

CURRICULUM VITAE

Charles Ryan Yates

Academic Degrees

1994	B.S.	The University of Tennessee, Knoxville Summa Cum Laude
1997	Pharm.D.	The University of Tennessee, Memphis College of Pharmacy High Honors
2000	Ph.D.	The University of Tennessee, Memphis College of Graduate Health Sciences

Military Service

United States Navy Bootcamp, Great Lakes, IL, October 1983 to December 1983
Basic Electricity and Electronics School, Great Lakes, IL, January 1984 to March 1984
Electronics Technician 'A' School, Great Lakes, IL, April 1984 to September 1984
Naval Nuclear Power School, Orlando, FL, October 1984 to May 1985
Naval Nuclear Power Training Unit, Saratoga Springs, NY, June 1985 to December 1985
USS Daniel Boone, Submarine Overhaul Facility, Newport News Naval Shipyard, Newport News, VA, January 1986 to May 1987
USS Daniel Boone, United States Navy Group Six Submarine Force, Charleston Naval Base, Charleston, South Carolina, June 1987 to October 1988
USS Samuel Rayburn, Nuclear Power Training Unit, Naval Weapons Station, Goose Creek, SC November 1988 to November 1991

Awards and Honors

1993 The University of Tennessee Alumni First Year Scholarship
1996 The University of Tennessee's Annual Research Day Award
1997 Ralph R. Braund Young Investigator Award
1997 Rho Chi Schering Plough AFPE First Year Graduate Scholarship
1997 Medicinal Chemistry Award
1997 Who's Who Among Students in American Universities and Colleges
1998 AFPE Pre-doctoral Fellowship
1999 AFPE Pre-doctoral Fellowship
1999 Feurt Scholar
1999 Tennessee Academy of Sciences, First Place Paper Presentation
2000 Van Vleet Scholar
2000 AFPE Pre-doctoral Fellowship
2001 AACP New Investigator Award

Licensure

1997-Present Licensed Pharmacist, State of Tennessee

Professional Society Memberships

Rho Chi Pharmacy Honor Society
Phi Delta Chi Professional Pharmacy Fraternity
American Association of Pharmaceutical Scientists
Radiation Research Society

University (and College) Appointments

2000-2005 Assistant Professor of Pharmaceutical Sciences, College of Pharmacy, University of Tennessee Health Science Center, Memphis, TN.
2005-2010 Associate Professor of Pharmaceutical Sciences, College of Pharmacy, University of Tennessee Health Science Center, Memphis, TN.

- 2010-Present Professor of Pharmaceutical Sciences, College of Pharmacy, University of Tennessee Health Science Center, Memphis, TN.
- 2011-Present Professor, Ophthalmology, College of Medicine, University of Tennessee Health Science Center, Memphis, TN.

Practice/Professional Experience

- 1999-2000 Poison Information Specialist, Southern Poison Center, University of Tennessee Health Science Center, Memphis, TN
- 2011-2013 Vice President for Research and Development, RxBio, Inc. Memphis, TN
- 2014-Present Scientific Advisory Board, Harmony Diagnostics, Cordova, TN

Teaching Experience

- 2001-2005 Introduction to Nuclear Pharmacy (PHSC 258). A four semester hour course taught to 2nd year pharmacy students in the fall semester. 2 contact hours. Average class size 5.
- 2008-2010 Molecular Fundamentals of Medicine II (MFM-II). Lincoln Memorial University. A 3 hour semester course taught every spring. 8 contact hours. Average class size 100.
- 2001-Present Advanced Pharmacokinetics (PHAC 813). A four semester hour course taught to graduate students every other fall semester. 26 contact hours. Average class size is 6.
- 2001-Present Pharmacokinetics and Dose Optimization (PHSC 221). A four semester hour course taught to 2nd year pharmacy students in the fall semester. 36 contact hours. Average class size 200.
- 2002-Present Drug Metabolism (PHAC 817). A three semester hour course taught to graduate students every other spring semester. 3 contact hours. Average class size 5.
- 2006-Present Pharmacogenomics (PHSC 222). A two semester hour course taught to 2nd year pharmacy students in the spring semester. 10 contact hours. Average class size 200.

