



Curriculum Vitae

Personal information **Jean-marie Colet**

Work experience

1. Employer: Eli Lilly
 - Start date: 012001
 - End date: 122006
 - Position: Senior scientist
 - Activities: toxicologist expert in metabonomics
 - Country: Belgium
2. Employer: Total Petrochemicals
 - Start date: 012007
 - End date: 062007
 - Position: senior scientist
 - Activities: toxicologist REACH
 - Country: Belgium
3. Employer: University of Mons
 - Start date: 072007
 - End date:
 - Position: Professor
 - Activities: professor of biology and toxicology Head of the laboratory of human biology & toxicology
 - Country: Belgium

Education and training

1. Subject: University of Mons
 - Start date: 091984
 - End date: 061989
 - Qualification: master in biological sciences
 - Organisation: Biology
 - Country: Belgium
2. Subject: University of Mons
 - Start date: 061991
 - End date: 121994
 - Qualification: PhD in biological sciences
 - Organisation: toxicology of MRI contrast agents
 - Country: Belgium
3. Subject: University of Dallas Texas
 - Start date: 111995
 - End date: 101996
 - Qualification: postdoctoral trainee
 - Organisation: sodium and carbon NMR spectroscopy and imaging
 - Country: United States
4. Subject: Kings' college London
 - Start date: 012003
 - End date: 092003
 - Qualification: postdoctoral trainee
 - Organisation: in vivo NMR spectroscopy _ functional imaging
 - Country: United Kingdom

Additional information

Publications

1. J._M. Colet, Y. Van Haverbeke and R.N. Muller. Evidence for Attachment of Magnetic Starch Microspheres to Kupffer Cells Receptors in Excised and Perfused Rat Liver. Investigative Radiology 29: S223_S225 (1994) 2. J._M. Colet and R.N. Muller. Effect of Oposnins on the Uptake of Magnetic Starch Microspheres by Rat Kupffer Cells. Magnetic Resonance Materials in Physics, Biology and Medicine 2: 1_3 (1994) 3. J._M Colet, E. Cetiner , B.E. Hedlund and R.N. Muller. Assessment of Microvascular Integrity in the Isolated Perfused Rat Liver by Contrast Enhanced MRI. Attenuation of Reperfusion Injury by Conjugated Deferoxamine. Magnetic Resonance in Medicine 36:753_757 (1996) 4. R.N. Muller, L. Vander Elst, J._M. Colet, P. Herrent, F. Séghi, L. Pamart and Y. Van Haverbeke. Spectroscopic Monitoring of the Cellular Internalization of Paramagnetic Ions and Their Complexes: A Perfused Cells and Perfused Organs Approach. Academic Radiology 3:S227_S281 (1996) 5. L. Vander Elst, J._M. Colet and R.N. Muller. Spectroscopic and Metabolic Effects of MnCl2 and MnDPDP on the Isolated and Perfused Rat Heart. Investigative Radiology 32 (10): 581_588 (1997) 6. J._M. Colet, J.D. Makos, C.R. Malloy and A.D. Sherry. Determination of the Intracellular Sodium Concentration in Perfused Mouse Liver by 31P and 23Na Magnetic Resonance Spectroscopy. Magnetic Resonance in Medicine 39: 155_159 (1998) 7. J._M. Colet, L. Vander Elst and R.N. Muller. Dynamic Evaluation of the Hepatic Uptake and Clearance of Manganese_Based MRI Contrast Agents: A 31P NMR Study on the Isolated and Perfused Rat Liver. Journal of Magnetic Resonance Imaging 8: 663_669 (1998) 8. J._M. Colet, C. Piérart, F. Seghi, I. Gabric and R.N. Muller. Intravascular and Intracellular Hepatic Relaxivities of Superparamagnetic Particles: An Isolated and Perfused Organ Pharmacokinetics Study. Journal of Magnetic Resonance 134: 199_205 (1998) 9. S.L. Fossheim, K.E. Kellar, S. Mansson, J._M. Colet, P. Rongved, A.K. Fahlvik and J. Klaveness. Investigation of Lanthanide_Based Starch Particles as a Model System for Liver Contrast Agents. J. Magn. Res. Imaging 9(2):295_303 (1999) 10. S.L. Fossheim, J._M. Colet, S. Mansson, A.K. Fahlvik, R.N. Muller and J. Klaveness. Paramagnetic Liposomes as MRI Contrast Agents: Assessment of Contrast Efficacy in Various Liver Models. Invest Radiol. 33(11):810_21 (1998) 11. J._M. Colet, N. Bansal, C.R. Malloy and A.D. Sherry. Multiple

