

BIOGRAPHICAL SKETCH

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NAME Julie A. Johnson		POSITION TITLE Distinguished Professor and Dean	
eRA COMMONS USER NAME (credential, e.g., agency login) jajohnson			
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
Ohio State University University of Texas Ohio State University	B.S. PharmD Fellowship	1980-1985 1985-1987 1987-1989	Pharmacy Clinical Pharmacy Pharmacokinetics/ Clinical Pharmacology

A. Personal Statement Dr Johnson is an expert in clinical pharmacology and pharmacogenomics, with particular focus on the pharmacogenomics of cardiovascular drugs, particularly beta-blockers, a drug class that she has been working with since the mid-1980's. She has an extensive record of funding and publication in pharmacogenomics. She is PI of the hypertension-focused research group within the NIH Pharmacogenomics Research Network, with work focused on short-term blood pressure and adverse metabolic responses, along with long-term adverse cardiovascular outcomes and new onset diabetes. She is the chair of the new NHGRI genomic medicine implementation network called IGNITE and is PI of a genomic medicine implementation grant, focused on pharmacogenomics, in that network. She has an extensive track record of training the next generation of scientists, including undergraduate students, for whom she has mentored a minimum of 3 per summer for the last 10 years, graduate students (8 awarded PhD as chair of PhD committee), and postdoctoral trainees (20 total). Most of her PhD and post-doctoral trainees have pursued research careers in academia, with a large number who have been successfully funded, promoted and tenured. Her former trainees include numerous tenured faculty, full professors, a department chair, and the Director of the Office of Clinical Pharmacology, Center for Drug Evaluation and Research, US Food and Drug Administration. Since 2009 her trainees have authored 20 first-author publications, some of which are highlighted under publications.

B. Positions and Honors**Professional Experience**

1989-93 Assistant Professor of Clinical Pharmacy, University of Tennessee
 1993-98 Associate Professor of Clinical Pharmacy (tenured), University of Tennessee
 1998-2001 Associate Professor of Pharmacy Practice (tenured), University of Florida College of Pharmacy
 1999-2001 Associate Professor of Medicine (Cardiology), University of Florida College of Medicine
 2001-2011 Professor of Pharmacotherapy and Translational Research (tenured), and Professor of Medicine (Cardiology), University of Florida Colleges of Pharmacy and Medicine
 2001-2013 Director, University of Florida Center for Pharmacogenomics
 2002-2011 Chair, Department of Pharmacotherapy and Translational Research, University of Florida
 2004-2013 V. Ravi Chandran Professor of Pharmaceutical Sciences – endowed professorship
 2011-present Distinguished Professor of Pharmacy (Pharmacotherapy and Translational Medicine), tenured, and Medicine (Cardiovascular Medicine), Colleges of Pharmacy and Medicine, UF
 2011-present Director, University of Florida Health Personalized Medicine Program
 2013-present Dean, University of Florida College of Pharmacy

Professional Awards and Honors (selected)

Inducted Fellow, American College of Clinical Pharmacy (1996); University of Tennessee Student Government Association Excellence in Teaching Award (1996); Ohio State University William Oxley Thompson Alumni

Award, for early career achievement (1997); Outstanding Faculty Award, University of Florida Working Professional Pharm.D. Program (2001); Leon I. Goldberg Young Investigator Award, American Society for Clinical Pharmacology and Therapeutics (2004); University of Florida Research Foundation Professorship Award (2004-2006); V. Ravi Chandran Professor of Pharmaceutical Sciences – endowed professorship (2004-present); Ohio State University College of Pharmacy Distinguished Alumni Award (2005); University of Florida Faculty Achievement Recognition Award (2007); Paul Dawson Biotechnology Award, American Association of Colleges of Pharmacy (2007), Robert G. Leonard Memorial Lecture Award, Texas Society of Health System Pharmacists (2008), Therapeutic Frontiers Award, American College of Clinical Pharmacy (ACCP) (2009); inducted Fellow, American Heart Association Council on Functional Genomics and Translational Biology (2009); Russell Miller Award for Contribution to the Literature, ACCP (2010); Distinguished Investigator Award, ACCP Cardiology Practice and Research Network (2010); American Association of College of Pharmacy Annual meeting Keynote Scientific Lecture (2013) and recipient of numerous named lectureship awards at other universities.

