

NATALIA DE MORAES, B. Pharm., PhD

January, 2024

Center of Pharmacometrics & Systems

Pharmacology

Department of Pharmaceutics - Lake Nona

University of Florida

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Google Scholar: <https://scholar.google.com/citations?hl=en&user=beBQflcAAAAJ>

CURRENT POSITION

Assistant Professor

Center for Pharmacometrics & Systems Pharmacology

Department of Pharmaceutics – Lake Nona (Orlando)

College of Pharmacy

University of Florida

EDUCATION

Institution

University of Sao Paulo

School of Pharmaceutical Sciences of Ribeirão Preto

Department of Clinical, Toxicological, and Food Analysis

Thesis Advisor: Dr. Vera Lanchote

Thesis title: Effect of uncontrolled diabetes on the kinetic disposition, metabolism, and pharmacokinetic-pharmacodynamic relationship of tramadol enantiomers in patients with neuropathic pain

University of Sao Paulo

School of Pharmaceutical Sciences of Ribeirão Preto

Short-term training at the University of Mississippi

School of Pharmacy

Supervised by Prof. Christopher McCurdy

POSTDOCTORAL FELLOWSHIP

Institution

University of São Paulo

School of Pharmaceutical Sciences

Department of Clinical, Toxicological, and Food Analysis

Advisor: Prof. Vera Lanchote

PROFESSIONAL EXPERIENCE

Year

Position

Degree

Ph.D.

Year

2011

B.S. Pharmacy

2006

2006

Year

2012 –2012

2022 – present	Assistant Professor, Department of Pharmaceutics, College of Pharmacy, University of Florida
2021 – 2022	Research Assistant Professor, Department of Pharmaceutics, College of Pharmacy, University of Florida
2012 – 2021	Assistant professor at São Paulo State University (UNESP), Araraquara, SP, Brazil
2020 – 2021	Consultant at Cristalia Produtos Químico-Farmacêuticos Ltda, São Paulo, Brazil
2020 – 2021	Consultant at Instituto BioChimico Indústria Farmacêutica Ltda, Rio de Janeiro, Brazil
2014 – 2022	Advisor for the Graduate Program of Toxicology (Ph.D. and Masters), School of Pharmaceutical Sciences of Ribeirao Preto, University of Sao Paulo
2014 – 2022	Advisor for the Graduate Program of Pharmaceutical Sciences (Ph.D. and Masters), School of Pharmaceutical Sciences, Sao Paulo State University
2018 – 2019	Visiting researcher at Queen's University Belfast, UK. Biomarkers of arsenic exposure and metabolism. Supervised by Profs. A Meharg & J Woodside.
2011 – 2011	Visiting researcher at Centre for Applied Pharmacokinetics Research (CAPkR), University of Manchester, Manchester, UK. In vitro in vivo extrapolation for drug metabolism and transporter. Supervised by Prof. Amin Rostami
2008 - 2008	Visiting researcher at School of Pharmacy, University of Mississippi, Oxford, MS USA. Pharmacokinetics of mitragynine, an alkaloid from <i>Mitragyna speciosa</i> . Supervised by Profs. Bonnie Avery and Christopher McCurdy

TEACHING EXPERIENCE IN THE UNIVERSITY

Department of Pharmaceutics, University of Florida

PHA5132 – Principles of Drug Therapy Individualization (Spring 2023)

PHA6935/6122 – Population pharmacokinetic-pharmacodynamic modelling (since Spring 2023)

PHA6125 – Introduction to Quantitative Pharmacology (Since Fall 2023)

Department of Drugs and Toxicology, Sao Paulo State University

General Toxicology (2013-2021, teaching 60 h per semester per class, 2 classes) – FI-584(T) and FN-585(T)

Drug Toxicology (2012, 2021, teaching 60 h per semester per class, 2 classes) FI-511(T) and FN-562(T)

Fundamentals of Toxicology (2017 – 2021, 15 h per semester) – EBB-061(T)

Introduction to Toxicological Analysis (2013-2021, 60 h per semester) – FI-510(P) – FN-561(P)

Fundamentals of Chromatography (2020-2020, teach 12 h per semester) – FI-620(P) - FN-652(P)

Pharmaceutical Sciences Graduate Program, Sao Paulo State University

Modern Liquid Chromatography (2013 – 2019, teaching in 3 out of 15 modules)

Pharmacogenetics/Pharmacogenomics: fundamentals and applications (2013 – 2018, 45 h per semester, every two years)

Special topics in Toxicology (2020, 45 h)

Physiologically based pharmacokinetics (2021, 60 h)

Toxicology Graduate Program, University of Sao Paulo

Pharmacometrics towards Personalized Drug Therapy (2019 – 2019, 30h)

Seminars in Pharmacometrics (2020, course coordinator, 15 h)

Pharmacogenetics/Pharmacogenomics: fundamentals and applications (2013 – 2018, 45 h per semester, every two years)

Physiologically based pharmacokinetics (2021, 60h)