Quantum Filtered ²³Na NMR Spectroscopy of the Isolated, Perfused Rat Liver. *Magn Reson Med* 41(6):1127_1135 (1999) 12. Bremerich J, Colet JM, Giovenzana GB, Aime S, Scheffler K, Laurent S, Bongartz G, Muller RN. Slow Clearance Gadolinium_based Extracellular and Intravascular Contrast media for Three-dimensional MR angiography. *J Magn Reson Imaging* 13(4): 588_93 (2001) 13. Le Duc G, Vander Elst L, Colet JM, Roch A, Gillis P, Le Bas JF, Muller RN. Ultrasmall Particulate Iron Oxides as Contrast Agents for Magnetic Resonance Spectroscopy. *J Magn Reson Imaging* 13(4):619_626 (2001) 14. Colet JM, Lecomte S, Vander Elst L, Muller RN. Cesium_133: A potential Reporter of the Hepatic Uptake of Contrast Agents. *Magn Reson Med* 45(4):711_715 (2001) 15. Duarte MG, Gil MH, Peters JA, Colet JM, Vander Elst LV, Muller RN, Galdes CF. Synthesis, characterization, and Relaxivity of Two Linear Gd(DTPA)_polymer conjugates. *Bioconj Chem.* 12(2):170_177 (2001) 16. Gossuin Y, Colet JM, Roch A, Muller RN, Gillis P. Cesium adsorption in hydrated iron oxide particles suspensions: an NMR study. *J Magn Reson*;157(1):132_6 (2002) 17. Lindon JC, Nicholson JK, Holmes E, Antti H, Bollard ME, Keun H, Beckonert O, Ebbels TM, Reilly MD, Robertson D, Stevens GJ, Luke P, Breaux AP, Cantor GH, Bible RH, Niederhauser U, Senn H, Schlotterbeck G, Sidemann UG, Laursen SM, Tymiak A, Car BD, Lehman_McKeeman L, Colet JM, Loukaci A, Thomas C. Contemporary issues in toxicology the role of metabolomics in toxicology and its evaluation by the COMET project. *Toxicol Appl Pharmacol.* 187(3):137_46 (2003) 18. Burtea C, Laurent S, Colet JM, Vander Elst L, Muller RN. Development of new glucosylated derivatives of gadolinium diethylenetriaminepentaacetic for magnetic resonance angiography. *Invest Radiol.* 38(6):320_33 (2003) 19. Wei T, Liao B, Ackermann BL, Jolly RA, Eckstein JA, Kulkarni NH, Helvering LM, Goldstein KM, Shou J, Estrem ST, Ryan TP, Colet JM, Thomas CE, Stevens JL, Onyia JE. Data_driven analysis approach for biomarker discovery using molecular_profiling technologies. *Biomarkers* 10(2_3):153_72 (2005) 20. Jolly RA, Goldstein KM, Wei T, Gao H, Chen P, Huang S, Colet JM, Ryan TP, Thomas CE, Estrem ST. Pooling samples within microarray studies: a comparative analysis of rat liver transcription response to prototypical toxicants. *Physiol Genomics.* 22(3):346_55 (2005) 21. S. Hambÿe, D. Stanicki, J._M. Colet, J.J. Vanden Eynde, B. Blankert. 21. S. Hambÿe, D. Stanicki, J._M. Colet, J.J. Vanden Eynde, B. Blankert. Three optimized and validated (using accuracy profiles) LC methods for the determination of pentamidine and new analogs in rat plasma. *Talanta.* 2011 Jan 15;83(3):832_9 22. Colet JM and Conotte R. Long term metabolic changes induced in idiosyncrasy_like liver toxicity *Toxicology letters* 2009; 189 : S95_S96 23. Tagliatti V., Conotte R., De Luca D., Colet JM Valproate_induced liver mitochondrial dysfunction in rats: A metabolomic approach *Toxicology letters* 2011; 205(1) : S277_S277 24. De Luca D., Tagliatti V., Conotte R., Colet JM Chlordecone potentiation of carbon tetrachloride toxicity: A metabolomic_based mechanistic study. *Toxicology letters* 2011; 205 (1) : S181_S182 25. Conotte R., De Luca D., Tagliatti V., Colet JM Metabolomic evaluation of oxaliplatin hepatotoxicity by comparison with a sinusoidal obstruction syndrome (SOS) model *Toxicology letters* 2011; 205 (1) : S181_S181 26. Vamecq J., Colet J._M., Vanden Eynde J.J, Briand G., Porchet N. and Rocchi S. PPARs: interference with Warburg' effect and clinical anti_cancer trials PPAR Research, 2012 (accepted for publication) 27. Ouedraogo M., Baudoux T., StÛvigny C., Nortier J., Colet