BIOGRAPHICAL SKETCH

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NAME Straka, Robert James	POSITION TITLE Professor, Experimental and Clinical Pharmacology
eRA COMMONS USER NAME RJStraka	

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

INSTITUTION AND LOCATION	DEGREE *(if applicable)*	MM/YY	FIELD OF STUDY
McMaster University, Hamilton, Canada		05/80	Biology
University of Toronto, Toronto, Canada	BSc.	0583	Pharmacy
University of Minnesota, Minneapolis, MN	Pharm.D.	05/85	Pharmacy
University of Tennessee, Memphis, TN	Fellowship	06/87	Cardiovascular Pharmacy & Pharmacokinetics
Univ. of Florida, College of Pharmacy, Center for Pharmacogenomics, Visiting Assoc. Prof. (sabbatical)	NA	09/06-08/07	Cardiovascular Pharmacogenetics

A. Personal Statement.

My research interests are focused on optimizing the use of therapeutic agents for the prevention and treatment of patients with cardiovascular disease by investigating pharmacogenetic, pharmacokinetic and pharmacodynamic sources of variability in response. Although primarily interested in cardiovascular therapeutics, my interests have also included agents for the use of conditions other than cardiovascular disease. Research related to ethnicity based sources of drug response variability is also of interest to our research team. Knowledge of sources of variability in drug response may be expected to optimize the achievement of therapeutic targets and/or provide guidance as to the ideal patient candidates to receive select drug therapies -- both common goals to all those interested in optimizing clinical outcomes.

B. Positions and Honors.

Positions and Employment

1985-1987 Research Fellow, University of Tennessee, Memphis, TN, Cardiovascular Pharmacokinetics

1987-1996 Assistant Professor (Non Tenure Track), University of Minnesota, College of Pharmacy, Pharmacy Practice

1996-1997 Assistant Professor (Tenure Track), University of Minnesota, College of Pharmacy,

1997-2008 Associate Professor (Tenured), University Of Minnesota, College of Pharmacy

2000-Present Full Member (2007), Graduate Faculty Experimental and Clinical Pharmacology, University of Minnesota, College of Pharmacy, Experimental and Clinical Pharmacology

2006-2007 Associate Professor (Visiting), University of Florida, College of Pharmacy, Center for Pharmacogenetics

2008-Present Professor (Tenured), University Of Minnesota, College of Pharmacy, Experimental and Clinical Pharmacology Department

Other Experience and Professional Memberships

1987-2000 Clinical Pharmacist in Cardiovascular Therapeutics, Regions Hospital, HealthPartners Inc.
1985-Present American College of Clinical Pharmacy
1991-Present American Society for Clinical Pharmacology and Therapeutics, Full Member
1999-Present American Heart Association, Clinical Cardiology Council #000105587467

Honors

1994, 97, 01 Doctor of Pharmacy, Teacher of the Year – U of M, College of Pharmacy
2003-Present Doctor of Pharmacy, Teacher of the Semester (spring 2003), Teacher of the Year – U of M Duluth Campus (spring 2004 and 2009), Twin Cities Campus (2005, 2006, 2011)
2001 Fellow, American College of Clinical Pharmacy
2006-2010 Chair, Cardiovascular-Pulmonary-Renal (CPR) Scientific Section for the American Society of Clinical Pharmacology and Therapeutics

C. Selected peer-reviewed publications.

Most Relevant to the Current Application (in chronological order)

Lai CQ, Arnett DK, Corella D, **Straka, RJ**, Tsai MY, Peacock JM, Adiconis X, Parnell LD, Hixon JE, Province MA, Ordovas JM. Fenofibrate effect on triglyceride and postprandial response of apolipoprotein A5 variants: The GOLDN study. Arterioscler Thromb Vasc Biol. 2007;27(6):1417-25. PMID: 17431185

Smith JA, Arnett DK, Kelly RJ, Ordovas JM, Sun YV, Hopkins PN, Hixson JE, **Straka RJ**, Peacock JM, Kardia SLR. The genetic architecture of fasting plasma triglyceride response to fenofibrate treatment. Euro J Hum Gen. 2008;16:603-613. PMID: 18212815. PMCID: 2546577

