

Curriculum Vitae

Name: Paula Maria Brazao Mendes Luis
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Date and Place of Birth: 15 August 1981 in Fochville, South Africa
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Personal data

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Education

- 1999 – 2004 *College*
Faculty of Sciences, University of Lisbon, Portugal (Biochemistry – classification: 16/20)
- 2007 – 2011 *Ph.D in Pharmacy (Specialization: Biochemistry)*
Research Institute for Medicines and Pharmaceutical Sciences – iMED.UL, Faculty of Pharmacy, University of Lisbon, Portugal (Advisor: Margarida Silva) / Laboratory Genetic Metabolic Diseases, Department of Clinical Chemistry and Pediatrics, Academic Medical Centre, University of Amsterdam, The Netherlands, (Advisors: Ronald Wanders and Marinus Duran). **Dissertation title:** Study Of The Underlying Basis For Valproate Hepatotoxicity: Drug Metabolism And Its Interaction With Coenzyme A Homeostasis
- 2013 – *Postgraduate Training*
Department of Pharmacology, Vanderbilt University Medical School, Nashville, TN. Mentor: Claus Schneider, Ph.D.

Professional Activities

- 2003 – 2004 *Research Training*
Centro de Patogénese Molecular, Unidade de Biologia Molecular e Biopatologia Experimental Faculty of Pharmacy, University of Lisbon, Portugal
- 2004 – 2005 *Research Assistant*
Centro de Patogénese Molecular, Unidade de Biologia Molecular e Biopatologia Experimental Faculty of Pharmacy, University of Lisbon, Portugal

2005 – 2007 *Research / Technical Assistant*
Centro de Patogénese Molecular, Unidade de Biologia Molecular e
Biopatologia Experimental Faculty of Pharmacy, University of Lisbon,
Portugal

Membership in Professional Organizations

European Association for the Study of the Liver (EASL)
International Society for the Study of Xenobiotics (ISSX)
Portuguese Metabolic Disease Society
Graduate Women in Science
America Heart Association (AHA)
Groupe Polyphenols

Journal peer reviews

Ad hoc reviewer for articles and reviews submitted to the following journals:

- Journal of Medicinal Chemistry
- Molecular Nutrition and Food Research

Awards

2006 – 2009: Ph.D. Fellowship by Fundação para a Ciência e Tecnologia
2008: 2nd Place award for best poster presentation, Emma Kinderziekenhuis Symposium,
Amsterdam
2009: 2nd Place award for best poster presentation, 11th European Regional International Society
for the Study of Xenobiotics (ISSX), Lisbon
2010: Short term fellowship by Fundação Gulbenkian
2010: Training grant by European Research Network of Inherited Disorders of Metabolism
2010: Young Investigators' Bursary by European Association for the Study of the Liver (EASL)
2010: Travel grant by Society for the Study of Inborn Errors of Metabolism (SSIEM) to attend
the Annual Symposium of SSIEM in Istanbul, Turkey.
2010: Travel grant by International Society for the Study of Xenobiotics (ISSX) to attend the 9th
ISSX International Meeting in Istanbul, Turkey.
2014: Groupe Polyphénols travel award by 27th International Conference on Polyphenols & 8th
Tannin Conference; Nagoya, Japan.
2016 – 2017: Postdoctoral fellowship by American Heart Association (AHA)
2018: Travel grant by the NIH Office of Dietary Supplements (ODS) to attend the 2018 Annual
Meeting of AOAC International, in Toronto, Canada.

Research Supervision

- Marc Singleton, VU undergraduate (Chemistry), 01/2014-04/2014
- Fumie Nakashima, visiting student from Nagoya University, Japan, 08/2016-10/2016
- Abdul-Musawwir Alli-Oluwafuyi visiting graduate student (Fulbright scholar) from the
University of Ilorin, Nigeria, 09/2017-05/2018

Research Program

SFRH/BD22420 (PI: Luis) (€17,000/year) 01/01/2006 – 12/31/2009
by Fundação para a Ciência e Tecnologia
Study Of The Underlying Basis For Valproate Hepatotoxicity
Role: Ph.D. Student

16POST27250138 (PI: Luis) (\$49,000/year) 01/01/2016 – 12/31/2017
by American Heart Association
Curcumin-glucuronide as a pro-drug in inflammation
Role: Postdoctoral Fellow

