BIOGRAPHICAL SKETCH

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NAME	POSITION TITLE
Reginald F. Frye, Pharm.D., Ph.D.	Professor and Chair
eRA COMMONS USER NAME fryerf	

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)*

INSTITUTION AND LOCATION	DEGREE *(if applicable)*	YEAR(s)	FIELD OF STUDY
Oglethorpe University, Atlanta, GA.	B.S.	1986	Biology
Mercer University, Atlanta, GA.	Pharm.D.	1990	Clinical Pharmacy
University of Pittsburgh, Pittsburgh, PA.	Ph.D.	1995	Clinical Pharmaceutical Science

A. Personal Statement

I am a clinical pharmacologist by training and a licensed pharmacist. My research focuses on identifying factors that contribute to variability in drug response. In particular I have focused on drug metabolizing enzymes that contribute to pharmacokinetic variability observed with many drugs and natural products. My work in this area is currently supported by NCCAM, NIDCR and NIGMS. I serve on the editorial boards of Pharmacotherapy, The Open Drug Metabolism Journal, and Annals of Pharmacotherapy and as an ad-hoc reviewer for many journals, including Drug Metabolism and Disposition and Clinical Pharmacology and Therapeutics.

B. Positions and Honors.

Positions and Employment

1990-1991 Clinical Pharmacokinetics Fellow and Clinical Instructor, School of Pharmacy, University of North Carolina
1991-1993 American Society of Health Systems Pharmacists Fellow in Clinical Pharmacokinetics, Department of Pharmacy and Therapeutics, School of Pharmacy, University of Pittsburgh
1991-1995 Graduate Student, Department of Pharmacy and Therapeutics, School of Pharmacy, and Member, Center for Clinical Pharmacology, School of Medicine, University of Pittsburgh
1995-2002 Assistant Professor, Department of Pharmaceutical Sciences, School of Pharmacy, and Member, Center for Clinical Pharmacology, University of Pittsburgh
1998-2003 Director, Clinical Pharmacology Analytical Facility, Center for Clinical Pharmacology, School of Medicine, University of Pittsburgh
2001-2003 Member, Center for Pharmacogenetics, School of Pharmacy, University of Pittsburgh
2002-2003 Associate Professor with tenure, Department of Pharmaceutical Sciences, School of Pharmacy, and Member, Center for Clinical Pharmacology, University of Pittsburgh
2003-2008 Associate Director, Center for Pharmacogenomics, University of Florida
2003-2011 Graduate Coordinator, Department of Pharmacotherapy and Translational Research, College of Pharmacy, University of Florida
2003-2012 Associate Professor (with tenure), Departments of Pharmacotherapy and Translational Research (primary) and Pharmaceutics, College of Pharmacy, University of Florida
2012-present Professor and Chair, Department of Pharmacotherapy and Translational Research, College of Pharmacy, University of Florida

Other Experience and Professional Activities

NIH/NINDS, Translational Stroke SEP (ZNS1 SRB-G (48)), July 2010, (ZNS1 SRB-G (49)), April 2011.
NIH/NCCAM Mechanistic Research on CAM Natural Products SEP (ZAT1SM24), July 2011, (ZAT1SM24) March 2012.
NIH/NIGMS Program Project SEP (ZGM1 PPBC-7 (VD)), August 2011.

CSR/Risk, Prevention and Intervention for Addictions (RPIA) Study Section, Temporary member, June 2010, September 2010, February 2011, June 2011, September 2011, February 2012.

Honors

2011 – Teacher of the Year, University of Florida College of Pharmacy
2011 – Elected Fellow, American College of Clinical Pharmacy

C. Selected peer-reviewed publications (in chronological order).

Sampath C, Haug K, Thanei S, Hamburger M, Derendorf H, **Frye R**, Butterweck V. Pharmacokinetics of valerenic acid in rats after intravenous and oral administrations. Planta Med. 2012 Apr;78(6):575-81. Epub 2012 Mar 12. PMID: 22411722.

Joy MS, La M, Wang J, Bridges AS, Hu Y, Hogan SL, Frye RF, Blaisdell J, Goldstein JA, Dooley MA, Brouwer KLR, Falk RJ. Cyclophosphamide and 4-Hydroxycyclophosphamide Pharmacokinetics in Patients with Glomerulonephritis Secondary to Lupus and Small Vessel Vasculitis. Br J Clin Pharmacol 2012; 74(3):445-455. PMID: 22380717.

Le MT, **Frye RF**, Rivard CJ, Cheng J, McFann KK, Segal MS, Johnson RJ, Johnson JA. Effects of high fructose corn syrup and sucrose on the pharmacokinetics of fructose and acute metabolic responses in healthy subjects. Metabolism. 2012 May;61(5):641-51. PMID: 22152650.

Flaherty KT, Lathia C, **Frye RF**, Schuchter L, Redlinger M, Rosen M, O'Dwyer PJ. Interaction of sorafenib and cytochrome P450 isoenzymes in patients with advanced melanoma: A phase I/II pharmacokinetic interaction study. Cancer Chemother Pharmacol. 2011 Nov;68(5):1111-8. PMID: 21350850.

Shin J, Pauly DF, Pacanowskia MA, Langaee T, **Frye RF**, Johnson JA. Effect of CYP3A5 genotype on atorvastatin pharmacokinetics and interaction with clarithromycin. Pharmacother 2011;31:942-50. PMID: 21950641. PMCID: pending.