Liu Y, Ordovas JM, Gao G. Province M. **Straka RJ**, Tsai MY, Lai CQ, Zhang K, Borecki I, Hixson JE, Allison DB, Arnett DK The SCARB1 gene is associated with lipid response to dietary and pharmacological interventions Journal of Human Genetics 2008;53:709-717. PMID: 18542840

Liu Y, Ordovas JM, Gao G, Province M, **Straka RJ**, Tsai MY, Lai CQ, Zhang K, Borecki I, Hixson JE, Allison DB, Arnett DK. Pharmacogenetic association of the APOA1/C3/A4/A5 gene cluster and lipid responses to fenofibrate: the Genetics of Lipid-Lowering Drugs and Diet Network study. Pharmacogenet Genomics. 2009;19:161-169. PMID: 19057464. PMCID: 2733171

Tojcic J, Benoit-Biancamano MO, Court MH, **Straka RJ**, Caron P, Guillemette C. In vitro glucuronidation of fenofibric acid by human UGTs and liver microsomes. Drug Metabolism and Disposition 2009;11:2236-2243. PMID: 19661212. PMCID: 2774983

Tsai MY, Ordovas JM, Li N, **Straka RJ**, Hanson NQ, Arends VL, Arnett D. Effect of fenofibrate therapy and ABCA1 polymorphisms on high-density lipoprotein subclasses in the Genetics of Lipid Lowering Drugs and Diet Network. Mol Genet Metab. 2010 Jun;100(2):118-22. PMID: 20346718

Irvin MR, Kabagambe EK, Tiwari HK, Parnell LD, **Straka RJ**, Tsai MY, Ordovas JM Arnett DK. Apolipoprotein E Polymorphisms and Postprandial Triglyceridemia before and after Fenofibrate Treatment in the GOLDN Study. Circ Cardiovasc Gen. 2010 Oct 1;3(5):462-7. PMID 20729559

Feitosa MF, An P, Ordovas JM, Ketkar S, **Straka, RJ**, Arnett DK Borecki IB. Association of gene variants with lipid levels in response to fenofibrate is influenced by metabolic syndrome status. Atherosclerosis. 2011 Apr;215(2):435-439 ahead of print. PMID 21324458

Trottier J, Caron P, **Straka, RJ**, Barbier O. Profile of Serum Bile Acids in Noncholestatic Volunteers: Gender-Related Differences in Response to Fenofibrate. Clinical Pharmacology & Therapeutics. 2011 August 90 (2):279-286 PMID 21716269

Additional recent publications of importance to the field (in chronological order)

Kaila N, **Straka RJ**, Brundage RC. Mixture Models and Subpopulation Classification: A Pharmacokinetic Simulation Study and Application to Metoprolol CYP2D6 Phenotype. Journal of Pharmacokinetics and Pharmacodynamics. 2007;34:141-155. PMID: 17053980

Perez-Martinez P, Yiannakouris N, Lopez-Miranda J, Arnett D, Tsai M, Galan E, **Straka R**, Delgado-Lista J, Province M, Ruano J, Borecki I, Hixson J, Garcia-Bailo B, Perez-Jimenez F, Ordovas JM. Postprandial triacylglycerol metabolism is modified by the presence of genetic variation at the perilipin (PLIN) locus in 2 white populations American Journal of Clinical Nutrition 2008;87:744-753. PMID: 18326614

Perez-Martinez P, Corella D, Shen J, Arnett DK, Yiannakouris N, Tai ES, Orho-Melander M, Tucker KL, Tsai M, **Straka RJ**, Province M, Kai CS, Perez-Jimenez F, Lai CQ, Lopez-Miranda J, Guillen M, Parnell LD, Borecki I, Kathiresan S, Ordovas JM. Association between glucokinase regulatory protein (GCKR) and apolipoprotein A5 (APOA5) gene polymorphisms and triacylglycerol concentrations in fasting, postprandial, and fenofibrate-treated states. Am J Clin Nutr. 2009;89:391-399. PMID: 19056598. PMCID: 2647710

