

CURRICULUM VITAE

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Publications (published refereed papers 2012 - 2019)

- 14) Michaud V, Ogburn E, Kreutz Y, Thong N, Aregbe AO., Quigg TC., Epstein N, Callaghan JT., Flockhart DA., Desta Z. Induction of CYP2C19 and CYP3A activities following repeated administration of efavirenz in human. Clin Pharmacol Ther. Mar 2012; 91 (3):475-82.
- 15) Michaud V, Bar-Magen T, Turgeon J, Desta Z, Flockhart D, Wainberg M. The dual role of pharmacogenetics in HIV treatment: Mutations and polymorphisms regulating antiretroviral drug resistance and disposition. Pharmacol Rev.2012; 64 (3):803-33.
- 16) Michaud V, Turgeon J. Domperidone and sudden cardiac death: how much longer should we wait? J Cardiovasc Pharmacol. 2013 Mar; 61(3):215-7.
- 17) Skrobik Y, Leger C, Cossette M, Michaud V, Turgeon J. Factors Predisposing to Coma and Delirium: Fentanyl and Midazolam Exposure, *CYP3A5*, *ABCB1* and *ABCG2* Genetic Polymorphisms, and Inflammatory Factors. Cri Care Med. 2013 Apr; 41(4):999-1008.
- 18) Michaud V, Kreutz Y, Skaar T, Ogburn E, Thong N, Flockhart DA., Desta Z. Induction of omeprazole metabolism by efavirenz as a function of *CYP2C19* genotype. Pharmacogenomics J 2013; Apr30: 1-9 (Epub).
- 19) Madadi P, Amstutz U, Rieder M, Ito S, Fung V, Hwang S, Turgeon J, Michaud V, Koren G, Carleton BC; CPNDS Clinical Recommendations Group. Clinical practice guideline: CYP2D6 genotyping for safe and efficacious codeine therapy. J Popul Ther Clin Pharmacol 2013; 20(3):e369-96.
- 20) Lu J, Michaud V, Guilarta Moya L, Gaudette F, Leung YH, Turgeon J. Effects of β -blockers and tricyclic antidepressants on the activity of human organic anion transporting polypeptide 1A2 (OATP1A2). JPET 2015; 352(3):552-8.

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- 22) Gaudette F, Sirhan-Daneau A, St-Onge M, Turgeon J, Michaud V. Development of a sensitive method for the determination of oxycodone and its major metabolites noroxycodone and oxymorphone in human plasma by liquid chromatography-tandem mass spectrometry. *J Chromatogr B Analyt Technol Biomed Life Sci*. 2016 Jan 1;1008:174-80
- 23) Bouchard P, Bilodeau S, Alain K, Vadnais B, Franco M, Turgeon J, Michaud V. Evaluation of limited sampling methods for oral busulfan pharmacokinetic monitoring in adult patients undergoing hematopoietic stem cell transplantation. *Ther Drug Monit*. 2016; 38(3):414-8.
- 24) Turgeon J, Michaud V. Clinical decision support systems: Great promises for better management of patients' drug therapy. *Expert Opin Drug Metab Toxicol*. 2016; 72 (8):925-31.
- 25) Huguet J, Lu J, Gaudette F, Chiasson JL, Hamet P, Michaud V, Turgeon J. No Effects of pantoprazole on the pharmacokinetics of rosuvastatin in healthy subjects. *Eur J Pharmacol* 2016; 72(8):925-31.
- 26) Lu J, Grangeon A, Gaudette F, Turgeon J, Michaud V. Effects of tricyclic compounds on the transport of anti-migraine triptans through human organic anion transporting polypeptide 1A2 (OATP1A2). *J Pharmacokinet Exp Ther* 2016; 1(2):1-11.
- 27) Grangeon A, Gravel S, Gaudette F, Turgeon J, Michaud V. Highly sensitive LC-MS/MS methods for the determination of seven human CYP450 activities using small oral doses of probe-drugs in human. *J Chromatogr B Analyt Technol Biomed Life Sci*. 2017; 1040:144-58.
- 28) Turgeon J, Michaud V, Steffen L. The dangers of polypharmacy in elderly patients. Letter to the Editor: *Polypharmacy in the Elderly- when good drugs lead to bad outcomes. A teachable moment (April 24, 2017; E1)*. *JAMA Internal Med* 2017;177(10):1544
- 29) Maximos S, Chamoun M, Gravel S, Turgeon J, Michaud V. Tissue Specific Modulation of cyp2c and cyp3a mRNA Levels and Activities by Diet-Induced Obesity in Mice: The Impact of Type 2 Diabetes on Drug Metabolizing Enzymes in Liver and Extra-Hepatic Tissues. *Pharmaceutics* 2017 Sep 26;9(4).
- 30) Leung YH, Turgeon J, Michaud V. Study of Statin- and Loratadine-Induced Muscle Pain Mechanisms Using Human Skeletal Muscle Cells. *Pharmaceutics* 2017 Oct 10;9(4).
- 31) Huguet J, Gaudette F, Michaud V, Turgeon J. Development and validation of probe drug cocktails for the characterization of CYP450-mediated metabolism by human heart microsomes. *Xenobiotica* 2018 Feb 16:1-46.