PROFESSIONAL AFFILIATIONS

2022 – present – Member of the American College of Clinical Pharmacology

2021 – present – Member of the International Society of Pharmacometrics
2020 – 2021 – Brazilian Association of Pharmaceutical Sciences
2019 – 2021 – Brazilian local coordinator of the Red IberoAmericana de Farmacometría (alongside Prof. Teresa Dalla Costa)
2019 – present – Member of the Red IberoAmericana de Farmacometría (alongside Prof. Teresa Dalla Costa)

ADDITIONAL PROFESSIONAL ACTIVITIES

2023 – now – Chair of the Digital Twin working group at the Center for Pharmacometrics & Systems (UF)
2022 – now – Member of the Membership Committee of the American College of Clinical Pharmacology
2022-2023 – Member of the Working Group at ANVISA (Brazilian Health Regulatory Agency) to discuss PBBM case applications - Collaborative project between pharmaceutical industries associated with the IQ Consortium (International Consortium Innovation & Quality in Pharmaceutical Development) and regulatory agencies, including ANVISA, FDA, Health Canada, MHRA.
2021 – 2021 Vice-supervisor of “Nucleo de Atendimento a Comunidade”, School of Pharmaceutical Sciences, UNESP

Peer-reviewer for:

Pharmaceuticals
European Journal of Pharmaceutical Sciences
Frontiers in Pharmacology
The Pharmacogenomics Journal
Journal of Basic and Applied Pharmaceutical Sciences
Scientific Reports
Journal of Chromatography B
Basic & Clinical Pharmacology & Toxicology
Frontiers in Chemistry
Biomedicine and Pharmacotherapy
Xenobiotica
Exposure And Health
Brazilian Journal of Pharmaceutical Sciences
Pain management
Canadian Journal of Physiology and Pharmacology
Journal of Clinical Pharmacology
Drug Research
Journal of Pharmaceutical Analysis
Clinical and Experimental Pharmacology and Physiology
International Journal of Anesthetics and Anesthesiology
Current Pharmaceutical Analysis

Editor

Guest Editor for **Pharmaceutics** in the Special Issue entitled "Cytochrome P450 enzymes in Drug Metabolism."
Review editor in Drug Metabolism and Transport for **Frontiers in Pharmacology**
Review editor in Experimental Pharmacology and Drug Discovery for **Frontiers in Pharmacology**
Associate editor - **Journal of Basic and Applied Pharmaceutical Sciences**

GRANTS AND CONTRACTS

Active grants:

FAPESP 2023/04406-3

Therapeutic individualization of tacrolimus after transplantation of liver: the effect of vertical gastrectomy and liquid biopsy technology

Requested amount: R\$ 277.656,74

02/01/2024-01/31/2026

Role: Co-I (PI: Dr. Leonardo Regis Leira Pereira, University of Sao Paulo)

Ministry of Health, Brazil / Pan American Health Organization (PAHO) (OPAS)

Proposal for diagnostic intervention in municipalities with high therapeutic failure for leprosy polychemotherapy

Requested amount: R\$ 500,000 (Brazilian reais)

Role: Co-I

Certara - UF Postdoctoral Fellowship

Sponsor: CERTARA

Amount: US\$ 219,609

12/02/2023-12/03/2025

Role: Co-PD/PI

UF Post-doctoral fellowship program

Sponsor: Genentech

Amount: US\$ 227,563

07/01/2024-06/30/2026

Time dedication: 1%

Role: Co-I

CNPq 405333/2021-8

Assessment of the impact of pharmaceutical care in patients with pharmaco-resistant epilepsy: a population pharmacokinetic model based on saliva samples

Requested amount: R\$ 60,000.00

Role: Co-I (PI: Dr. Fabiana Varallo, University of Sao Paulo)

MMJ Consortium 2022 RFP

Quantitative assessment of complex drug-drug interaction networks involving medical cannabis products in special populations

07/01/2022-06/30/2024

Amount: US\$ 130,000

Time dedication: 1.5%

Role: Co-I

Pending:

PAR-21-313, NIH

12/1/2023 - 11/30/2026

Liquid biopsy technology toward individualized tacrolimus immunosuppression therapy

Amount: \$ 535,841

Time dedication: 10%

Role: PI

RFA-AG-24-044, NIH/NIA

7/1/2024 - 6/30/2028

Pharmacokinetic and pharmacodynamic modeling of mTOR inhibitors in aging

Amount: \$810,141

Time dedication: 7.5%

Role: Co-PI

RFA-OD-22-009, NIH/

04/01/2023 - 03/31/2028

Development of a Down Syndrome gut-brain-chip to investigate the impact of trisomy 21 on brain and intestine homeostasis

Amount: \$3,862,509

Time dedication: 5%

Role: Co-investigator

PAR-23-131, NIH/NICHD

04/01/2023 - 03/31/2028

Translational Research on maternal-fetal drug transfer in antiretroviral therapy

Amount: \$419,375

Time dedication: 20%

Role: PI

PAR-21-313, NIH/NICHD

04/01/2024 - 03/31/2027

Precision dosing in obesity: leveraging liquid biopsy and digital twin models to

Amount: \$571,875

Time dedication: 20%

Role: PI

Completed:

FAPESP 2018/06569-9, Impact of Roux-en-Y gastric bypass surgery on drug disposition: a single-dose pharmacokinetic study of simvastatin and carvedilol.