*Mohamed MF, **Frye RF**. Inhibitory Effects of commonly used herbal extracts on UGT1A4, 1A6, and 1A9 enzyme activities. Drug Metab Dispos 2011; 39(9):1522-8. PMID: 21632963. PMCID: pending.

*Mohamed MF, *Tseng T, **Frye RF**. Inhibitory effects of commonly used herbal extracts on UGT1A1 enzyme activity. Xenobiotica 2010 Oct;40(10):663-9. PMID: 20666626.

*Navare HA, **Frye RF**, Cooper-DeHoff RM, Shuster JJ, Hall K, Schmidt SOF, Turner ST, Johnson JA. Atenolol exposure and risk for development of adverse metabolic effects. Pharmacother Sep 2010;30:872-8. PMID: 20795842.

*Mohamed MF, **Frye RF**. Inhibition of intestinal and hepatic glucuronidation of mycophenolic acid by Ginkgo biloba extract and flavonoids. Drug Metab Dispos 2010; 38:270-5. PMID: 19889883.

Joy MS, **Frye RF**, Stubbert K, Falk RJ, Brouwer KR, Kharasch E. Use of enantiomeric bupropion and hydroxybupropion to assess CYP2B6 activity in glomerular kidney diseases. J Clin Pharmacol 2010 Jun;50(6):714-20. PMID: 20103693.

Nolin TD, **Frye RF**, Le P, Sadr H, Naud J, Leblond FA, Pichette V, Himmelfarb J. Kidney disease alters nonrenal drug clearance by inhibiting transporter function. J Am Soc Nephrol 2009; 20: 2269-76. PMID: 19696225.

*Alkharfy KM, Poloyac SM, Congiu M, Desmond PV, **Frye RF**. Effect of the acute phase response induced by endotoxin administration on the expression and activity of UGT isoforms in rats. Drug Metab Lett. 2008;2(4):248-55. PMID: 19356101.

*Pacanowski M, **Frye RF**, *Enogieru O, Schofield RS, Zineh I. Plasma coenzyme Q10 predicts lipid-lowering response to high-dose atorvastatin. J Clin Lipidol 2008; 2:289-97. PMID: 19649137.

*Shin J, Pauly DF, Johnson JA, **Frye RF**. Simplified method for determination of clarithromycin in human plasma using protein precipitation in a 96-well format and liquid chromatography tandem mass spectrometry. J Chromatogr B 2008; 871:130-4. PMID: 18639501.

*Mohamed MF, *Harvey SS, **Frye RF**. Determination of mycophenolic acid phenolic glucuronide in microsomal incubates using high performance liquid chromatography-tandem mass spectrometry. J Chromatogr B 2008; 870:251-4. PMID: 18602350.

Johnson JA, Moore MJ, Shin J, **Frye RF**. Fostering PharmD student interest in research through a formalized summer research training program. Am J Pharm Educ 2008;72(2):23.1-6. PMID: 18483591.

D. Research Support

Ongoing Research Support

R21 DE019267-01A1 (PI: BA Hastie) 7/1/2009 – 6/30/2013
NIH/NIDCR
Sex Differences in Acute Pain and Analgesic Responses: Psychosocial and Genetic Influences
The major goals of this project are to identify and characterize psychosocial, physiological and genetic factors that contribute to sex differences in pain perception, analgesia and side effects through use of a common acute clinical pain model. The ultimate goal is to reduce the increased burden of clinical pain in women through the development of tailored interventions designed to enhance quality of life.
Role: Co-investigator

RC2 GM092729 (PI: R. Kaddurah-Daouk) 9/30/2009 – 8/31/2012
NIH/NIGMS
Metabolomics Network for Drug Response Phenotype
The major goals of this project are to determine metabolic signatures for the antihypertensive drugs atenolol and hydrochlorothiazide and define sub-signatures that correlate with or predict drug response phenotypes.
Role: Co-investigator/University of Florida Consortium PI.

R21 AT005083-01 (PI: RF Frye) 9/30/2010 – 9/29/2012
NIH/NCCAM
Herb-Drug Glucuronidation Interactions
The major goals of this project are to determine in healthy volunteers the extent to which two commonly used herbal supplements affect the pharmacokinetics of drugs eliminated predominately by glucuronidation.
Role: Principal Investigator

U01 GM074492 (PI: JA Johnson) 8/1/2010 – 07/31/2015
NIH/NIGMS
Pharmacogenomic Evaluation of Antihypertensive Response (PEAR)
This study aims to advance hypertension pharmacogenomics, focusing defining replicated genetic determinants of the antihypertensive and adverse metabolic effects of thiazide diuretics and beta-blockers, along with the genetic determinants of long term cardiovascular outcomes and new-onset diabetes with these same drugs. We also seek to define the mechanistic underpinnings of the genetic associations
Role: Co-investigator

American Cancer Society (PI: BA. Hastie) 1/1/2011 – 12/31/2014
Mechanism Predicting Pain Trajectory among Cancer Patients
This study aims to identify collective influences of experimental pain sensitivity, genetic, pharmacologic, and psychosocial factors as risks for development of chronic pain secondary to thoracic surgery for lung cancer.