Publications and Presentations

1. Articles in refereed journals

1. Luís PB, Ruiter JP, Aires CC, Soveral G, Tavares de Almeida I, Duran M, Wanders RJA, Silva MFB. *Valproic acid metabolites inhibit dihydrolipoyl dehydrogenase activity leading to impaired 2-oxoglutarate-driven oxidative phosphorylation*. *Biochim Biophys Acta – Bioenergetics*, (2007) 1767:1126-33.
2. Aires CC, Ruiter JP, Luís PB, ten Brink HJ, Ijlst L, Tavares de Almeida I, Duran M, Wanders RJA, Silva MFB. *Studies on the extra-mitochondrial CoA-ester formation of valproic and Delta4-valproic acids*. *Biochim Biophys Acta – Mol Cell Biol L*, (2007) 1771:533-43.
3. Aires CC, Soveral G, Luís PB, ten Brink HJ, Tavares de Almeida I, Duran M, Wanders RJA, Silva MFB. *Pyruvate uptake is inhibited by valproic acid and metabolites in mitochondrial membranes*. *FEBS Lett*, (2008) 582:3359-66.
4. Silva MFB, Aires CC, Luís PB, Ruiter JP, Ijlst L, Duran M, Wanders RJA, Tavares de Almeida I. *Valproic acid metabolism and its effects on mitochondrial fatty acid oxidation: A review*. *J Inherit Metab Dis*, (2008) 31:205-216.
5. Luís PB, Ruiter JP, Ijlst L, Tavares de Almeida I, Duran M, Mohsen A, Vockley J, Wanders RJ and Silva MF. *Role of isovaleryl-CoA dehydrogenase and short branched-chain acyl-CoA dehydrogenase in the metabolism of valproic acid: implications for the branched-chain amino acid oxidation pathway*. *Drug Metab Dispos*, (2011) 39:1155-60.
6. Luís PB, Ruiter JP, Ofman R, Ijlst L, Moedas M, Diogo L, Garcia P, Tavares de Almeida I, Duran M, Wanders RJA and Silva MFB. *Valproic acid utilizes the isoleucine breakdown pathway for its complete beta-oxidation*. *Biochem Pharmacol*, (2011) 82: 1740-6.
7. Luís PB, Ruiter JP, Ijlst L, Diogo L, Garcia P, Tavares de Almeida I, Duran M, Wanders RJA and Silva MFB. *Inhibition of 3-methylcrotonyl-CoA carboxylase explains the increased excretion of 3-hydroxyisovaleric acid in valproate-treated patients*. *J Inherit Metab Dis*, (2011) 35: 443-9.
8. Luís PB, Ruiter J, Ijlst L, Duran M, Tavares de Almeida I, Wanders RJ and Silva MFB. *Valproyl-CoA inhibits the activity of ATP- and GTP-dependent succinate:CoA ligase*. *J Inherit Metab Dis*, (2014) 37(3): 353-7.