J._M., Efferth T., Qu F., Zhou J., Chan K., Shaw D., Pelkonen O. and Duez P. Review of current and "omics" methods for assessing the toxicity (genotoxicity, teratogenicity and nephrotoxicity) of herbal medicines and mushrooms. *J Ethnopharmacol* 2012 Apr 10; 140(3):492_512 28. Duquesne M., Goossens C., Dika Z., Conotte R., Nortier J., Jelakovic B., Colet J._M., "Metabolomics: on the Road to Detect Diagnostic Biomarkers in Endemic (Balkan) Nephropathy. Evaluation in a Retrospective Pilot Project ". *Journal of cancer Science and Therapy,* 2012; S15 : 1_9 29. Hambye S., Helvenstein M., Verdy L., Kahvecioglu Z., Conotte R., Vanden Eynde J._J., Colet J._M., Blankert B., "Ultra High Performance Liquid Chromatography method for the determination of Pentamidine and analog in rat biological fluids." *Journal of Pharmaceutical & Biomedical Analysis* (2013) 30. Soubhye J., Aldib L., Eifving B., Gelbcke M., Furtmuller P.G., Podrecca M., Conotte R., Colet J._M., Rousseau A., Rey F., Sarakbi A., Vanhaeverbeek M., Kauffmann J._M., Obinger C., Nève Jean, Prevost M., Zouaoui Boudjeltia K., Dufrasne Fr., Van Antwerpen P., "Design, Synthesis, and Structure_Activity Relationship Studies of Novel 3_Alkylindole Derivatives as Selective and Highly Potent Myeloperoxidase Inhibitors". *Journal of Medicinal Chemistry* 2013; 56(10) : 3943_3958 31. Benourad F., Kahvecioglu Z., Youcef_Benkada M., and Colet J._M. Prospective evaluation of potential toxicity of repeated doses of Thymus vulgaris L. extracts in rats by means of clinical chemistry, histopathology and NMR-based metabolomic approach. *2014 Drug Testing & Analysis* (DOI: 10.1002/dta.1606) 32. Conotte R. and Colet J._M. A metabolomic evaluation of the monocrotaline_induced sinusoidal obstruction syndrome (SOS) in rats. *Toxicol Appl Pharmacol.* 2014 276(2) : 147_156 33. Colet J._M. Recherche de nouveaux biomarqueurs du cancer par approche métabolomique. *Biologiste Infos* 2014 ; 68 :20_22 34. Soubhye J, Aldib I, Prévost M, Eifving B, Gelbcke M, Podrecca M, Conotte R, Colet JM, Furtmüller PG, Delporte C, Rousseau A, Vanhaeverbeek M, Nève J, Obinger C, Zouaoui Boudjeltia K, Van Antwerpen P, Dufrasne F. Hybrid molecules inhibiting myeloperoxidase activity and serotonin reuptake: a possible new approach of major depressive disorders with inflammatory syndrome. *J Pharm Pharmacol.* 2014 (Doi: 10.1111/jphp.12236) 35. Hambye S, Helvenstein M, Verdy L, Kahvecioglu Z, Conotte R, Vanden Eynde JJ, Colet JM, Blankert B. Ultra high performance liquid chromatography method for the determination of pentamidine and analog in rat biological fluids. *J Pharm Biomed Anal.* 2014 ;95 :54_60. (doi: 10.1016/j.jpba.2014.02.002) 36. Thooft Aurélie, Colet Jean_Marie, Conotte Raphael, Biston Patrick, Piagnerelli Michael, "Patients' metabolomic profile in the ICU" in *Critical Care Medicine*, 43, 12, 267_268(2015) 37. Colet Jean_Marie, "Metabolomics in the Preclinical and Environmental Toxicity Field" in *Drug Discovery Today*, 13, 3_10, DDTEC428(2015) 38. Tagliatti Vanessa, Colet Jean_Marie, "Drug_Induced Impairment of Mitochondrial Fatty Acid Be_ta_Oxidation: A Metabolomic Evaluation in Rats" in *HSOA Journal of Medical Genomics and Biomarkers* , 3, 005(2016) 39. Valentini X., Rugira Pascaline, Frau Annica, Tagliatti Vanessa, Conotte Raphaël, Laurent Sophie, Colet Jean_Marie, Nonclercq Denis, "Hepatic and renal toxicity induced by TiO2 nanoparticles in rats: a morphological and metabolomic study" in *European Journal of Toxicology* (2019) 40. Valentini Xavier, Rugira Uwamahoro Pascaline, Frau Annica, Tagliatti Vanessa, Conotte Raphael, Laurent Sophie, Colet Jean_Marie, Nonclercq Denis, "Hepatic and renal toxicity induced by TiO2 