Visiting Professorships and Invited Lectures

- November 2001 Biogen, Cambridge, MA. "Effect of Polymorphic CYP3A5 and MDR1 Expression on Cyclosporine Oral Disposition".
- March 2002 Annual ASCPT Meeting 2002, Atlanta, GA. "Effect of Polymorphic CYP3A5 and MDR1 Expression on Cyclosporine Oral Disposition".
- April 2002 CEPSIS Meeting, NIH, Bethesda, MD. "Platelet Activating Factor, Pathogens and Acute Lung Injury".
- October 2002 University of Arkansas College of Pharmacy, Little Rock, AR. "Gene Expression Profiling in Patients with Acute Lung Injury".
- February 2003 University of Arkansas College of Pharmacy, Little Rock, AR. "Clinically Significant Genetic Polymorphisms".
- May 2003 American Thoracic Society 2003 Annual Meeting, Seattle, WA. "Association Between the *Arg92His* Allelic Variant and Plasma PAF-Acetylhydrolase Activity in ARDS Patients".
- January 2004 University of Michigan, College of Medicine Pulmonary Division, Ann Arbor, MI. "Genetic Variation in PAF Acetylhydrolase is Associated with ARDS Severity".
- April 2005 University of Tennessee, College of Nursing, Memphis, TN. "Pharmacogenomics: Are We There Yet?"
- October 2006 University of Tennessee Continuing Education, Memphis, TN. "Pharmacogenomics of Drug Discovery".
- July 2009 Tennessee Pharmacist Association Annual Meeting, Hilton Head, SC. "Pharmacogenomics: Where Do We Stand and Where Are We Going?"
- March 2010 NIH-NIAID Platelet Regeneration Conference, Bethesda, MD. EDL2000 Improves Platelet Function in a Murine Combined Radiation Vascular Injury Model.
- July 2010 Tennessee Pharmacist Association Annual Meeting, Memphis, TN "Pharmacogenetics: An Update"
- January 2011 University of Minnesota College of Pharmacy. "The University of Tennessee College of Pharmacy Dual Degree Program: Dos and Don'ts"
- September 2011 Fall Therapeutics CE (1.5 hours), Chattanooga, TN, Kinetics, Genetics, and Dianetics
- October 2011 Fall Therapeutics CE (1.5 hours), Nashville, TN, Kinetics, Genetics, and Dianetics
- October 2011 Fall Therapeutics CE (1.5 hours), Memphis, TN, Kinetics, Genetics, and Dianetics
- November 2011 Fall Therapeutics CE (1.5 hours), Knoxville, TN, Kinetics, Genetics, and Dianetics
- January 2012 The United States Food and Drug Administration. "Development of Rx100 as a GI-ARS Radiomitigant"
- September 2012 NIH/NIAID, Bethesda, MD "The promise of nanotechnology confirmed: New data on KZ-41 and Radiomitigation"

- January 2013 BARDA/NIAID Symposium on *Developing Radiation Medical Countermeasures for Licensure*. NIH Bethesda, MD. "FDA, the Animal Rule and GI Acute Radiation Syndrome Prophylaxis: An industry perspective."
- March 2013 UC Berkeley, Berkeley, CA. The role of pharmacokinetics in the drug approval process.
- June 2013 Xian Jiaotong University Health Sciences Center Xi'an, Shaanxi, China. Light of Life Biomedical Science Lecture. KZ-41: Optimization of a natural product derivative for the treatment of radiation injury

Committees and Offices Held

Institutional Committees

- 2001-Present Radiation Safety Committee
 2008-2010 Shared and Large Equipment Committee
 2010-Present Post-doc Committee
 2011-Present Irradiator Oversight Committee

College of Pharmacy Committees

- 2000-Present Graduate Committee
 2002-Present Admissions Committee
 2008-2011 Promotion and Tenure Committee
 2011-2014 Curriculum Committee
 2013-Present Dean's Advisory Council (Chair)