9. Gordon O, Luis PB, Sintim HO, Schneider C. *Unraveling curcumin degradation: Autoxidation proceeds through spiroepoxide and vinyl ether intermediates en route to the main bicyclopentadione*. J Biol Chem (2015) 290(8): 4817-28.
10. Gordon O, Luis PB, Schneider C. *Oxidative transformation of demethoxy- and bisdemethoxycurcumin: Products, mechanism of formation, and poisoning of topoisomerase*. Chem Res Toxicol (2015) 28(5): 989-96.
11. Schneider C, Gordon O, Edwards RL, Luis PB. *Degradation of curcumin: From mechanism to biological implications*. J Agric Food Chem (2015) 63(35): 7606-14.
12. Hardbower DM, Asim M, Luis PB, Singh K, Barry DP, Yang C, Steeves MA, Cleveland JL, Schneider C, Piazuelo MB, Gobert AP, Wilson KT. *Ornithine decarboxylase regulates M1 macrophage activation and mucosal inflammation via histone modifications*. Proc Natl Acad Sci U S A (2017) 114(5):E751-60.
13. Luis PB, Gordon ON, Nakashima F, Joseph AI, Shibata T, Uchida K, Schneider C. *Oxidative metabolism of curcumin-glucuronide by peroxidases and isolated human leukocytes*. Biochem Pharmacol (2017) 132: 143-9.
14. Yang Z, Prinsen JK, Bersell KR, Shen W, Yermalitskaya L, Sidorova T, Luis PB, Hall L, Zhang W, Du L, Milne G, Tucker P, George AL Jr, Campbell CM, Pickett RA, Shaffer CM, Chopra N, Yang T, Knollmann BC, Roden DM, Murray KT. *Azithromycin causes a novel proarrhythmic syndrome*. Circ Arrhythm Electrophysiol. (2017) 10(4) e003560.
15. Edwards RL, Luis PB, Varuzza PV, Joseph AI, Presley SH, Chaturvedi R, Schneider C. *The anti-inflammatory activity of curcumin is mediated by its oxidative metabolites*. J Biol Chem (2017) 292(52): 21243-21252.
16. Luis PB, Boeglin W, Schneider C. *Thiol reactivity of curcumin and its oxidation products*. Chem Res Toxicol (2018) 31(4): 269-270.
17. Joseph AI, Edwards RL, Luis PB, Presley SH, Porter NA, Schneider C. *Stability and anti-inflammatory activity of the reduction-resistant curcumin analog, 2,6-dimethyl-curcumin*. ACS Chem Biol (2018) 16(17): 3273-3281.
18. Skiba MB, Luis PB, Alfarara C, Billheimer D, Schneider C, Funk JL. *Curcuminoid content and markers of quality of turmeric dietary supplements sold in an urban retail marketplace in the United States*. Mol Nutr Food Res (2018) e1800143 [Epub ahead of print].
19. Singh K, Coburn LA, Asim M, Barry DP, Allaman MM, Shi C, Washington MK, Luis PB, Schneider C, Delgado AG, Piazuelo MB, Cleveland JL, Gobert AP, Wilson KT. *Ornithine decarboxylase in macrophages exacerbates colitis and promotes colitis-associated colon carcinogenesis by impairing M1 immune responses*. Cancer Res (2018) 78(15): 4303-4315.
20. Gobert AP, Al-Greene NT, Singh K, Coburn LA, Sierra JC, Verriere TG, Luis PB, Schneider C, Asim M, Allaman MM, Barry DP, Cleveland JL, Destefano Shields CE, Casero RA Jr, Washington MK, Piazuelo MB, Wilson KT. *Distinct immunomodulatory effects of spermine oxidase in colitis induced by epithelial injury or infection*. Front Immunol (2018) 9: 1242.

21. Kunihiro AG, Brickey JA, Frye JB, Luis PB, Schneider C, Funk JL. *Curcumin, but not curcumin-glucuronide, inhibits Smad signaling in TGF β -dependent bone metastatic breast cancer cells and is enriched in bone compared to other tissues.* J Nutr Biochem (2019) 63: 150-156.
22. Joseph AI, Luis PB, Schneider C. *A curcumin degradation product, 7-norcyclopentadione, formed by aryl migration and loss of a carbon from the heptadienedione chain.* J Nat Prod (2018) [Epub ahead of print].
23. Kunihiro AG, Luis PB, Brickey JA, Frye JB, Chow HS, Schneider C, Funk JL. *Beta-glucuronidase catalyzes deconjugation and activation of curcumin-glucuronide in bone.* J Nat Prod (2019) 82(3): 500-509.
24. Sierra JC, Suarez G, Piazuolo MB, Luis PB, Baker DR, Romero-Gallo J, Barry DP, Schneider C, Morgan DR, Peek RM Jr, Gobert AP, Wilson KT. *α -Difluoromethylornithine reduces gastric carcinogenesis by causing mutations in Helicobacter pylori cagY.* Proc Natl Acad Sci U S A (2019) 116(11): 5077-5085.
25. Singh K, Gobert AP, Coburn LA, Barry DP, Allaman M, Asim M, Luis PB, Schneider C, Milne GL, Boone HH, Shilts MH, Washington MK, Das SR, Piazuolo MB, Wilson KT. *Dietary arginine regulates severity of experimental colitis and affects the colonic microbiome.* Front Cell Infect Microbiol (2019) 9: 66.