Professional Appointments and Activities (selected)

FDA Nonprescription Drugs Advisory Committee Member, 2000-2004

NIH/NHLBI Pediatric Heart Disease Clinical Research Network, Protocol Review Committee member, 2002-2013

NIH/NHLBI Heart Failure Network Data and Safety Monitoring Board member, 2008-2013

NIH/NHLBI – Special Emphasis Panel member, February 2002, May 2002, April 2004, April 2013

NIH/NIGMS – National Advisory Council, ad hoc member, January 2006

NIH CSR – XNDA Study Section chartered member, July 2007 to June 2012 (ad hoc Feb & Oct 2006)

NIH/NHLBI workshops: Workshop on Genetic Determinants of Response to Drug Therapies in Heart Failure, speaker, Sept 2002; Working Group on Polymorphisms of the β -adrenergic Receptor Gene: Implications for the Pharmacotherapy of Asthma, participant/speaker, June 2003; Behavioral Genetics and Cardiovascular Disease Working Group; participant/speaker, August 2005; Genotype-guided warfarin trial Advisory Group member, November 2006.

NIH/NHLBI Clarification of Optimal Anticoagulation through Genetics (COAG) Trial – Protocol Planning Committee, Steering Committee, Executive Committee Vice Chair, PI of local site; 2008-present.

American Heart Association - Southern and Ohio Valley Consortium Grant Review Committee 3A. Member - 2004; Co-chair - 2005; Committee 3B: Chair – 2006, 2007; Florida/Puerto Rico Affiliate Research Committee, 2004-2006; Research Consortium II Steering Committee member, 2007 to 2009, 2009 to 2013; International Congress on Genetics and Genomics of Cardiovascular Disease, co-chair, 2009.

AHA Functional Genomics and Translational Biology Working Group – Steering Committee member, 2006-2012; Program Committee, Vice-Chair 2006-2008, Chair, 2009-2011.

Centers for Disease Control -Evaluation of Genomic Applications in Practice and Prevention Stakeholder's Group, 2008.

Editorial Boards: Scientific Editor – *Pharmacotherapy*; Editorial Boards – *Pharmacogenetics and Genomics*; *Clinical Pharmacology and Therapeutics*; *Journal of the American Heart Association*; *Personalized Medicine*.

C. Selected relevant peer-reviewed publications most relevant to the current application (from over 200 total) * Indicates trainees of Dr. Johnson at the time of manuscript authorship

1. Klein TE, Altman RB, Eriksson N, Gage BF, Kimmel SE, Lee MTM, Limdi NA, Page D, Roden DM, Wagner MJ, Caldwell MD, **Johnson JA** for the International Warfarin Pharmacogenetics Consortium. Warfarin dosing using clinical and pharmacogenetic data. N Engl J Med 2009;360:753-64. PMID: 19228618; NIHMSID: 106202.
2. Niu Y*, Gong Y, Langae TY, Moss JI, Beitelshes AL, Rhonda M. Cooper-Dehoff RM, Pepine CJ, **Johnson JA** for INVEST investigators. DNA variations in voltage-gated calcium channel beta 2 subunit (*CACNB2*) gene and their association with adverse cardiovascular outcomes in the International Verapamil SR-trandolapril Study-GENetic Substudy (INVEST-GENES). Circulation Cardiovasc Genet 2010;3:548-555. PMID: 21156931
3. Price ET*, Pacanowski MA*, Martin MA*, Cooper-DeHoff RM, Pepine CJ, Zineh I, **Johnson JA**. Liver X receptor alpha gene polymorphisms and variable cardiovascular outcomes in patients treated with