Graduate Student Faculty Committee

- Member Faculty Committee of Dr. Wenhui Zhang, Ph.D. (2001-2004)
 Member Faculty Committee of Dr. Manish Gupta, Ph.D. (2001-2005)
 Member Faculty Committee of Dr. Lisa Tang, Pharm.D., Ph.D. (2003-2007)
 Member Faculty Committee of Dr. Himanshu Bhattacharjee, Ph.D. (2005-2007)
 Member Faculty Committee of Dr. Vishal Lamba, Ph.D. (2003-2008)
 Member Faculty Committee of Dr. Hari Desu, Ph.D. (2005-2008)
 Member Faculty Committee of Dr. Nag Budha, Ph.D. (2005-2009)
 Member Faculty Committee of Dr. Nate Dirks, Pharm.D, Ph.D. (2006-2010)
 Member Faculty Committee of Dr. Kui Zeng, Ph.D. (2007-2010)
 Member Faculty Committee of Dr. Yi Zhang, Ph.D. (2007-2012)
 Member Faculty Committee of Dr. Maggie Thomson, Pharm.D., Ph.D. candidate (2001-Present)
 Member Faculty Committee of Ms. Limothai Warrarat, Ph.D. candidate (2008-Present)
 Member Faculty Committee of Mr. Ashit Trivedi, Ph.D. candidate (2013-Present)
 Member Faculty Committee of Mr. Chetan Rathi, Ph.D. candidate (2013-Present)
 Member Faculty Committee of Mr. Josiah Ryman, Pharm.D., Ph.D. candidate (2013-Present)

Fellows/Graduate Students Trained

- 2001-2005 Pengfei Song, Ph.D. (Food and Drug Administration)
 2001-2005 Shen Li, Ph.D. (Quintiles, Inc.)
 2006-2008 Suma Ramagiri, Ph.D. Post-doctoral Fellow (Applied Biosystems)
 2007-2008 Hari Kosanam, Ph.D. Post-doctoral Fellow (Therapure Biopharma, Inc.)
 2009-2010 Hui He, Ph.D. Post-doctoral Fellow
 2005-2010 Karin Emmons Thompson, Ph.D. (RxBio, Inc.)
 2004-2012 Fei Ma, Ph.D. (Glaxo Smith-Kline, Shanghai)
 2012-2012 Patrudra Makena, Ph.D. Post-doctoral Fellow (RxBio, Inc.)
 2012-2013 Fan Zhang, Ph.D., Post-doctoral Fellow (Glaxo Smith-Kline, Shanghai)
 2010-Present Jordan Toutouchian, Ph.D. candidate
 2013-2014 Hui He, Ph.D. Post-doctoral Fellow

Peer Reviewed Journal Articles

1. Tai H-L, Krynetski EY, Krynetskaia NF, Yates CR, Evans WE: Thiopurine S-methyltransferase deficiency: two nucleotide transitions define the most prevalent mutant allele associated with loss of catalytic activity in Caucasians. *Am J Hum Genet.* 1996 58:694-702. PMID: 8644731