2. Abstracts

1. Luís PB, Silva MFB, Aires CC, Tavares de Almeida I, Duran M and Wanders RJA. *Differential effect of valproate mitochondrial metabolites on dihydrolipoyl dehydrogenase activity*; I Simpósio da Sociedade Portuguesa de Doenças Metabólicas (SPDM); Lisboa, 2003.
2. Aires CC, Silva MFB, Luís PM, Filipe HM, Tavares de Almeida I, Duran M and Wanders RJA. *Studies on the metabolic activation of valproic acid by monitoring of acyl-CoA intermediates*; I Simpósio da Sociedade Portuguesa de Doenças Metabólicas (SPDM); Lisboa, 2003.
3. Luís PB, Silva MFB, Filipe HM, Diogo L, Garcia P and Tavares de Almeida I. *Studies in vivo and in vitro on the valproic acid interaction with the isoleucine and leucine oxidative metabolism*; XIVth Congresso Nacional de Bioquímica; Vilamoura, 2004.
4. Luís PB, Silva MFB, Filipe HM, Diogo L, Garcia P and Tavares de Almeida I. *Impaired mitochondrial fatty acid β -oxidation in vivo during valproate therapy*; II Simpósio da Sociedade Portuguesa de Doenças Metabólicas (SPDM); Lisboa, 2004.
5. Silva MFB, Luís PB, Aires CC, Tavares de Almeida I, Duran M and Wanders RJA. *Valproyl-CoA induces a decrease in dihydrolipoyl dehydrogenase activity compromising pyruvate- and 2-ketoglutarate- driven OXPHOS and respiration rates*; Microsomes and Drug Oxidation (MDO), Mainz, 2004.
6. Silva MFB, Aires CC, Luís PB, Filipe HM, Duran M, Tavares de Almeida I and Wanders RJA. *Subcellular conjugation of valproate as thioester derivatives: valproyl-CoA and valproyl-dephosphoCoA*; Microsomes and Drug Oxidation (MDO), Mainz, 2004.
7. Silva MFB, Luís PB, Aires CC, Duran M, Tavares de Almeida I and Wanders RJA. *2-Ketoglutarate-driven mitochondrial energy metabolism is inhibited by valproyl-CoA and by its dephosphorylated form*; III Congresso Luso-Espanhol de Biofísica, Lisboa, 2004.
8. Luís PB, Agostinho JF, Aires CC, Filipe HM, Diogo L, Garcia P, Tavares de Almeida I and Silva MFB. *Valproate therapy induces abnormal profiles of dicarboxylic and long-chain fatty acids in*