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- 32) Gravel S, Chiasson JL, Dallaire S, Turgeon J, Michaud V. Evaluating the impact of type 2 diabetes mellitus on CYP450 metabolic activities: protocol for a case-control pharmacokinetic study. *BMJ Open* 2018 Feb 8;8(2).
- 33) Leung YH, Lu J, Belanger F, Turgeon J, Michaud V. Effects of a series of acidic drugs on L-lactic acid transport by the monocarboxylate transporters MCT1 and MCT4. *Current Pharmaceutical Biotechnology*. 2018;18(14):1141-50.
- 34) Cicali B, Michaud V, Knowlton HK, and Turgeon J. 2018. Application of a novel medication-related risk stratification strategy to a self-funded employer populations. *Benefits Quarterly*. second quarter 2018:34; 49-55.
- 35) Gaudette F, Hamadjida A, Bédard D, Nuara SG, Gourdon JC, Michaud V, Beaudry F, Huot P. Development of a selective and sensitive high-performance liquid chromatography-tandem mass spectrometry assay to support pharmacokinetics studies of LY-487,379 in rat and marmoset. *J Chromatogr B Analyt Technol Biomed Life Sci* 2018: 1093-94:1-7.
- 36) Huguet J, Gaudette F, Michaud V, Turgeon J. Development and validation of probe drug cocktails for the characterization of CYP450-mediated metabolism by human heart microsomes. *Xenobiotica* 2019;49(2):187-99.
- 37) Clermont V, Grangeon A, Barama A, Lallier M, Malaise J, Turgeon J, Michaud V. Activity and mRNA expression levels of selected cytochrome P450s in various sections of the human small intestine. *Br J Clin Pharmacol*. Accepted 2019

Submitted refereed papers

- 1) Grangeon A, Clermont V, Barama A, Gaudette F, Turgeon J, Michaud V. Development and validation of an absolute protein assay for the simultaneous quantification of fourteen CYP450s in human microsomes by LC-MS/MS-based targeted proteomics. *J Pharmaceut Biomed Analyt* Submitted Jan 2019.
- 2) Gravel S, Chiasson JL, Turgeon J, Grangeon A, Michaud V. Modulation of CYP450 activities in patients with type 2 diabetes. *Clin Pharmacol Ther*. Submitted Jan 2019.
- 3) Gravel S, Gaudette F, Chiasson JL, Turgeon J, Michaud V. Use of 4 β -hydroxycholesterol plasma concentrations as an endogenous biomarker of CYP3A activity: Clinical validation in patients with Type 2 diabetes. *Clin Pharmacol Ther*. Submitted Feb 2019.

- 4) Yeung YF, Hao W, Zinquon N, El-Sakkary M, Landry S, Michaud V, Ghazal N, Gaudette F, Hetu P-O, Lebouche B, Sheehan N. Atazanavir, Darunavir and Tenofovir Concentrations in Subjects with HIV and Type 2 diabetes mellitus – a pilot study. JAC. Submitted.

