Co-Investigator

8/1/20 – 7/31/23; \$385,408

Full Grant. Creative Grant.

34. LCMS Assay Development for DFMO Clinical Studies

Corewell Health/MSU

7/1/23 – 6/30/24; \$10,000

Research Subcontract.

Fellowship Grant Awards for Graduate Students:

Hobart Rogers – American Heart Association Pre-doctoral Fellowship Award
(2008-2010; \$40,000)

Consulting:

Shire Laboratories (2005)

- Advisory board

OrthoBiotech (1999-2006)

- Advisory board/speaker's bureau

Council of Advisors (2004-2005)

- Drug development consulting

Abbott Laboratories (2005)

- Advisory board

Bioanalytical Systems, Inc. (2003-2005)

- Drug development consulting

Mallinckrodt, Inc. (Covidien; 2005-2011)

- Drug development consulting

Goodell, DeVries, Leech & Dann, LLP (2006-2007)

- Medical case litigation

URL Pharma (2009)

- Drug development consultant

US FDA (2010-2023) – Advisory Committees

- FDA Advisory Committee for Pharmaceutical Science and Clinical Pharmacology (ACPS-CP) meeting (Silver Spring, MD, Mar. 17, 2010)

 - Ad Hoc (voting) member on FDA Renal Guidance development

- FDA Anti-Infective Drugs Advisory Committee (AIDAC) meeting (Silver Spring, MD, Oct. 17, 2013)

 - Ad Hoc (voting) member on PK/PD and dosing of antimicrobial agents

- FDA Pulmonary-Allergy Drugs Advisory Committee (PADAC) (Virtual, May 11, 2023)
Ad Hoc (voting) member to review PK/PD data and discuss new drug application (NDA) 214697, for epinephrine nasal spray, submitted by ARS Pharmaceuticals Inc., for the proposed indication of emergency treatment of allergic reactions (Type I) including anaphylaxis in adults and children $\geq$ 30 kilograms.

Bingham McCutchen LLP (2010-2011)

- Patent litigation

Merchant & Gould LLP (2012 - 2020)

- Patent litigation

MediBeacon, Inc. (2012-2013)

- Drug development consulting

Greenberg Taurig, LLP (2017 - 2020)

- Patent litigation

Buchanan Ingersoll & Rooney PC (2017 -)

- Patent litigation

Journal Manuscript Reviewer:

American Journal of Kidney Diseases

American Journal of Geriatric Pharmacotherapy

American Journal of Health Systems Pharmacists

Annals of Oncology

Annals of Pharmacotherapy

Biopharmaceutics and Drug Disposition

British Journal of Clinical Pharmacology

Clinical Pharmacokinetics

Current Medical Research and Opinion

Currents in Pharmacy Teaching and Learning

European Journal of Clinical Pharmacology

Expert Opinion on Investigational Drugs

Expert Opinion on Pharmacotherapy

iForumRx

Journal of the American Geriatrics Society

Journal of the American Society of Nephrology

Journal of Chromatography B Biomedical Applications

Journal of Clinical Pharmacology

Journal of Critical Care

Journal of Pharmaceutical and Biomedical Analysis

Journal of Pharmacokinetics and Pharmacodynamics

Kidney International

Nephron

Neuroscience Letters

Pharmacotherapy

Pharmaceutical Research

Physiological Reports

PLoSOne

Editorial Boards:

Member, Editorial Board for *Pharmacotherapy* (2009-2016)

Member, Editorial Board for *Clinical Pharmacokinetics* (2016 -)

Book, Program or Grant Reviewer:

AACP New Investigator's Grant Program (2003)

ACCP – PSAP IV (Nephrology Training Program, 2005)

ASHP Concepts in Clinical Pharmacokinetics (2004)

ACCP Research Institute: Frontiers Awards and Research Awards (2004, Nephrology, Anemia)

- Expert reviewer and member of Grant Selection Committee (2005)

ACCP Grants and Fellowship Selection Committee (2005)

NIH Grant Reviewer:

NIGMS Minority Biomedical Research Support (2006)

NIDDK - ZRG1 DKUS-A (58)R (RC-1 grants, 2009)

NIDDK - ZRG1 DKUS-A (11)B (SBIR/STTR grants, 2012)

Honors and Awards:

- 2011 ACCP Best Paper Award, 2011 ACCP Annual Meeting, Pittsburgh, PA
Nominated, 2011 ASHP Foundation Pharmacy Practice Research Award
- 2010 Nominated, NCQ End Stage Renal Disease Steering Committee
Elected, Fellow of the American College of Clinical Pharmacy (FCCP)
- 2009 Elected, Fellow of the American College of Clinical Pharmacology (FCCP)
Nominated, Chair of ACCP Research Institute Board of Trustees
- 2007 Elected, ACCP Research Institute Trustee (2007-2010)
Nominated, Fellow of the American College of Clinical Pharmacy (FCCP)
- 2006 Nominated, ACCP Research Institute Trustee
- 2005 Nominated, Pacesetter Award, Ferris State University Alumni Association
- 2004 Teacher of the Year, University of Maryland School of Pharmacy
Nominated, Pacesetter Award, Ferris State University Alumni Association
- 2003 ACCP Research Institute – Roche/Transplant Research Award
National Kidney Foundation of Maryland – Research Award
NIH Clinical Research Loan Repayment Program Award (2003-2006)
- 2002 Nominated, Teacher of the Year, University of Maryland School of Pharmacy
- 2001 Nominated, FDA Cardiovascular and Renal Drugs Advisory Committee (by APhA)
- 2000 American Association of Colleges of Pharmacy New Investigator Program Award
National Kidney Foundation of Maryland – Research Award
Women's Health Research Group – Research Award
- 1993 Excellence in Clinical Communication Award (Facts and Comparisons- J.B. Lippencott Co.)
- 1992 Dean's List- FSU College of Pharmacy
Michigan Association of Governing Boards of State Universities Award
Warner-Lambert/Parke-Davis, Consumer Health Products Group "Commitment to Excellence '92" Scholarship
- 1991 Who's Who in American Colleges and Universities
Rho Chi Pharmacy Honor Society
Winner, APhA-ASP Patient Counseling Competition at FSU
Participant, National Patient Counseling Competition, APhA National Convention
- 1990 Dean's Advisory Board- FSU College of Pharmacy
Phi Lambda Sigma Pharmacy Leadership Society
Omicron Delta Kappa National Leadership/Honor Society

	Omicron Delta Kappa National Leadership/Honor Society - student selection committee
1989	Dean's List, Ferris State University
1988	Robert M. Chater Memorial Scholarship Recipient

TEACHING

Courses Taught:

Professional (PharmD Courses)

Course Title	Years Taught	Credits	Approx. Hours/yr	Coursemaster
PHEX 562(APPC 464)Clinical Pharmacokinetics	1999-2014	3	10	T. Dowling
PHEX 589 Transplantation	1999-2014	3	10	T. Dowling
PHAR 516 Pharmaceutical Care Workshop	1999-2002	1	4	B. Anderson
PHAR 517 Study Design	1999-2001	3	2	J. Zito
PHAR 554 ISAT I (GU module)	1999-2006	3	2	N. Brandt
PHAR 555 ISAT II (GI module)	1999-2006	3	2	J. Polli
PHAR 564 ISAT III (Renal, CNS modules) (Renal Module Coordinator)	1999-2011	3	30	S. Haines
PHPC 532 Longitudinal Care I	1999-2001	1	12	M. Rodriguez
PHMY 562 Clinical Pharmacokinetics	2000-2014	2	25	T. Dowling
PHAR 524 Human Biology II	2000-2006	3	8	B. Buterbaugh
PHAR 522 Pharmacology and Aging	2000-2006	2	2	M. Weiner
PHAR 541/602 Biopharmaceutics and Pharmacokinetics	2000-2014	3	18	K. Bauer
PHMY 529 Pharmacogenomics	2008-2014	2	2	H. Wang
PHAR 506 Principles of Drug Action	2009-2014	3	3	M. Weiner
PHMY 510 Advanced Educational Opport.	2006-2014	1	1	M. Weiner
PHAR 456 Path Pharm Therapeutics (PPT4)	2010-2014	3	6	D. Huynh
PHAR 559 Path Pharm Therapeutics (PPT8)	2011-2014	3	6	L. Hynicka
PHAR 568 Applied Pharm. Sciences	2012-2014	2	2	A. Coop
PHAR 428 Pharmacokinetics	2017 (Fall)	3	25	T. Dowling

Graduate Courses (PhD, MS)