- antihypertensive therapy: Results from the INVEST-GENES. Pharmacogenetic Genom 2011;21:333-340. PMID 21562465. PMCID3093636.
4. Duarte JD*, Turner ST, Tran BA*, Chapman AB, Bailey KR, Gong Y, Gums JG, Langaee TY, Beitelshes AL, Cooper-DeHoff RM, Boerwinkle E, **Johnson JA**. Association of Chromosome 12 locus with antihypertensive response to hydrochlorothiazide may involve differential *YEATS4* expression. Pharmacogenomics J 2012; ePub Feb 12. PMID: 22350108.
 5. 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;61:641-51. ePub Dec 5 2011. PMID: 22152650.
 6. Karnes JH*, McDonough CW*, Gong Y, Vo TT, Langaee TY, Chapman AB, Gums JG, Beitelshes AL, Bailey KR, Del-Aguila J, Boerwinkle EA, Pepine CJ, Turner ST, **Johnson JA**, Cooper-DeHoff RM. Association of *KCNJ1* variation with change in fasting glucose and new onset diabetes during HCTZ treatment. Pharmacogenomics J 2012 ePub Aug 21. PMID 22907731.
 7. Vandell AG*, Lobbmeyer MT*, Gawronski BT*, Langaee TY, Gong Y, Gums JG, Beitelshes AL, Turner ST, Chapman AB, Cooper-DeHoff RM, Bailey KR, Boerwinkle E, Pepine CJ, Liggett SB, **Johnson JA**. G protein receptor kinase (GRK4) polymorphisms: beta-blocker pharmacogenetics and treatment related outcomes in hypertension. Hypertension 2012;60:957-964. ePub Sept 4. PMID: 22949529. PMCID: PMC3462355.
 8. McDonough CW*, Burbage SE*, Duarte JD*, Gong Y, Langaee TY, Turner ST, Gums JG, Chapman AB, Bailey KR, Beitelshes AL, Boerwinkle E, Pepine CJ, Cooper-DeHoff RM, Johnson JA. Association of variants in *NEDD4L* with blood pressure response and adverse cardiovascular outcomes in hypertensive patients treated with thiazide diuretics. J Hypertens 2013; Apr;31(4):698-704. ePub Jan 30. PMID 23353631. NIHMSID #481353.
 9. Shahin MH*, Cavallari LH, Perera MA, Khalifa SI, Misher A, Langaee T, Patel S, Perry K, Meltzer DO, McLeod HL, **Johnson JA**. VKORC1 Asp36Tyr geographic distribution and its impact on warfarin dose requirement in Egyptians. Thromb Haemost 2013; ePub Mar 21. PMID 23571513. NIHMSID #484345.
 10. McDonough CW*, Gong Y, Padmanabhan S, Burkley B, Langaee TY, Melander O, Pepine CJ, Dominiczak AF, Cooper-DeHoff RM, **Johnson JA**. Pharmacogenomic association of non-synonymous SNPs in *SIGLEC12*, *A1BG*, and the Selectin Region and Cardiovascular Outcomes. Hypertension 2013;62:48-54. ePub May 20. PMID 23690342. PMCID: PMC3686553
 11. Turner ST*, Boerwinkle E, O'Connell JR, Bailey KR, Gong Y, Chapman AB, McDonough CW, Beitelshes AL, Schwartz GL, Gums JG, Padmanabhan S, Hiltunen TP, Citterio L, Donner KM, Hedner T, Lanzani C, Melander O, Saarela J, Ripatti S, Wahlstrand B, Manunta P, Kontula K, Dominiczak AF, Cooper-DeHoff RM, **Johnson JA**. Genomic association analysis of common variants influencing antihypertensive response to hydrochlorothiazide. Hypertension 2013;62:391-7. ePub June 10. PMID 23753411. PMCID3780966
 12. Perera MA, Cavallari LH, Limdi NA, Gamazon ER, Konkashbaev A, Daneshjou R, Pluzhnikov A, Crawford DC, Wang J, Liu N, Tatonetti N, Bourgeois S, Takahashi H, Bradford Y, Burkley BM, Desnick RJ, Halperin JL, Khalifa SI, Langaee TY, Lubitz SA, Nutescu EA, Oetjens M, Shahin MH*, Patel SR, Sagreiya H, Tector M, Weck KE, Rieder MJ, Scott SA, Wu AHB, Burmester JK, Deloukas P, Wagner MJ, Mushiroda T, Kubo M, Roden DM, Cox NJ, Altman RB, Klein TE, Nakamura Y, **Johnson JA**. Genetic variants associated with warfarin dose in African-American individuals: a genome-wide association study. Lancet 2013;382:790-6. ePub June 5. PMID: 23755828. PMCID37959580.
 13. Vandell AG*, McDonough* CW, Gong Y, Langaee TY, Lucas AM, Chapman AB, Gums JG, Beitelshes AL, Bailey KR, Johnson RJ, Boerwinkle E, Turner ST, Cooper-DeHoff RM, **Johnson JA**. Hydrochlorothiazide-Induced Hyperuricemia in the Pharmacogenomic Evaluation of Antihypertensive Responses (PEAR) Study. J Intern Med 2014; ePub Feb 12. PMID 24612202. NIHMSID# 566087.
 14. Kimmel SE, French B, Kasner SE, **Johnson JA**, Anderson JL, Gage BF, Rosenberg YD, Eby CS, Madigan RA, McBane RB, Abdel-Rahman SZ, Stevens SM, Yale S, Mohler ER, Fang MC, Shah V, Horenstein RB, Limdi NA, Muldowney JAS, Gujral J, Delafontaine P, Desnick RJ, Ortel TL, Billet HH, Pendleton RC, Geller NL, Halperin JL, Goldhaber SZ, Caldwell MD, Califf RM, Ellenberg JH, on behalf of the COAG Investigators. A pharmacogenetic versus a clinical algorithm for warfarin dosing. N Engl J Med 2013;369:2283-93. ePub Nov 19. PMID 24251361
 15. Hamadeh IS*, Langaee TY, Dwevedi R*, Garcia S*, Burkley BM, Chapman AAB, Gums JG, Turner ST, Gong Y, Cooper-DeHoff RM, **Johnson JA**. Impact of *CYP2D6* polymorphisms on clinical efficacy and tolerability of metoprolol tartrate. Clin Pharmacol Ther 2014; ePub Mar 17. PMID 24637943. NIHMSID# 574012