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- 61) Huguet J, Michaud V, Gaudette F, Turgeon J. CYP450 functional activities in human heart microsomes. American Society for Clinical Pharmacology and Therapeutics Meeting, Washington, March 2012; PI-31:pS19.
- 62) Michaud V, Kreutz Y, Skaar T, Ogburn E, Thong N, Flockhart D, Desta Z. Genotype-based estimation of CYP2C19 contribution to the elimination of omeprazole in healthy subjects. American Society for Clinical Pharmacology and Therapeutics Meeting, Washington, March 2012; PII-34:pS64.
- 63) Michaud V, Ogburn E, Thong N, Desta Z. Evaluation of the use of single plasma samples for determination of omeprazole hydroxylation and sulfoxidation indices to phenotype CYP2C19 and CYP3A under induction drug interactions. American Society for Clinical Pharmacology and Therapeutics Meeting, Washington, March 2012; PII-35:pS64.
- 64) Leung YH, Lu J, Belanger F, Turgeon J, Michaud V. Drug-transporter interactions : Inhibition of MCT1 and MCT4 by statins and other acidic drugs. Canadian Society of Pharmacology and Therapeutics Meeting, Toronto, June 2012; 178: #156.
- 65) Huguet J, Gaudette F, Michaud V, Turgeon J. Functional Activity of CYP450 2J2, 3A5 and 2E1 in Human Heart Ventricles. Canadian Society of Pharmacology and Therapeutics Meeting, Toronto, June 2012; 124; #57.
- 66) Leung Y. Hei, Lu J, Belanger F, Turgeon J, Michaud V. Interactions médicamenteuses : inhibition des MCT1 et MCT4 par les statines et autres médicaments acides. Club de Recherches Cliniques du Québec. October 2012; 136 #98.
- 67) Huguet J, Gaudette F, Michaud V, Turgeon J. Évaluation de l'activité fonctionnelle des CYP450s dans les microsomes de cœurs humains. Club de Recherches Cliniques du Québec. October 2012; 138 #100.
- 68) Huguet J, Gaudette F, Michaud V, Turgeon J. Développement d'une approche cocktail pour étudier l'activité fonctionnelle des CYP2C8, 1A1 et 2D6 dans le cœur humain. 15eme congrès annuel CRCHUM. Montreal. December 18, 2012.
- 69) Huguet J, Gaudette F, Michaud V, Turgeon J. A probe drug cocktail to study CYP2C8, 1A1 and 2D6 in the human heart. American Society for Clinical Pharmacology and Therapeutics Meeting, Indianapolis, March 2013; 93(Suppl 1):30.
- 70) Leung YH, Lu J, Belanger F, Turgeon J, Michaud V. Drug-transporter interactions: inhibition of MCT1 and MCT4 by statins and other acidic drugs. American Society for Clinical Pharmacology and Therapeutics Meeting, Indianapolis, March 2013; 93(Suppl 1):60.