2. Mukherjee A, Kirkovsky L, Yao X-T, **Yates CR**, Miller DD, Dalton JT: Enantioselective binding of Casodex to the androgen receptor. *Xenobiotica* 1996 26(2):117-122. PMID: 8867996
3. Krynetski EY, Tai H-L, **Yates CR**, Fessing M, Loennechen T, Schutz JD, Relling MV, and Evans WE: Genetic polymorphism of thiopurine S-methyltransferase: clinical importance and molecular mechanisms. *Pharmacogenetics* 1996 6:279-280. PMID: 8873214
4. **Yates CR**, Krynetski EY, Loennechen T, Fessing M, Tai H-L, Pui C-H, Relling MV, and Evans WE: Molecular diagnosis of thiopurine S-methyltransferase deficiency: genetic basis for azathioprine and mercaptopurine intolerance. *Ann Intern Med* 1997 April 15 126(8):608-614. PMID: 9103127
5. Krynetski EY, Fessing MY, **Yates CR**, Sun D, Schuetz JD, and Evans WE. Promoter and intronic sequences of the human thiopurine S-methyltransferase (TPMT) gene isolated from a human PAC1 genomic library. *Pharm Res* 1997 14(12):1672-1678. PMID: 9453052
6. Loennechen T, **Yates CR**, Fessing MY, Krynetski EY, Relling MV, and Evans WE. Isolation of a human thiopurine S-methyltransferase (TPMT) cDNA with a single nucleotide transition A719G (*TPMT*3C*) and its association with loss of TPMT protein and catalytic activity in humans. *Clin Pharmacol Ther* 1998 July 64(1):46-51. PMID: 9695718
7. **Yates CR**, Pui C-H, and Evans WE. Pharmacodynamic monitoring of cancer chemotherapy: childhood acute lymphoblastic leukemia as a model. *Ther Drug Monit* 1998 20:453-458. PMID: 9780117
8. **Yates CR**, Vysokanov A, Mukherjee A, Ludden TM, Tolley E, Meduri GU, and Dalton JT. Time-variant increase in methylprednisolone clearance in patients with acute respiratory distress syndrome: A population pharmacokinetic study. *J Clin Pharmacol* 2001 41(4):415-424. PMID: 11304898
9. Dalton JT, **Yates CR**, Yin D, Straughn A, Golub AL, and Meyer MC. Clinical pharmacokinetics of 5-aminolevulinic acid in healthy volunteers and patients at high risk for recurrent bladder cancer. *J Pharmacol Exp Ther* 2002 May 1;301(2):507-512. PMID: 11961050
10. Song P, Li S, Honaker M, Kotb M, Gaber O, Meibohm B, and **Yates CR**. Detection of MDR1 single nucleotide polymorphisms (SNPs) C3435T and G2677A using real-time PCR. *AAPS PharmSci* 2002;4(4):E29. PMID: 12646001
11. **Yates CR**, Zhang W, Song P, Gaber AO, Honaker MR, Kotb M, Alloway R, and Meibohm B. The effect of CYP3A5 and MDR1 polymorphic expression on cyclosporine oral disposition. *J Clin Pharmacol* 2003; 43(6):555-64. PMID: 12817518
12. Parker RB, Laizure SC, **Yates CR**, and Soberman JE. Effect of grapefruit juice on intestinal P-glycoprotein: Evaluation using digoxin in humans. *Pharmacotherapy* 2003; 23(8):979-87. PMID: 12921244
13. **Yates CR**, Chang C, Kearbey JD, Yasuda K, Schuetz EG, Miller DD, Dalton JT and Swaan PW. Structural determinants of P-glycoprotein-mediated transport of glucocorticoids. *Pharm Res* 2003; 20(11):1794-1803. PMID: 14661924
14. Gupta M, Song P, **Yates CR**, and Meibohm B. Real-time PCR-based genotyping assay for CXCR2 polymorphisms. *Clin Chim Acta* 2004 Mar;341(1-2):93-100. PMID: 14967163
15. Meduri GU and **Yates CR**. Systemic inflammation-associated glucocorticoid resistance and outcome of ARDS. *Ann N Y Acad Sci* 2004; 1024: 24-53. PMID: 15265772
16. Dirks NL, Huth B, **Yates CR**, and Meibohm B. Pharmacokinetics of immunosuppressants: a perspective on ethnic differences. *Int J Clin Pharmacol Ther* 2004 Dec;42(12):701-18. PMID: 15624287
17. Song P, Meibohm B, and **Yates CR**. LC/MS/MS in drug development: Targeting the brain. *BioTechniques* 2005 June; 38(Supplement):S19-S23. PMID: 16528912
18. Gupta M, **Yates CR**, and Meibohm B. SYBR-green based real-time PCR allelic discrimination assay for β 2-adrenergic receptor polymorphisms. *Anal Biochem* 2005 September 15;344(2):292-294. PMID: 16026755
19. Gurley BJ, Barone GW, Williams DK, Carrier J, Breen P, **Yates CR**, Song P, Hubbard MA, and Tong Y. Effect of milk thistle (*Silybum marianum*) and black cohosh (*Cimicifuga racemosa*) supplementation on digoxin pharmacokinetics in humans. *Drug Metab Disp* 2006 January;34(1):69-74. PMID: 16221754
20. Parker RB, **Yates CR**, Laizure SC, and Weber KT. P-glycoprotein modulates aldosterone plasma disposition and tissue uptake. *J Cardiovasc Pharmacol* 2006 January 47(1):55-59. PMID: 16424786
21. Song P, Lamba JK, Zhang L, Shukla N, Meibohm B, and **Yates CR**. G2677T and C3435T genotype and haplotype are associated with hepatic ABCB1 (MDR1) expression. *J Clin Pharmacol* 2006 Mar;46(3):373-9. PMID: 16490813
22. Gourley DR, Rowell C, Wingate L, **Yates CR**, Gourley G, and Miller DD. Status of Pharm.D./Ph.D. programs in colleges of pharmacy: The University of Tennessee Pharm.D./Ph.D. program. *Am J Pharm Educa* 2006 March;70(2). PMID: 17149422
23. Gao L, Grant A, Halder I, Brower R, Sevransky J, Maloney JP, Moss M, Shanholtz C, **Yates CR**, Meduri GU, Shriver MD, Ingersoll R, Scott AF, Beaty TH, Moitra J, Ma SF, Ye SQ, Barnes KC, and Garcia JGN. Novel polymorphisms in the myosin light chain kinase gene (MYLK) confer risk for sepsis-associated acute lung injury. *Am J Respir Cell Mol Biol* 2006 Apr;34(4):487-95. PMID: 16999953