- vivo; II Congress of the Pharmaceutical Sciences, 6th Portuguese-Spanish Congress on Controlled Release; Coimbra, 2005.
9. Luís PB, Agostinho JF, Aires CC, Filipe HM, Diogo L, Garcia P, Tavares de Almeida I and Silva MFB. *Studies on the in vivo effect of Valproic Acid on the Short-Chain 3-Hydroxyacyl-CoA Dehydrogenase (SCHAD)*; Simpósio Anual da Sociedade Portuguesa das Doenças Metabólicas (SPDM); Luso, 2005.
 10. Aires CC, Luís PB, Agostinho JF, Filipe HM, Diogo L, Garcia P, Tavares de Almeida I and Silva MFB. *Valproic acid is a presumed substrate for the carnitine palmitoyl-transferase I: implications on endogenous fatty acid oxidation*; II Congress of the Pharmaceutical Sciences, 6th Portuguese-Spanish Congress on Controlled Release; Coimbra, 2005.
 11. Aires CC, Luís PB, Ruiter JPN, Tavares de Almeida I, Duran M, Wanders RJA and Silva MFB. *Activation of Valproate to valproyl-CoA is not restricted to mitochondria: implications to fatty acid β -oxidation and drug subcellular effects*; 6th International Congress on Fatty Acid Oxidation; Egmond aan Zee, 2005.
 12. Aires CC, Ruiter JPN, Luís PB, Tavares de Almeida I, Duran M, Wanders RJA and Silva MFB. *Valproyl-CoA is a possible substrate for the Carnitine Palmitoyl-Transferase I: implications for mitochondrial fatty acid oxidation*; 42nd Annual Symposium of the Society for the Study of Inborn Errors of Metabolism (SSIEM); Paris, 2005.
 13. Jesus IS, Aires CC, Luís PB, Tavares de Almeida I and Silva MFB. *Studies on Valproic Acid metabolism using in vitro models: activation of delta4-VPA to delta4-Valproyl-CoA, a conjugation reaction with potential impact on cellular toxicity*; Congress of Medical Chemistry in the 21st century; Lisbon, 2006.
 14. Aires CC, Luís PB, Jesus IS, Duran M, Wanders RJA, Tavares de Almeida I and Silva MFB. *The microsomal product delta4-Valproic acid is a substrate of an extramitochondrial acyl-CoA synthetase*; XVth National Congress of Biochemistry; Aveiro, 2006.
 15. Luís PB, Jesus IS, Aires CC, Tavares de Almeida I and Silva MFB. *Mechanisms of drug induced liver injury: Studies on the conversion of salicylic acid to salicylglycine*; XVth National Congress of Biochemistry; Aveiro, 2006.
 16. Luís PB, Ruiter JPN, Ijlst L, Diogo L, Garcia P, Tavares de Almeida I, Duran M, Vockley J, Wanders RJA and Silva MFB. *In vitro studies on the interaction of between Valproic Acid metabolites and the branched chain acyl-CoA dehydrogenases*; Simpósio Anual da Sociedade Portuguesa das Doenças Metabólicas (SPDM), Porto, 2007.
 17. Luís PB, Ruiter JPN, Ijlst L, Diogo L, Garcia P, Duran M, Vockley J, Wanders RJA, Tavares de Almeida I and Silva MFB. *Evidence for the involvement of 2-Methyl-3-Hydroxy-Butyryl-CoA Dehydrogenase (MHBd), from Isoleucine pathway, on the oxidative metabolism of Valproic Acid*; Simpósio Anual da Sociedade Portuguesa das Doenças Metabólicas (SPDM), Porto, 2007.
 18. Luís PB, Ruiter J, Ijlst L, Aires CC, Garcia P, Diogo L, Tavares de Almeida I, Duran M, Wanders RJA and Silva MFB. *In vivo and in vitro studies on the interaction of Valproic Acid and metabolites with the Leucine oxidative metabolism*; Annual Symposium of the Society for the Study of Inborn Errors of Metabolism (SSIEM), Hamburg, 2007.
 19. Aires CC, Ijlst L, Ruiter JPN, Luís PB, Tavares de Almeida I, Duran M, Wanders RJA and Silva MFB. *Valproyl-CoA inhibits Carnitine Palmitoyl-Transferase I and thus interferes with for mitochondrial fatty acid oxidation*; Annual Symposium of the Society for the Study of Inborn Errors of Metabolism (SSIEM), Hamburg, 2007.
 20. Silva MFB, Luís PB, Aires CC, Diogo L, Garcia P, Tavares de Almeida I, Duran M and Wanders RJA. *Valproate (VPA)-induced inhibition of mitochondrial Short-Chain 3-Hydroxyacyl-CoA*