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- 71) Huguet J., Gaudette F., Michaud V., Turgeon J. Functional activity in human heart expressing CYP1A1, Annual meeting American Society for Pharmacology and Experimental Therapeutics, Boston, April 20-24 2013.
- 72) Leung YH, Lu J, Belanger F, Turgeon J, Michaud V. The role of MCT1 and MCT4 in drug-induced muscle disorders. Annual meeting American Society for Pharmacology and Experimental Therapeutics, Boston, April 20-24 2013.
- 73) Huguet J, Sharma S, Fulton S, Gaudette F, Michaud V. Effets de diètes riches en gras sur l'activité des CYP450s hépatiques et extra-hépatiques chez des souris. Club de Recherche Clinique du Quebec, Stoneham, Quebec, Sept 2013.
- 74) Huguet J, Godoy R, Sharma S, Bélanger F, Gaudette F, Fulton S, Michaud V. Des organes extra-hépatiques doués d'activité métabolique par les CYP450s. Club de Recherche Clinique du Quebec, Stoneham, Quebec, Sept 2013.
- 75) Leung YH, Lu J, Bélanger F, Turgeon J, Michaud V. Rôle des transporteurs MCT1 et MCT4 dans les désordres musculaires induits par les statines. Club de Recherche Clinique du Quebec, Stoneham, Quebec, Sept 2013.
- 76) Huguet J, Gaudette F, Bélanger F, Michaud V., Turgeon J. Intersubject variability of CYP2J2 activity in human heart microsomes. Annual meeting American Society for Pharmacology and Therapeutics, Atlanta, 2014. Clin Pharmacol Ther 2014: 95(1); PI-041: S31.
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- 78) Lu J, Guilarte Moya LG, Leung YH, Gaudette F, Keiser M, Michaud V., Turgeon J. Inhibition of the OATP1A2 transporter by tricyclic compounds. Annual meeting American Society for Pharmacology and Therapeutics, Atlanta, 2014. Clin Pharmacol Ther 2014: 95(1); PII-028: S70.
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- 81) Huguet J, Gaudette F, Bélanger F, Michaud V, Turgeon J. Stereoselective and interindividual differences in methadone metabolism in human heart microsomes. Annual meeting American Society for Pharmacology and Therapeutics, Atlanta, 2014. Late-breaking abstract LBII-014.
- 82) Gravel S, Huguet J, Rousseau E, Gaudette F, Turgeon J, Michaud V. CYP450 mediated drug metabolism in human lung tissue. 19th North American ISSX meeting, San Francisco, October 2014.
- 83) Lu J, Grangeon A, Gaudette F, Keiser M, Michaud V, Turgeon J. Effects of tricyclic compounds on almotriptan transport through OATP1A2. 19th North American ISSX meeting, San Francisco, October 2014.
- 84) Huguet J, Bélanger F, Michaud V, Turgeon J. Impact of *CYP2J2*7* on drug metabolism in the human heart. 19th North American ISSX meeting, San Francisco, October 2014.
- 85) Pelletier R, Gravel S, Huguet J, Turgeon J, Michaud V. Metabolism of olanzapine in human heart microsomes. Annual meeting American Society for Pharmacology and Therapeutics, New Orleans, 2015: PII-018.
- 86) Gravel S, Huguet J, Gaudette F, Turgeon J, Michaud V. Iloperidone metabolism in human hearts. Annual meeting American Society for Pharmacology and Therapeutics, New Orleans, 2015: PII-015.
- 87) Ghazal N, Yeung Y, Z Ngan, Wang H, El-Sakkary M, Bélanger F, Sheehan N, Lebouché B, Turgeon J, Labbé L, Michaud V. Comparison of drug-transporter mRNA expression levels in PBMC from HIV-infected patients with and without diabetes. Annual meeting American Society for Pharmacology and Therapeutics, New Orleans, 2015: PI-031.
- 88) Lu J, Grangeon A, Gaudette F, Keiser M, Michaud V, Turgeon J. Effects of tricyclic compounds on naratriptan transport through OATP1A2. Annual meeting American Society for Pharmacology and Therapeutics, New Orleans, 2015, :PI-025
- 89) Leung YL, Turgeon J, Michaud V. Statin inhibition of lactic acid transport in human skeletal muscle. Annual meeting American Society for Pharmacology and Therapeutics, New Orleans, 2015: PII-012.
- 90) Pilote S, Kamaliza J, Turgeon J, Michaud V, Simard C, Drolet B. The effect of intracellular methadone on hERG current is modulated by the coexpression of the CYP450 isozyme 2B6. Annual meeting American Society for Pharmacology and Therapeutics, New Orleans, 2015: PII-014.

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- 91) Yeung YF, Wang H, Ngan Z, El-Sakkary M, Michaud V, Hétu PO, Lebouché B, Sheehan NL. Evaluating Concentrations of Antiretrovirals: Atazanavir, Darunavir and Tenofovir in Subjects with HIV and Type 2 Diabetes Mellitus - a Pilot Study. 16th International Workshop on the Clinical Pharmacology of HIV and Hepatitis Therapy; May 2015
- 92) Maximos S, Leung YT, Gravel S, Bélanger F, Gaudette F, Turgeon J, Michaud V. Hepatic and extra-hepatic CYP450s activity modulation in C57BL/6 mice fed a high-fat diet. 20th North American International Society of the Study of Xenobiotics, Orlando FL, 2015: P208.
- 93) J Lu, F Gaudette, M Keiser, V Michaud, J Turgeon. Effects of tricyclic compounds on zolmitriptan transport through OATP1A2. North American meeting of the International Society for the Study of Xenobiotics, Orlando FL, 2015: P250.
- 94) Grangeon A, Gaudette F, Turgeon J and Michaud V. Highly sensitive LC-MS/MS methods for the in vivo assessment of human CYP450 activities using small doses of probe-drugs. North American meeting of the International Society for the Study of Xenobiotics, Orlando FL, 2015: P3.
- 95) Gravel S, Huguet J, Gaudette F, Turgeon J, Michaud V. Iloperidone metabolism in human heart microsomal and cytosolic fractions. North American meeting of the International Society for the Study of Xenobiotics, Orlando, 2015: PII-136.
- 96) Leung YH, Turgeon J, Michaud V. Inhibition of lactic acid efflux by atorvastatin in human skeletal muscle cells. North American meeting of the International Society for the Study of Xenobiotics, Orlando, 2015: P259.
- 97) Gravel S, Grangeon A, Gaudette F, Chiasson JL, Dallaire S, Langelier H, Turgeon J, Michaud V. Type 2 diabetes modulates CYP450 metabolic activities. 10th MDRC annual meeting. Montreal, Quebec, 2016. Oral poster (ranked in the top 10%).
- 98) Gravel S, Grangeon A, Gaudette F, Chiasson JL, Dallaire S, Langelier H, Turgeon J, Michaud V. Type 2 diabetes modulates CYP450 metabolic activities; an important factor of variability in drug response. American Society for Pharmacology and Therapeutics meeting, San Diego 2016. Late-breaking abstract.
- 99) Gravel S, Grangeon A, Gaudette F, Belanger F, Chiasson JL, Dallaire S, Langelier H, Turgeon J, Michaud V. Effect du diabète de type 2 sur le métabolisme des médicaments par les Cytochromes P450. Annual scientific meeting of Cardiometabolic Health, Diabetes and Obesity Research Network and COLoSUS Congress. Magog-Oford, Quebec, 2017. #51.