24. Chen M-L, Straughn AB, Sadrieh N, Meyer M, Faustino P, Ciavarrella A, Meibohm B, **Yates CR**, Hussain AS. A modern view of effect of excipients on bioequivalence: Case study of sorbitol. *Pharm Res* 2007 Jan;24(1):73-80. PMID: 17048115
25. Gurley BJ, Swain A, Barone GW, Williams DK, Breen P, **Yates CR**, Stuart LB, Hubbard MA, Tong Y, and Cheboyina S. Effect of goldenseal (*Hydrastis canadensis*) and kava kava (*Piper methysticum*) supplementation on digoxin pharmacokinetics in humans. *Drug Metab Disp* 2007 January;35(2):240-245. PMID: 17079360
26. Gao L, Flores C, Fan-Ma S, Miller EJ, Moitra J, Moreno L, Wadgaonkar R, Simon B, Brower R, Sevransky J, Tuder RM, Maloney JP, Moss M, Shanholtz C, **Yates CR**, Meduri GU, Ye SQ, Barnes KC, and Garcia JG. Macrophage migration inhibitor factor in acute lung injury: expression, biomarker, and associations. *Transl Res* 2007 Jul;150(1):18-29. PMID: 17585860
27. Kosanam H, Prakash PK, **Yates CR**, Miller DD, and Ramagiri S. Rapid screening of doping agents in human urine by vacuum MALDI-linear ion trap mass spectrometry. *Anal Chem* 2007 Aug 1;79(15):6020-6026. PMID: 17602668
28. Song P, Ma F, Wang F, Wang X-D, Orr WE, Miller DD, Geisert EE, and **Yates CR**. Plasma and cerebrospinal fluid pharmacokinetics of the novel tetrahydroisoquinoline EDL-155 in rats. *Cancer Chemother Pharmacol* 2008 May;61(6):1037-44. PMID: 17768626
29. Ramagiri S, Gupte R, Rakov I, **Yates CR**, and Miller DD. Quantitative chiral analysis of phthaloylglutamic acid and related analogs by Cook's kinetic method using electro spray ionization and matrix assisted laser desorption techniques. *Rapid Commun Mass Spectrom* 2008;22(5):639-46. PMID: 18247407
30. Dirks NL, Li S, Hochhaus G, **Yates CR**, and Meibohm B. Transrepression and transactivation potencies of inhaled glucocorticoids. *Pharmazie* 2008 Dec;63(12):893-8. PMID: 19177906
31. Ramagiri S, Ma F, Kosanam H, Wang X-D, Patil R, Miller DD, Geisert EE, and **Yates CR**. Fast and sensitive liquid chromatography/electrospray mass spectrometry method to study ocular penetration of EDL-155, a novel antitumor agent for retinoblastoma in rats. *J Mass Spectrom* 2009 May;44(5):786-93. PMID: 19160451
32. Li S, Stuart L, Zhang Y, Meduri GU, Umberger R, and **Yates CR**. Inter-individual variability of plasma PAF-acetylhydrolase activity in early ARDS patients. *J Clin Pharm and Ther* 2009 Aug;34(4):447-55. PMID: 19583678
33. Zeng K, Thompson KE, **Yates CR**, and Miller DD. Synthesis and biological evaluation of quinic acid derivatives as anti-inflammatory agents. *Bioorg Med Chem Lett*. 2009 Sep 15;19(18):5458-60. PMID: 19674895