nanoparticles in rats : a morphological and metabolomic study" in *Journal of Toxicology*, 2019, ID 5767012 (2019) 41. Kindt Nadège, Descamps Géraldine, Lechien Jérôme, Remmelink Myriam, Colet Jean_Marie, Wattiez Ruddy, Berchem G, Journe Fabrice, Saussez Sven, "Involvement of HPV Infection in the Release of Macrophage Migration Inhibitory Factor in Head and Neck Squamous Cell Carcinoma." in *Journal of Clinical Medicine*, 1#0, 8, pii: E75. (2019) 42. Benourad Fouzia, Kahvecioglu ZEHRA CAGLA, Youcef_Benkada Mokhtar, Colet Jean_Marie, "Protective potential of the essential oil of Thymus vulgaris L. against Dicolof_induced poisoning in rats as established through clinical chemistry, histopathology and 1H_NMR_based metabolomics" in *South Asian Journal of experimental biology*, 8, 2, 49_56 (2018) 43. Conotte Stéphanie, Tassin Alexandra, Conotte Raphaël, Colet Jean_Marie, Zouaoui Karim, Legrand Alexandre, "Metabolomic profiling of chronic intermittent hypoxia in a mouse model" in *Respiratory Physiology and Neurobiology*, 256, 157_173, doi.org/10.1016/j.resp.2018.02.015 (2018) 44. Duquesne Marilyn, Declèves Anne_Emilie, Deprez Eric, Nortier Joëlle, Colet Jean_Marie, "Interest of metabolomic approach in environmental nephrotoxics : Application to aristolochic acid exposure" in *Food & Chemical Toxicology*, 108, PtA, 19_29, doi: 10.1016/j.fct.2017.07.015. (2017) 45. Richard Vincent, Conotte Raphaël, Mayne David, Colet Jean_Marie, "Does the 1H_NMR Plasma Metabolome Reflect the Host_Tumor Interactions in Human Breast Cancer?" in *Oncotarget*, 8, 30, 49915_49930, doi: 10.18632/oncotarget.18307 (2017) 46. Jelakovic B, Dika Ž, Arlt VM, Stiborova M, Pavlovic NM, Nikolic J, Colet JM, Vanherweghem JL, Nortier JL. (2019). Balkan Endemic Nephropathy and the Causative Role of Aristolochic Acid. *Semin Nephrol.* 39(3) : 284_296 47. Valentini X, Rugira P, Frau A, Tagliatti V, Conotte R, Laurent S, Colet JM, Nonclercq D. (2019). Hepatic and Renal Toxicity Induced by TiO2 Nanoparticles in Rats: A Morphological and Metabolomic Study. *J Toxicol.* ; 3 : 1_19 48. Kindt N, Descamps G, Lechien JR, Remmelink M, Colet JM, Wattiez R, Berchem G, Journe F, Saussez S. (2019). Involvement of HPV Infection in the Release of Macrophage Migration Inhibitory Factor in Head and Neck Squamous Cell Carcinoma. *J Clin Med.* 10;8(1) 49. Schepkens C, Dallons M, Dehairs J, Talebi A, Jeandriens J, Drossart LM, Auquier G, Tagliatti V, Swinnen JV, and Colet JM. (2019). A New Classification Method of Metastatic Cancers Using a 1H_NMR_Based Approach: A Study Case of Melanoma, Breast, and Prostate Cancer Cell Lines. *Metabolites* ; 17;9(11) 50. Chaumont M, Tagliatti V, Channan EM, Colet JM, Bernard A, Morra S, Deprez G, Van Mylem A, Debbas N, Schaefer T, Faoro V, van de Borne P. (2020). Short halt in vaping modifies cardiorespiratory parameters and urine metabolome: a randomized trial. *Am J Physiol Lung Cell Mol Physiol.* ; 318(2) : L331_L344 51. Dallons M., Schepkens C., Dupuis A., Tagliatti V., and Colet J.M. (2019). New Insights About Doxorubicin_Induced Toxicity to Cardiomyoblast_Derived H9C2 Cells and Dexamethasone Cytoprotective Effect: Contribution of In Vitro 1H_NMR Metabolomics. *Frontiers in Pharmacology* ; 11 : 1_14 52. Dallons M., Delcourt M., Schepkens C., Podrecca M., and Colet J.M. (2020). A Comparative Study of Rat Urine 1H_NMR Metabolome Changes Presumably Arising from Isoproterenol_Induced Heart Necrosis Versus Clarithromycin_Induced QT Interval Prolongation. *Biology (Basel)* ; 9(5): 98. 53. Soumoy L., Schepkens C., Krayem M., Najem A., Tagliatti V., Ghanem G.E., Saussez S., Colet J.M. and Journe F. (2020). Metabolic Reprogramming in Metastatic Melanoma