D. Research support
Ongoing Research Support

U01 GM074492 (PI: J.A. Johnson)
NIH/NIGMS

August 2005 – July 2015

“Pharmacogenomic Evaluation of Antihypertensive Responses (PEAR)”

The aims of this study are to: identify genetic predictors of the antihypertensive and adverse metabolic responses, genetic predictors of adverse cardiovascular outcomes and new onset diabetes, and to define the molecular mechanisms underlying the genetic effects.

U01 HG007269 (PI: J.A. Johnson)

May 2013 to April 2017

NIH, National Human Genome Research Institute

“Genomic Medicine Implementation: The Personalized Medicine Program”

This grant supports genomic medicine implementation. Its aims include an expansion of the UF Health Personalized Medicine Program, outreach to initiate genomic medicine implementation at two cardiology practice groups within Orlando Health, and at community hospitals that are part of the Florida State University Medical School network and to develop innovative educational programming for health sciences students, practitioners and patients.

R01 NS073346 (PIs: Johnson JA, Benavente OR, Shuldiner AR)
NIH/NINDS

March 2011 to February 2015
NCE

“Secondary Prevention of Subcortical Stroke Prevention (SPS3) Genetic Substudy”

The purpose of this grant is to support the creation of a genetics databank within the SPS3 clinical trial, which is a 2x2 factorial design trial to test the efficacy (secondary stroke prevention) of clopidogrel versus placebo, and to test usual versus aggressive blood pressure control, in patients with previous subcortical stroke.

U01 GM092655 (PI: W Sadee)

July 2010 to June 2015

NIH National Institute for General Medical Sciences,

“Expression Genetics in Drug Therapy”

The purpose of this program is to identify the role of differential expression genetics as a source of genetic variability in drug response. Our role in the project is to test genetic associations of drug response in antihypertensive drug response datasets at the University of Florida

T32 HL083810 (PI: C. Baylis)
expected summer 2013)

April 2007 to March 2012 (renewal funding

NIH/NHLBI

“Multidisciplinary Training Program in Hypertension

The is a training grant to support pre- and post-doctoral fellows in research training in hypertension.

Role: Co-program director

Recently completed

NIH/NHLBI Clarification of Optimal Anticoagulation through Genetics
(UF site PI: J.A. Johnson)

January 2009-July 2013

This is a randomized controlled multicenter clinical trial aimed to test whether genotyped-guided initial warfarin dosing is superior to initial dosing with a clinical algorithm.

R01 HL090957 (PI: Pepine, CJ)

September 2008 – June 2012

NIH, National Heart Lung Blood Institute

“Women’s Ischemia Syndrome Evaluation (WISE) Coronary Vascular Dysfunction”