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- 100) Clermont V, Grangeon A, Gaudette F, Barama A, Michaud V. Characterization of CYP450 drug metabolism enzymes along the entire small intestine in humans. American Society for Pharmacology and Therapeutics meeting, Washington DC, 2017: PII-027.
- 101) Grangeon A, Clermont V, Barama A, Gaudette F, Turgeon J, Michaud V. Simultaneous absolute protein quantification method of 14 CYP450s in human intestine by mass-spectrometry-based targeted proteomics. American Society for Pharmacology and Therapeutics meeting, Washington DC, 2017: PII-049.
- 102) Leung Y, Turgeon J, Michaud V. Loratadine, a potent inhibitor of lactic acid transporters MCT1 and MCT4 in human skeletal muscle cells. American Society for Pharmacology and Therapeutics meeting, Washington DC, 2017: PI-060.
- 103) Gravel S, Chiasson JL, Dallaire S, Langelier H, Grangeon A, Gaudette F, Belanger F, Turgeon J, Michaud V. Influence of type 2 diabetes on cytochromes P450 mediated drug metabolism. American Society for Pharmacology and Therapeutics meeting, Washington DC, 2017: PI-038 (within the top 20%).
- 104) Gravel S, Panzini B, Chiasson JL, Gaudette F, Grangeon A, Turgeon J, Michaud V. Effects of type 2 diabetes on duodenal CYP450 activities. American Society for Pharmacology and Therapeutics meeting, Orlando FL, March 2018: PT-011 & PWIII-004. (*Presidential Trainee Award*).
- 105) Michaud V, Cicali B, Verzicco J, Knowlton CH, Turgeon J. Yearly medical expenditure in patients treated with CYP2D6-dependent opioids and impact of concomitant treatment with CYP2D6 substrate or inhibitor drugs. American Society for Pharmacology and Therapeutics meeting, Orlando FL, March 2018: PII-095.
- 106) Cicali B, Verzicco J, Knowlton CH, Turgeon J, Michaud V. Increased risk medication related problems due to concomitant administration of CYP2D6-dependent opioids and CYP2D6 interacting drugs. American Society for Pharmacology and Therapeutics meeting, Orlando FL, March 2018: PII-032.
- 107) Michaud V, Turgeon. Pain management pharmacotherapy in the context of polypharmacy and drug-drug interactions. PCS 4th Global Pain Conference, Florence, Italy, August 2018. Oral presentation (08/18/2018).
- 108) Michaud V, Tran M, Pronovost B, Bouchard P, Bilodeau S, Alain K, Vadnais B, Franco M, Turgeon J. Impact of GSTA1 polymorphisms on the oral clearance of busulfan in adult patients undergoing hematopoietic stem cell transplantation. International Congress of Personalized Health Care 2nd edition, Montreal, Canada, September 2018. Oral presentation (09/25/2018).

Accepted abstracts

- 1) Tran M, Pronovost B, Bouchard P, Bilodeau S, Alain K, Vadnais B, Franco M, Turgeon J, Michaud V. Influence of GSTA1 Polymorphisms On The Oral Clearance Of Busulfan Using Limited Sampling Methods In Adult Patients Undergoing Hematopoietic Stem Cell Transplantation. American Society for Pharmacology and Therapeutics meeting, Washington DC, March 2019. *Selected for the the Special Poster Session Pharmacogenomics and for the Presidential Trainee Award.*
- 2) Gravel S, Gaudette F, Chiasson JL, Turgeon J, Michaud V. Use of 4 β -hydroxycholesterol plasma concentration as an endogenous biomarker of CYP3A activity: Clinical validation in patients with type 2 diabetes. American Society for Pharmacology and Therapeutics meeting, Washington DC, March 2019.