34. Nassr M, Wang X-D, Patil R, **Yates CR**, Miller DD, and Geisert EE. Treating retinoblastoma in tissue culture and in a rat model with a novel isoquinoline derivative. *IOVS* 2010 July;51(7):3813-19. PMID: 20570997
35. Kosanam H, Ma F, Ramagiri S, Kimura Y, Gududuru V, Deng W, Tigyi G, Miller DD, and **Yates CR**. Development of an LC-MS/MS assay to determine plasma pharmacokinetics of the radioprotectant octadecenyl thiophosphate (OTP) in monkeys. *J Chromatogr B Analyt Technol Biomed Life Sci*. 2010 Sep 15;878(26):2379-83. PMID: 20719582
36. Vaddady PK, Mehrotra N, Moore BM, **Yates CR**, and Meibohm B. Pharmacokinetics of a novel combination of Δ^9 -tetrahydrocannabinol and celecoxib in porcine model of hemorrhagic shock. *Biopharm Drug Dispos* 2011 Mar;32(2):89-98. PMID: 21341278
37. Patil R, Wang X-D, Orr WE, **Yates CR**, Geisert EE, and Miller DD. Synthesis and antiangioma activity of new tetrahydroisoquinolines. *Med Chem Res* (2011) 20:131-137.
38. Gupte R, Patil R, Lu J, Wang Y, Lee SC, Fujiwara Y, Bolen AL, Emmons-Thompson K, **Yates CR**, Siddam A, Panupinthu N, Pham TC, Baker DL, Parrill AL, Mills GB, Tigyi G, and Miller DD. Benzyl and naphthalene-methyl phosphonic acid inhibitors of autotaxin with anti-invasive and anti-metastatic actions. *ChemMedChem* 2011 May 2;6(5):922-35. PMID: 21465666
39. Zeng K, Thompson KE, Presley CS, Miller DD, and **Yates CR**. Pre-clinical pharmacokinetics of the novel QA amide KZ-41 in rats. *Xenobiotica* 2011 Nov;41(11):1006-12. PMID: 21864202
40. Wang X-D, Freeman N, Patil R, Mitra S, Orr WE, Abner CW, **Yates CR**, Miller DD, and Geisert EE. EDL-291, a novel isoquinoline presents anti-glioblastoma effects in vitro and in vivo. *Anticancer Drugs* 2012 Jun;23(5):494-504. PMID: 22391460
41. Steinle JJ, Zhang Q, Thompson KE, Toutouchian J, **Yates CR**, Soderland C, Wang F, Stewart CF, Haik BG, Williams JS, Jackson JS, Mandrell TD, Johnson D, Wilson MW. Intra-ophthalmic artery chemotherapy triggers vascular toxicity through endothelial cell inflammation and leukostasis. *Invest Ophthalmol Vis Sci* 2012 Apr 30;53(4):2439-45. PMID: 22427570
42. Zhang Q, Guy K, Pagadala J, Jiang Y, Walker RJ, Liu L, Soderland C, Kern TS, Ferry R Jr, He H, **Yates CR**, Miller D, Steinle JJ. Compound 49b prevent diabetes-induced apoptosis through increased IGFBP-3 levels. *Invest Ophthalmol Vis Sci* 2012 May 17;53(6):3004-13. PMID: 22467575
43. Slominski AT, Kim T-K, Shehabi HZ, Semak I, Tang EKY, Nguyen MN, Benson HAE, Korik E, Janjetovic Z, Chen J, **Yates CR**, Postlethwaite A, Li W, Tuckey RC. In vivo evidence for novel pathway of vitamin D3 metabolism initiated by P450scc and modified by CYP27B1. *FASEB J*. 2012 Sep;26(9):3901-15. PMID: 22683847