- Dehydrogenase (SCHAD): a potential mechanism linked to the VPA-associated weight gain and hyperinsulinemia*; International Congress of Toxicology (ICT); Montréal, 2007.
21. Mendes MIS, Luís PB, Silva MFB and Tavares de Almeida I. *Measurement of the biomarkers of Creatine biosynthesis defects, Guanidinoacetate and Creatine, using a SID-GC-MS method*; First Scientific Meeting of iMed.UL; Lisbon, 2008.
 22. Aires CC, Ijlst L, Luís PB, Ruiter JPN, Tavares de Almeida I, Duran M, Wanders RJA and Silva MFB. *Studies on the Valproyl-CoA interference on recombinant rat liver Carnitine Palmitoyl Transferase I*; First Scientific Meeting of iMed.UL; Lisbon, 2008.
 23. Luís PB, Ruiter JPN, Ijlst L, Aires CC, Garcia P, Diogo L, Tavares de Almeida I, Duran M, Vockley J, Wanders RJA and Silva MFB. *Studies on the interactions of Valproic Acid and metabolites with the Leucine oxidative metabolism*; First Scientific Meeting of iMed.UL; Lisbon, 2008.
 24. Luís PB, Ruiter J, Ijlst L, Ofman R, Diogo L, Garcia P, Duran M, Vockley J, Tavares de Almeida I, Wanders RJA and Silva MFB. *Interaction of VPA metabolites with branched-chain amino acids oxidation: Implications for drug-hepatotoxicity*; 45th Congress of the European Societies of Toxicology (EUROTOX), Rhodes, 2008.
 25. Luís PB, Ruiter J, Ijlst L, Ofman R, Diogo L, Garcia P, Tavares de Almeida I, Duran M, Vockley J, Wanders RJA and Silva MFB. *Interference of Valproic Acid on the branched-chain amino acid oxidative metabolism*; Emma Kinderziekenhuis (EKZ) symposium; Amsterdam, 2008.
 26. Luís PB, Ruiter J, Ijlst L, Ofman R, Diogo L, Garcia P, Duran M, Vockley J, Tavares de Almeida I, Wanders RJA and Silva MFB; *Interference of Valproic Acid on the branched-chain amino acid oxidative metabolism*; Annual Symposium of the Society for the Study of Inborn Errors of Metabolism (SSIEM); Lisbon, 2008. Published in *J Inher Metab Dis.* (2008), 31 (Suppl 1):7.
 27. Aires CC, Soveral G, Luís PB, ten Brink HJ, Tavares de Almeida I, Duran M, Wanders RJA and Silva MFB. *Pyruvate uptake is inhibited by Valproic Acid and metabolites in mitochondrial membranes*; 1st Portuguese-Spanish-British Joint Biophysics Congress 2008; Lisbon, 2008.
 28. Luís PB, Ruiter J, Ijlst L, Ofman R, Diogo L, Garcia P, Duran M, Vockley J, Tavares de Almeida I, Wanders RJA and Silva MFB; *Mitochondrial β -Oxidation Pathway of Valproic Acid and its Interference with the Oxidation of Branched-Chain Amino Acids*; Annual Meeting of the Amsterdam Center of Metabolism (ACM); Lunteren, 2009.
 29. Luís PB, Ruiter J, Ijlst L, Ofman R, Diogo L, Garcia P, Duran M, Vockley J, Tavares de Almeida I, Wanders RJA and Silva MFB. *Valproic Acid interferes with the oxidation of branched-chain amino acids*; 1st Post-Graduate iMed.UL Students symposium; Lisbon, 2009.
 30. Luís PB, Ruiter J, Ijlst L, Ofman R, Diogo L, Garcia P, Duran M, Vockley J, Tavares de Almeida I, Wanders RJA and Silva MFB. *Potential interference of valproic acid with the biotin-dependent carboxylase of leucine metabolism*; 34th Federation of the Societies of Biochemistry and Molecular Biology (FEBS) Congress, Prague, 2009.
 31. Luís PB, Ruiter J, Ijlst L, Ofman R, Diogo L, Garcia P, Duran M, Vockley J, Tavares de Almeida I, Wanders RJA and Silva MFB. *Towards the Complete Elucidation of the Mitochondrial β -Oxidation Pathway of Valproic Acid and its Interference with the Oxidation of Branched-Chain Amino Acids*; 11th European Regional International Society for the Study of Xenobiotics (ISSX) Meeting, Lisbon, 2009.
 32. Luís PB, Ruiter J, Ijlst L, Ofman R, Diogo L, Garcia P, Duran M, Vockley J, Tavares de Almeida I, Wanders RJA and Silva MFB. *Valproic Acid interferes with the oxidation of branched-chain amino acids*; Emma Kinderziekenhuis (EKZ) symposium; Amsterdam, 2009.