PHAR 757 Advanced Pharmacokinetics	2000-2014	3	3	N. Eddington
PPAS 701 Research Methods I	2001-2014	3	3	I. Zuckerman
PHAR 601 Principles of Drug Development	2006-2014	3	4	J. Polli
PHAR 602 Basic PKPD Modeling (MS)	2012-2-14	3	2	J. Gobburu

Other Teaching (UMB)

Statistics Review (UMMS Residents)	2001-2005	2	S. Wilson
IRB Overview (faculty and UMMS Residents)	2001- 2014	4	--
MSPR 520 Host Defenses (SOM)	1999-2007	4	S. Doyon
Phase I Clinical Toxicology (SOM)	2003-2007	2	S. Piniero

Other Teaching (Post-Graduate)

- 9/95-6/99 Teaching Fellow and Lecturer - Clinical Pharmacokinetics, Nephrology Pharmacotherapy, University of Pittsburgh School of Pharmacy
- 9/94 – 9/97 Nephrology Pharmacy Preceptorship - On-Site Instructor
Topics: Pharmacotherapy, Renal Drug Dosing, and Clinical Pharmacokinetics, University of Pittsburgh Schools of Pharmacy and Medicine
- 9/94-9/95 Graduate Teaching Assistant- Courses: Drug Information and Literature Evaluation, Contemporary Pharmacy Practice, Disease Management, Pharmacy Communications (BS students), University of Pittsburgh School of Pharmacy

Graduate (PhD) Students: 1999 – 2014

Student Name	Degree Sought	Primary Advisor	Member Thesis Committee	Thesis Defended	Date Graduated
Kimberly Lentz	Ph.D.	Polli	X	X	Aug. 2000
Dennis Killian	Ph.D.	Chikhale	X	X	Apr. 2001
Julie Suman	Ph.D.	Dalby	X	X	Apr. 2002
Chetan Karyekar	Ph.D.	Dowling	X	X	Oct. 2002
Sangeeta Raje	Ph.D.	Eddington	X	X	Nov. 2002
Simu Thomas	Ph.D.	Mullins	X	X	Sept. 2002
Sanna Tolle	Ph.D.	Polli	X	X	Nov. 2002
Noha Salama	Ph.D.	Eddington	X	X	Nov. 2003
Sigal Kaplan	Ph.D.	Weiss	X	X	Feb. 2004
Jennifer Jones	Ph.D.	Brown	X (UMCP)	X	Aug. 2004
Robert J. LoCosale	Ph.D.	Weiss	X	X	Apr. 2007
Nicola Fenty	Ph.D.	Brown	X (UMCP)	X	Apr. 2007
Jennifer Horn	Ph.D.	Dowling	X		Transferred 2004
Minori Kinjo	Ph.D.	Dowling	X	X	May 2008
Bart Rogers	Ph.D.	Dowling	X	X	May 2010
Runyan Jin	Ph.D.	Dowling	X	X	Aug 2010
Laura Shoop	Ph.D.	Liggett	X		Transferred 2014

C. Master and Doctoral Thesis Completed Under Chairmanship

Student Name	Degree type	Thesis Title	Years Under Supervision (E.g. 2009-2010)	Current Status / Professional Position
Chetan Karyekar	PhD	Effect of the Tight Junction Modulator Zonula Occludens Toxin (Zot) and the P-Glycoprotein Inhibitor Itraconazole on Brain Transport Enhancement and Potential for Renal Drug Interactions	1999-2002	Clinical PK Scientist, Abbott
Minori Kinjo	PhD	Evaluations of a human kidney (HK-2) cell model for drug-induced nephrotoxicity and BK virus infection	2003- 2008	Clinical Researcher, UMMS (Transplant)
Hobart Rogers	PhD	The Role of the 1,2-adrenergic and GRK5 Receptor Single-Nucleotide-Polymorphisms	2004-2010	FDA Office of Genomics

		(SNPs) on the Treatment of Heart Failure with - blockers		
Runyan Jin	PhD	Population pharmacokinetics and efficacy of ribavirin in patients with chronic hepatitis C genotype 1 infection	2005-2010	FDA CDER Office of Clinical Pharmacology (DCP5)

Non-Graduate (PharmD) Students Supervised or Advised:

Name	Role	Year(s)
Karalee Turner	PharmD elective (PHEX 559)	1999-2002
Chad Morris	PharmD elective (PHEX 559)	2000-2001
Gilbert Ngan	Summer Student (Work Study)	2000-2003
Mary C. Brace	PharmD elective (PHEX 559)	2002
Mandi Unterman	PharmD elective (PHEX 559)	2002
Heather Robinson	Summer Student (Work Study)	2000-2001
Angie Bakshi	PharmD elective (PHEX 559)	2002
Devon Flynn	Advisor	2002-2005
Jennifer Horn	PharmD elective (PHEX 559)	2001-2002
Steven Allison	Advisor	2003-2006
Emily Henson	Advisor	2003-2005
Bryan Alexander	Advisor	2004-2006
Diana Earl	Advisor	2004-2006
Sofanit Getahun	Advisor	2005-2006
Aruna Pokharel	Advisor	2005-2006
Katie Petzold	Advisor	2004-2007
Vivian Leung	PharmD elective (PHEX 559)	2004
Jonathan Gibney	Advisor	2004-2007
Min-Chi Huang	Advisor	2004-2007
Jing Shao	Advisor	2004-2007
Matt Bathula	PharmD elective (PHEX 559)	2005
Timothy Mariner	Advisor	2005-2006
Jessie Lish	Advisor	2005-2007
Jonelle Mohammed	Supervisor (NIH AREA grant)	2005
Robert Rizer	Supervisor (NIH AREA grant)	2006-2007
Michael Cuda	Advisor, Supervisor (work study)	2006-2008
Ted Kim	PharmD elective (PHEX 559)	2008
Danil Podolskiy	PharmD elective (PHEX 559)	2008-2009
Yang Chang	Supervisor (work study)	2009-2011
Yang Chang	PharmD elective (PHEX 559)	2010-2013
Tamara Kitsul	PharmD elective (PHEX 559)	2010-2013
Della Wang	PharmD elective (PHEX 559)	2011-2012
Joleine Bigcas	PharmD elective (PHEX 559)	2010-2013
Lizhi Liang	PharmD elective (PHEX 559)	2012-2013
Nousheen Nadjmabadi	PharmD elective (APEX 424)	2012
Maggie Chan	PharmD elective (APEX 424)	2012
Yang Chang	PharmD elective (APEX 424)	2012-2013
Aila Spiegel	PharmD elective (APEX 424)	2013
Mirian Lim	PharmD elective (APEX 424)	2014

Wannisa Dongtai	PharmD elective (APEX 424)	2014
Sharmila Das	PharmD elective (APEX 424)	2014
Brandon Mihelich	Supervisor (summer LCMS project)	2018
Carlye Szarowicz	Supervisor (work study – LCMS/PK)	2018 - 2019
Matthew Swanson	Supervisor (work study – LCMS/PK)	2020 - 2021
Heather LeFaivre	Supervisor (grant – LCMS/PK)	2023 - 2024
Abigail Proksch	Supervisor (grant – LCMS/PK)	2024

Post Doctoral Fellows and Resident Research:

<u>Resident:</u>	<u>Date</u>	<u>Project</u>	<u>Current Position</u>
Marty Arjomand, PharmD	2000-2001	Ketoprofen PK	Clinical Pharmacist
Seth Brownlee, PharmD	2001-2002	CVVHD drug removal	Clinical Pharmacist/faculty
Jill McMath, PharmD	2002-2003	Metadone PK	Director, ExcellRx
Ealaf Shemmeri, PharmD	2004-2005	MDRD drug dosing	Critical Care Resident
Jason Chui	2007-2008	Antibiotic Dosing	UMMS Resident

<u>Fellow:</u>	<u>Date:</u>	<u>Project:</u>	<u>Current Position:</u>
Tahira Iqbal, PhD	09/02 – 10/03	In vitro assessment of renal drug transport	Assoc. Professor, Biochemistry, University of Agriculture, Fasilabad, Pakistan
Ghazal Vessal, PharmD	10/04 – 10/06	Analysis of cidofovir Pharmacokinetics	Asst. Professor, Shiraz Univ, Tehrah Iran

Student Advising:

Faculty Advisor, Phi Delta Chi Pharmaceutical Fraternity (2000-2009)
Faculty Judge, AMCP Student Chapter, Pharmacy and Therapeutics Competition (2008-2009)

SERVICE

Department (FSU):

Department Head, Pharmacy Practice (2014-2015)
Member, PEDALS resident teaching certificate program (2014-2015)

Department (UMB):