44. Slominski AT, Kim T-K, Chen JJ, Nguyen MN, Li W, **Yates CR**, Sweatman T, Janjetovic Z, Tuckey RC. Cytochrome P450-dependent metabolism of 7-dehydrocholesterol in placenta and epidermal keratinocytes. *Int J Biochem Cell Biol* 2012 Nov;44(11):2003-18. PMID: 22877869
45. Kiss GN, Lee S-C, Fells JI, Liu J, Valentine WJ, Fujiwara Y, Thompson KE, **Yates CR**, Sümeği B, and Tigyi J. Mitigation of radiation injury by selective stimulation of the LPA2 receptor. *BBA - Molecular and Cell Biology of Lipids*. 2013 Jan; 1831(1):117-25. PMID: 23127512
46. Zhang Q, Jiang Y, Toutouchian J, Soderland C, **Yates CR**, and Steinle JJ. Insulin-like growth factor binding protein-3 inhibits monocyte adhesion to retinal endothelial cells in high glucose conditions. *Mol Vis*. 2013 Apr 5;19:796-803. PMID: 23592916
47. Gardner LA, Groover CJ, Desiderio D, **Yates CR**, Zucker-Levin AR, Bloom LI, and Levin MC. LC-MS/MS identification of the one-carbon cycle metabolites in human plasma. *Electrophoresis*. 2013 Jun;34(11):1710-6. PMID: 23417555
48. Zhang Q, Toutouchian J, **Yates CR**, and Steinle JJ. Novel quinic acid derivative KZ-41 prevents retinal endothelial cell apoptosis through P38 signaling without inhibiting melphalan-induced retinoblastoma cell death. *Invest Ophthalmol Vis Sci* 2013 Sep 3;54(9):5937-43. PMID: 23942968
49. Schilling BK, Hammond KG, Bloomer RJ, Presley CS, and **Yates CR**. Pharmacokinetics and physiological effects of oral DMAA administration. *BMC Pharmacol Toxicol*. 2013 Oct 4;14(1):52. PMID: 24090077
50. Wu H, Pagadala J, Wen D, **Yates CR**, Miller DD, and Mahato RI. Synthesis and characterization of a novel antiapoptotic immunosuppressive compound for improving the outcome of islet transplantation. *Bioconjug Chem*. 2013 Dec 18;24(12):2036-44. PMID: 24256337
51. Slominski AT, Kim T-K, Shehabi HZ, Tang E, Benson HAE, Semak I, Lin Z, **Yates CR**, Li W, and Tuckey RC. In vivo production of novel vitamin D2 hydroxy-derivatives by human placentas, epidermal keratinocytes, Caco-2 colon cells and the adrenal gland. *Mol Cell Endocrinol*. 2014 Mar 5;383(1-2):181-92. PMID: 24382416
52. He H, Williams-Guy K, Pagadala J, Presley CS, Miller DD, Steinle JJ, and **Yates CR**. Sensitive and fast LC-MS/MS method for determination of β -receptor agonist JP-49b: Application to a pharmacokinetic study in rats. *J Chrom B*. 15 March 2014 953-954:86-91. PMID: 24576769
53. Thompson KE, Zeng K, Wilson CM, Deng W, Gaber MW, Miller DD, and **Yates CR**. The quinic acid derivative KZ-41 exhibits radiomitigating activity in a murine combined radiation and vascular injury model. *Drug Development Research*. 2014 75:29-36. PMID: 24648047
54. Patil R, Jones TS, Hosni-Ahmed A, Patil SA, Wang X-D, **Yates CR**, Geisert EE, and Miller DD. Synthesis and in vitro evaluation of novel 1,2,3,4-tetrahydroisoquinoline derivatives as potent anti-glioma agents. *Anti-Cancer Agents in Medicinal Chemistry*, 2014, 14:473-482.
55. Toutouchian JJ, Steinle JJ, Makena P, Waters C, Wilson MW, Haik BG, Miller DD, and **Yates CR**. Modulation of the retinal endothelial cell radiation injury response by quinic acid derivative KZ-41 involves p38 MAPK. *PLoS One*, 2014 Jun 23;9(6). PMID: 24956278
56. Zawaski JA, **Yates CR**, Miller DD, Kaffes CC, Sabek OM, Afshar S, Young DA, Yang Y, and Gaber MW. Radiation combined injury models used to study the effect of interventions and wound biomechanics. *Radiat Res* 2014 Nov 19. [Epub ahead of print]. PMID: 25409125
57. Hosni-Ahmed A, Sims M, Jones T, Patil R, Abdelsamed H, **Yates CR**, Miller DD, and Pfeffer L. EDL-360: A potential novel chemotherapeutic agent for treating glioma. *Journal of Cancer Science and Therapy (in press)*
58. Patil R, Szabó E, Fells JI, Gatt KL, Fujiwara Y, Norman DB, Balogh A, Lee S-C, Balazs L, Fridtjof T, Patil S, Emmons-Thompson K, Strobos J, McCool SW, **Yates CR**, Stabenow J, Byrne GB, Miller DD, and Tigyi GJ. LPA analog mitigation of high-dose combined acute gastrointestinal and hematopoietic radiation syndromes by a sulfamoyl benzoic acid LPA2 receptor-specific agonist. *Chemistry and Biology (in revision)*.
59. Umberger R, Thompson CL, Cashion AK, Kuhl D, Wan J, **Yates CR**, Muthiah MP, Meduri GU. Exaggerated systemic inflammation and subsequent development of health care associated infections in patients with sepsis. *American Journal of Critical Care (in revision)*
60. Zhang Q, Jiang Y, Toutouchian J, Pagadala J, Soderland D, Miller DD, **Yates CR**, and Steinle JJ. Protective effects of β 1/ β 2-adrenergic receptor agonist, Compound 49b, in a mouse model of oxygen-induced retinopathy. *Current Eye Research (submitted)*.
61. Deng W, Kimura Y, Gududuru V, Wu W, Balogh A, Szabo E, Emmons-Thompson K, **Yates CR**, Balazs L, Johnson LR, Miller DD, Strobos J, McCool WS, and Tigyi GJ. Mitigation of the hematopoietic and gastrointestinal acute radiation syndrome by Rx100 a small molecule analogue of lysophosphatidic acid. *Radiation Research (submitted)*
62. He H, Steinle JJ, Toutouchian JJ, Pagadala J, Miller DD, and **Yates CR**. KZ-41 prevents glucose-induced retinal endothelial cell apoptosis through an IGF-R1/PI3K dependent mechanism. *(in preparation)*