33. Luís PB, IJlst L, van Cruchten A, Duran M, Tavares de Almeida I, Wanders RJA and Silva MFB. *Acute valproate therapy and the depletion of the essential co-factor coenzyme A in rats*; Annual Meeting of the Amsterdam Center of Metabolism (ACM); Lunteren, 2010.
34. Luís PB, IJlst L, van Cruchten A, Duran M, Tavares de Almeida I, Wanders RJA and Silva MFB. *Bioavailability of free Coenzyme A in liver after in vivo treatment with sodium valproate*; XVIIth National Congress of Biochemistry; Porto, 2010.
35. Luís PB, IJlst L, van Cruchten A, Duran M, Tavares de Almeida I, Wanders RJA and Silva MFB. *Bioavailability of free Coenzyme A in liver after in vivo treatment with sodium valproate*; 2nd Post-Graduate iMed.UL Students symposium; Lisbon, 2010.
36. Luís PB, IJlst L, Roelofsen J, van Kuilenburg ABP, Duran M, Tavares de Almeida I, Wanders RJA and Silva MFB. *Initiation of Valproate treatment induces a significant decrease on the ratio ATP/ADP in rat liver*; VII Simpósio Anual da Sociedade Portuguesa das Doenças Metabólicas (SPDM), Algarve, 2010.
37. Luís PB, Ruiter J, IJlst L, Duran M, Tavares de Almeida I, Wanders RJA and Silva MFB. *Activity of ATP- and GTP-dependent succinyl-CoA synthetases is inhibited by valproyl-CoA, in human fibroblasts*; VII Simpósio Anual da Sociedade Portuguesa das Doenças Metabólicas (SPDM), Algarve, 2010.
38. Luís PB, IJlst L, Roelofsen J, van Kuilenburg ABP, Duran M, Tavares de Almeida I, Wanders RJA and Silva MFB. *Influence of valproate on the levels of tri- and diphosphate nucleotides in rat liver tissues*; 9th International Society for the Study of Xenobiotics (ISSX) International Meeting, Istanbul, 2010.
39. Luís PB, IJlst L, van Cruchten A, Duran M, Tavares de Almeida I, Wanders RJA and Silva MFB. *Influence of sodium valproate on the homeostasis of hepatic free coenzyme A*; Annual Symposium of the Society for the Study of Inborn Errors of Metabolism (SSIEM), Istanbul, 2010.
40. Luís PB, Ruiter J, IJlst L, Duran M, Tavares de Almeida I, Wanders RJA and Silva MFB. *Valproate inhibits the activity of ATP- and GTP-dependent succinyl-CoA synthetases*; Annual Symposium of the Society for the Study of Inborn Errors of Metabolism (SSIEM), Istanbul, 2010
41. Luís PB, IJlst L, van Cruchten A, Duran M, Tavares de Almeida I, Wanders RJA and Silva MFB. *Hepatic depletion of free coenzyme A following acute administration of sodium valproate*; European Association for the Study of the Liver (EASL) Monothematic Conference, Amsterdam, 2010.
42. Luís PB, IJlst L, van Lenthe H, Violante S, Moedas MF, Kulik W, Duran M, Tavares de Almeida I, Wanders RJA and Silva MFB. *Valproate does not deplete hepatic carnitine: a study in rat tissues*; III Congress of the Pharmaceutical Sciences, IX Portuguese-Spanish Congress on Controlled Release; Porto, 2011. Published in *Rev Port Farm*, (2011) 52, 6, 41-42.
43. Luís PB, IJlst L, van Lenthe H, Duran M, Tavares de Almeida I, Wanders RJA and Silva MFB. *Liver acylcarnitines in rats under acute and subchronic treatment with sodium valproate*; Annual Symposium of the Society for the Study of Inborn Errors of Metabolism (SSIEM), Geneva, 2011.
44. Silva MFB, Luís PB, Moedas M, IJlst L, van Cruchten A, van Lenthe H, Kulik W, Duran M, Tavares de Almeida I and Wanders RJA. *Insights into CoA and Carnitine metabolism to improve management of drug-associated mitochondrial dysfunction*; Cell Symposium: Mitochondria-from signalling to disease, Lisbon, 2013.
45. Luis PB, Gordon O and Schneider C. *Towards a resolution of the curcumin bioavailability conundrum*; 8th ISANH World Congress on Polyphenols, Lisbon, 2014.