Vice Chair for Research and Scholarship (2008-2014)
Member, PPS Leadership Working Group (2007-2014)
Chair, CIPS Director Faculty Search Committee (2009-2014)
Chair, Clinical Sciences Faculty Search Committee (1999-2000)
Member, PPS Department Research Committee (1999-2003)
Member, PHSR Graduate Program Admission Committee (2001-03)
Member, PPS Publications Advisory Committee (2003, 2008-2014)
Internal Scientific Reviewer for PPS Dept. IRB submissions (2003-2014)
Member, Clinical Sciences Faculty Search Committee (2004)
Residency Research Committee (2004-2014)
Member, Pharmacotherapy Faculty Search Committee (2004-2005)

College (FSU):

Member, Executive Council (2014-present)
Member, Curriculum Committee (2014-present)
Member, Professional Development Committee (2014-present)
Member, Health and Safety Committee (2016 – present)
Member, Workload Assignment Task Force (2017-present)
Chair, Search Committee for Assistant Dean for Academics and Practice (2017-present)

College (UMB):

Chair, Faculty Affairs Committee (2006-07)
Member (elected), Faculty Affairs Committee (2002-04, 2005-07, 2007-09)
Member, Pharmacy Hall Addition Steering and Research Committees (2007-2014)
Member, Dean's Search Committee (2007)
Member, Task Force on the Future of the School of Pharmacy (2004-05)
Member, Graduate Studies and Research Committee, (1999-2001)
Liaison to UMB Institutional Review Board (2003 – 2014)
Member, PSC Faculty Search Committee (Drug Metabolism) (2001-02)
Member, PSC Faculty Search Committee (Chemistry) (2003)
Interviewer for Student Admissions (PharmD, 2000-2014)

University (FSU):

Director, Office of Research and Sponsored Programs (2014-)
Chair, Intellectual Property Advisory Board (2016 -)
Co-Chair, Digital Measures Advisory Board (2019 -)
Member, HLC Reaccreditation Steering Committee (2019 -)
Co-Chair, HLC Criterion 2 (2019-2020)
Co-Chair, HLC Criterion 3, 4 Year Review (2023 -)
Co-Chair, Ferris Equity Initiative (Retention Grants Committee) (2022 -)
Co-Chair, Campus Lab Safety Committee (2022 -)

University (UMB):

Member, Pharmacogenomics Subcommittee of UMMC P&T (2013-2014)
Member (regular), UMB Institutional Review Board (2003-2006)
Member, Grant Selection Committee, Women's Health Research Group (2002)
Member, Clinical Research Working Group (SOM, 1999-2005)
Mentor, Clinical Research Career Development Program Award (NIH/NCRR, 2004-2014)
- PI: Alan Shuldiner, MD (1K12RR023250-01)
Member, UM Center for Pharmacogenomics (2006-2014)
Member, UMMS Resident Research Committee (2000-2002)
Member (regular), UMB Graduate Faculty (1999-2014)
Member (appointed), IRB BRAAN Testing and Implementation Task Force (2003)
Member, Shelter-In-Place Emergency Response (Allied Health Building, 2008-2012)
Fire Warden, UMB, 5th Floor Allied Health Building (1999-2012)

Professional Service (national):

Board of Trustees of the Research Institute, American College of Clinical Pharmacy (2008-11)
Chair, Research Affairs Committee, American College of Clinical Pharmacy (2006-07)
Chair, Nephrology PRN, American College of Clinical Pharmacy (2004-05)
Chair, Program Committee, Nephrology PRN, American College of Clinical Pharmacy (2002-05)

Memberships in Scientific, Professional, and Scholarly Organizations

American Association of Colleges of Pharmacy (current)
American Association of Pharmaceutical Scientists (past)
American College of Clinical Pharmacology (past)
American College of Clinical Pharmacy (current)
American Society of Nephrology (past)
Maryland Society of Health-System Pharmacists (past)
Michigan Pharmacists Association (past)

Community service:

Instructor, EMT Program, Pharmacology Course, Baltimore County Fire Department (2000-02)
Mentor, University of Maryland Summer High School Biomedical Research Program:

<u>Year</u>	<u>Student Name</u>	<u>High School</u>	<u>Research project</u>
2003	Jeanine Pollard	Notre Dame Prep	Determination of rhodamine-123 accumulation in HK-2 cells
2004	Ankit Patel	Liberty	Development of HPLC/UV assay for lidocaine and bupivacaine for IV stability testing (attended pharmacy school at PCP-USP)

I certify that this curriculum vitae is complete and accurate.



27 August 2024

(signed)

(date)