with Acquired Resistance to Targeted Therapies: Integrative Metabolomic and Proteomic Analysis. *Cancers* 12(5): 13_23 54. Dallons M., Alpan E., Schepkens C., Tagliatti V. and Colet JM. GPR91 Receptor Mediates Protection against Doxorubicin-Induced Cardiotoxicity without Altering Its Anticancer Efficacy. An In Vitro Study on H9C2 Cardiomyoblasts and Breast Cancer-Derived MCF_7 Cells. *Cells*; 9(10) : 2177_ 2198 (2020) 55. Delcourt M., Tagliatti V., Delsinne V., Colet JM., Declèves AE. Influence of Nutritional Intake of Carbohydrates on Mitochondrial Structure, Dynamics, and Functions during Adipogenesis. *Nutrients*; 12(10) : 2984_3008 (2020). 56. Leclercq S., Le Roy T., Furgieule S., Coste V., Bindels L., Leyrolle Q., Neyrinck A., Quoilin C., Amadieu C., Petit G., Dricot L., Tagliatti V., Cani P., Verbeke K., Colet JM., Stärkel P., de Timary P., Delzenne N.M.. *Cell Rep.* ; 33(2) : 108238_108261 (2020). Gut Microbiota-Induced Changes in β -Hydroxybutyrate Metabolism Are Linked to Altered Sociability and Depression in Alcohol Use Disorder. *Cell Rep.* 33, 108238 57. M. Vara_Pérez, M. Rossi, C. Van den Haute, H. Maes, M. L. Sassano, E. Romano, K. Rillaerts, A. Garg, C. Schepkens, F. Bosisio, J. Wouters, A. Oliveira, P. Vangheluwe, W. Annaert, J.V. Swinnen, J.M. Colet, J. Van den Oord, S. M. Fendt, M. Mazzone, P. Agostinis (2021). BNIP3 Supports Melanoma Growth by Fostering PHD2-Mediated HIF1A Stabilization. *EMBO Journal* (accepted for publication) Book/Book Chapter : 1. Jadot Ines, Duquesne Marilyn, Declèves Anne_Emilie, Caron Nathalie, Colet Jean_Marie, Nortier Joelle, "A translational metabolomic assessment of aristolochic acid-induced nephropathies" in "Nephropathy" , IntechOpen, 978_953_51_6746_4 (2018) 2. Colet Jean_Marie, Duquesne Marilyn, Declèves Anne_Emilie, Nortier Joëlle, "Advances in Nephropathy" in "Advances in Nephropathy" , IntechOpen, 978_1_78984_235_7 (2018)

Projects

Memberships

Member of the Federal Agency for Medicines and Health Products

Other Relevant Information