63. **Yates CR**, Toutouchian JJ, Kibe MW, Miller DD, Pagadala J, Steinle JJ, Haik BG, Wilson MW, and Morales-Tirado V. Immunomodulation of the $\alpha 4$ -paxillin ($\alpha 4$ -paxillin) signaling to enhance metastatic activity in metastatic uveal melanoma. (*in preparation*)
64. Toutouchian JJ, Makena PS, Pagadala J, Steinle JJ, Miller DD, and **Yates CR**. Genetic and pharmacological modulation of paxillin prevents VEGF-induced retinal neovascularization. (*in preparation*)

Book Chapter(s)

1. **Yates CR**. Biology. In: Gourley, DR, Gourley, GA (Eds.): A Study Guide for the PCAT Examination, 7th and 8th ed. Petersons, New York 2003-2005.
2. **Yates, CR**, Meibohm, B. Pharmacokinetics. In: Gourley, DR, Eoff, JC (Eds.): APhA's Complete Review for Pharmacy, 2nd-11th ed. Castle Connolly 2004-2014, ISBN 0-9723076-3, p. 107-131.
3. Dalton JT, **Yates CR**. Bioavailability of Drugs and Bioequivalence, Encyclopedia of Pharmaceutical Technology, 1:1, 164-175.
4. **Yates, CR**, Meibohm, B. Pharmacokinetics. In: Gourley, DR (Ed-in-Chief.): Foreign Equivalency Exam Book, 1st ed. APhA December 2009.

Research Abstracts

1. Loennechen T, **Yates CR**, Tai H-L, Fessing M, Krynetski EY, Evans WE. Identification of a new mutant allele of human thiopurine S-methyltransferase (TPMT). (presented at the 87th Annual Meeting of the American Association for Cancer Research, Washington, DC, April 1996).
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3. **Yates CR**, Kanangat S, Meduri U, Dalton JT. Effect of pro-inflammatory cytokines on glucocorticoid receptor transcripts. (presented at the Annual Meeting of the American Association of Pharmaceutical Scientists, San Francisco, CA, November 1998).
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