46. Luís PB, Gordon O, Funk JL and Schneider C. *Quantification of Curcumin and its Metabolites by Isotope Dilution LC-MS*; 27th International Conference on Polyphenols & 8th Tannin Conference; Nagoya, Japan, 2014.
47. Gordon O, Luís PB and Schneider C. *Biochemical pharmacology of curcumin*; 27th International Conference on Polyphenols & 8th Tannin Conference; Nagoya, Japan, 2014.
48. Edwards RL, Varuzza PV, Chaturvedi, Sprinkle KC, Gordon O, Luís PB and Schneider C. *Role of oxidative metabolites in the anti-inflammatory activity of curcumin*; 27th International Conference on Polyphenols & 8th Tannin Conference; Nagoya, Japan, 2014.
49. Luís PB, Milne GL, Laidlaw TM and Schneider C. *A novel pathway of eicosanoid metabolism?*; 14th International Conference on Bioactive Lipids in Cancer, Inflammation and Related Diseases; Budapest, Hungary, 2015.
50. Luis PB and Schneider C. *Quantification of curcumin metabolites in human plasma by isotope dilution LC-MS*; 7th International Conference on Polyphenols and Health; Tours, France, 2015.
51. Schneider C and Luis PB. *Isotope dilution LC-MS method for the quantification of curcumin and its metabolites in human plasma*; The International Chemical Congress of Pacific Basin Societies; Honolulu, USA, 2015.
52. Kunihiro AG, Frye JB, Luis PB, Schneider C and Funk JL. *Tissue-specific curcuminoid deglucuronidation for the treatment of metastatic breast cancer bone lesions*; Experimental Biology; San Diego, USA, 2016.
53. Luís PB, Nakashima F, Uchida K, Schneider C. *Oxidative Transformation of Curcumin-Glucuronide*; 28th International Conference on Polyphenols; Vienna, Austria, 2016.
54. Kunihiro AG, Frye JB, Luis PB, Schneider C and Funk JL. *Site-Specific activation of curcuminoids in the breast cancer bone metastases microenvironment*; San Antonio Breast Cancer Symposium (SABCS); San Antonio, USA, 2016.
55. Luis PB, Gordon O and Schneider C. *Oxidative transformation of curcumin-glucuronide*; Sociedade Portuguesa de Doenças Metabólicas (SPDM) Meeting; Évora, Portugal, 2017.
56. Luis PB, Boeglin W and Schneider C. *Thiol reactivity of curcumin and its oxidation products*. 8th International Conference on Polyphenols and Health; Quebec, Canada, 2017.
57. Kunihiro AG, Brickey JA, Frye JB, Luis PB, Schneider C and Funk JL. *Bone-protective curcumin circulates as a pro-drug conjugate that is activated in bone by β -glucuronidase*; American Association for Cancer Research (AACR); Chicago, USA, 2018.
58. Luis PB and Schneider C. *Isotope dilution LC-MS method for the quantification of curcumin and its metabolites in human plasma*; Annual meeting of the Association of Official Agricultural Chemists (AOAC) International, Toronto, Canada, 2018.

3. Oral Presentations at Scientific Meetings (peer reviewed)

1. Luís PB, Ruiter J, IJlst L, Ofman R, Diogo L, Garcia P, Duran M, Vockley J, Tavares de Almeida I, Wanders RJA and Silva MFB; *Interference of Valproic Acid on the branched-chain amino acid oxidative metabolism*; Annual Symposium of the Society for the Study of Inborn Errors of Metabolism (SSIEM); Lisbon, 2008. Published in *J Inherit Metab Dis.* (2008), 31 (Suppl 1):7.
2. Luís PB, Ruiter J, IJlst L, Ofman R, Diogo L, Garcia P, Duran M, Vockley J, Tavares de Almeida I, Wanders RJA and Silva MFB; *Mitochondrial β -Oxidation Pathway of Valproic Acid and its Interference with the Oxidation of Branched-Chain Amino Acids*; Annual Meeting of the Amsterdam Center of Metabolism (ACM); Lunteren, 2009.

3. Luís PB, IJlst L, van Cruchten A, Duran M, Tavares de Almeida I, Wanders RJA and Silva MFB; *Acute valproate therapy and the depletion of the essential co-factor coenzyme A in rats*; Annual Meeting of the Amsterdam Center of Metabolism (ACM); Lunteren, 2010.
4. Luís PB, IJlst L, van Lenthe H, Violante S, Moedas MF, Kulik W, Duran M, Tavares de Almeida I, Wanders RJA and Silva MFB. *Valproate does not deplete hepatic carnitine: a study in rat tissues*; III Congress of the Pharmaceutical Sciences, IX Portuguese-Spanish Congress on Controlled Release; Porto, 2011. Published in *Rev Port Farm*, (2011) 52, 6, 41-42.
5. Luís PB, Gordon O, Funk JL and Schneider C. *Quantification of Curcumin and its Metabolites by Isotope Dilution LC-MS*; 27th International Conference on Polyphenols & 8th Tannin Conference; Nagoya, Japan, 2014.
6. Luís PB, Nakashima F, Uchida K, Schneider C. *Oxidative Transformation of Curcumin-Glucuronide*; 28th International Conference on Polyphenols; Vienna, Austria, 2016.

4. Seminar Presentations at Vanderbilt

1. “Human Pharmacokinetics of Curcumin”; Grand Rounds in Clinical Pharmacology, Vanderbilt University Medical School, November 11, 2014.
2. “Pharmacology of the spice compound curcumin”; Department of Pharmacology Internal Seminar of Works in Progress, Vanderbilt University Medical School, September 27, 2017.