Junyent M, Lee Y, Smith C, Arnett DK, Tsai MY, Kabagambe EK, **Straka RJ**, Province M, An P, Lai CQ, Parnell LD, Shen J, Borecki I, Ordovas JM. The effect of a novel intergenic polymorphism (rs11774572) on HDL cholesterol concentrations depends on TaqIB polymorphism in the cholesterol ester transfer protein gene. Journal of Nutrition, Metabolism and Cardiovascular Diseases 2010;20(1):34-40. PMID: 19364639. PMCID: 2817943

Straka RJ, Liu LZ, Girase PS, DeLorenzo A, Chapman RH. Incremental cardiovascular costs and resource use associated with diabetes: an assessment of 29,863 patients in the US managed-care setting. Cardiovascular Diabetology. 2009 Sep 26;8:53. PMID: 19781099

Tsai AK, Steffen BT, Ordovas JM, **Straka RJ**, Zhou X, Hanson NQ, Arnett D, Tsai MY. Short-term fenofibrate treatment reduces elevated plasma Lp-PLA(2) mass and sVCAM-1 levels in a subcohort of hypertriglyceridemic GOLDN participants. Translational Research. 2011 Aug;158(2): 99-105 Epub 2011 Feb 26

D. Research Support.

Ongoing Research Support

Grant No. (1R21DK084560-01) Kabagambe EK (PI) 09/30/2009-007/31/2012
NIH NIDDK
Pretreatment genotyping at APOA5 and GCKR loci and response to fenofibrate therapy
The goal of this project is to demonstrate potential clinical role of pretreatment genotyping for key loci modulating drug response to the lipid lowering drug fenofibrate.
Role: Co-I, oversight of clinical pharmacology related issues pertaining to this study and the interpretation of data generated from its conduct.

Grant No. (PHDR-2008-005) Straka RJ (PI) 10/01/08-06/30/12
Program in Health Disparities Research
Pharmacogenomic Investigations in the Hmong Community
The goal of this project is to generate pilot data regarding the prevalence of key genetic variations associated with drug response and cardiovascular disease risk factors.
Role: Co-PI, oversight, genotyping analysis, and interpretation.

Completed Research Support

Grant No. (0750145Z) Straka RJ (PI) 07/01/07-06/30/09- no cost extension-06/30/10
American Heart Association
The Impact of Genetic Determinants of Fenofibrate's Pharmacokinetics on Lipid Response
The goal of this project is to identify the role of drug metabolizing genes in determining response to lipid lowering drug (fenofibrate).
Role: PI, oversight, genotyping analysis, and interpretation.

Completed Research Support (continued)

Grant No. PHDR 2007-005 Straka RJ, Culhane-Perra K (Co-PIs) 07/01/07-07/31/08
Planning Grant for Health Disparities, University of Minnesota, Academic Health Center
Community Partnerships to Prepare for Pharmacogenomic Studies in the Hmong Community
The goal of this project is to identify the role of genes which modulate drug disposition and expression may have on lipid lowering drug response in clinical human samples.
Role: Co-PI, oversight of genotyping plans and scientific support re: patient recruitment for genetic studies in the Hmong Community.

Grant No. (NA) Straka RJ (PI) 07/01/06-06/30/08
American College of Clinical Pharmacology
Pharmacogenetics of Drug Transporters and Triglyceride Response
The goal of this project is to identify the role of drug transporting genes (not drug metabolizing genes) in determining lipid lowering drug response based on the GOLDN study findings.
Role: PI, oversight, genotyping analysis, and interpretation.

7 U0 HL072524-03 Arnett D (PI) 09/30/02-7/15/07
NIH NHLBI
Genetic and Environmental Determinants of Triglycerides (GOLDN Study)
The goal of this proposal is to characterize the genetic basis of the variable response of triglycerides (TGs) to two environmental contexts, one that raises TGs (dietary fat) and one that lowers TGs (fenofibrate administration).
Role: PI for University of MN, Subcontract for University of Alabama (overall PI: Arnett).

Grant No. 19059 Straka RJ (PI) 01/02/02-01/06/04
University of Minnesota Grant-in-Aid
Correlating Phenotypic and Genotypic Expression of N-acetyltransferase- (NAT-2) in the Hmong
The goal of this study is to confirm or refute the previously reported predominance of NAT-2 slow acetylators in the Hmong population through genotyping.
Role: PI, oversight, genotype and phenotype analysis and interpretation.