Project period: 02/2019 – 11/2022.

Total amount: R\$ 177,048.61 (Brazilian reais) + US\$ 7,674.50

Role: PI

Contract 2100.0129 Cristalia – UNESP - Fundecif

Source: Laboratório Cristalia Produtos Químico e Farmacêuticos Ltda

Title: Setting health-based exposure limits for the manufacture of medicinal products in shared facilities

Time period: 11/2020 – 11/2025

Amount: R\$ 1,008,800.00 (Brazilian reais)

Role: PI

Contract 2100.0134 Instituto BioChimico – UNESP - Fundecif

Source: Instituto BioChimico Indústria Farmacêutica Ltda

Title: Setting health-based exposure limits for the manufacture of medicinal products in shared facilities

Time period: 11/2020 – 11/2022

Amount: R\$ 41,600.00 (Brazilian reais)

Role: PI

UNESP, Edital 009/2016 - Ofício 154 (PDI/2016) - Influence of genetic polymorphisms of *ABCG2/BCRP* on the transport of nifedipine to breast milk in hypertensive lactants.

Project period: 2016 - 2017
Amount: R\$ 9,000.00 (Brazilian reais)
Role: PI

PADC 2017/10-I - FCF-UNESP (FUNDECIF) - Impact of the genetic polymorphisms of *SLCO22A2* and *SLC22A4* on the kinetic disposition of gabapentin in patients with neuropathic pain.
Project period: 2017/2018.
Amount: R\$ 6,851.38 (Brazilian reais)
Role: PI

FAPESP 2014/50265-3, Projeto BIOTA – Temático. Metabolism and distribution of natural and synthetic xenobiotics: from the understanding of the reactive processes to the generation of tissue images.
Project period: July/2015 – June/2020
Role: Co-investigator; PI: N.P.Lopes, University of São Paulo.

PADC 2016/03-I - FCF-UNESP (FUNDECIF) – Influence of the organic cation transporter inhibitor (OCT2) cetirizine on the kinetic disposition of gabapentin in patients with neuropathic pain
Project period: 2016/2018.
Amount: R\$ 9,923.50 (Brazilian reais)
Role: PI

CNPq 448803/2014-3 - Influence of toluene exposure by inhalation on the in vivo activity of the P-glycoprotein and the organic anion transport polypeptide 1B1 (OATP1B1) in rats.
Project period: 2014 – 2017
Amount: R\$ 27,123.74 (Brazilian reais)
Role: PI

FAPESP 13/14730-0, Influence of sepsis and age on OATP1A2 activity using rocuronium pharmacokinetics-pharmacodynamics as a model in surgical patients.
Project period: 2014 –2016.
Amount: R\$ 85,940,01 (Brazilian reais) +US\$ 24.052,21
Role: PI

FAPESP 2020/00756-1 - Predictions of drug-drug interactions using physiologically based pharmacokinetic modeling
Title: Research fellowship program for undergraduate student
Time period: 04/01/20-12/31/2020
Role: PI
Amount: R\$ 6887.43

FAPESP 2017/12452-4 - Maturation of renal clearance processes
Title: Research fellowship program for M.S. student for international internship
Time period: 10/01/2017-03/31/2018
Role: PI
Amount: R\$ 7020.00 + US\$ 10335.49

FAPESP 2017/09757-8 - 53rd Congress of the European Societies of Toxicology (EUROTOX 2017)
Title: Funding to attend a research meeting
Time period: 10/09/2017 – 13/09/2017
Role: PI
Amount: R\$ 62.00 + US\$ 2390.76

FAPESP 2016/21313-5 - Repair of Flexar SQ-300 mass spectrometer

Title: Equipment repair

Time period: 12/01/2016 – 11/30/2017

Role: PI

Amount: R\$ 47661.15

FAPESP 2015/25728-2 - Influence of the organic cation transporter 2 (OCT2) inhibitor cimetidine and experimental diabetes mellitus on the kinetic disposition of gabapentin in rats

Title: Research fellowship program for M.S. student

Time period: 11/01/2016-07/31/2018

Role: PI

Amount: R\$ 32707.62

FAPESP 2014/20177-5 - Influence of experimental endotoxemia induced by lipopolysaccharide (LPS) on OATP1A2 expression in rats

Title: Research fellowship program for undergraduate student

Time period: 22/01/2014 – 10/31-2015

Role: PI

Amount: R\$ 4392.00

FAPESP 2013/08530-9 - 24th International Symposium on Pharmaceutical and Biomedical Analysis (PBA 2013)

Title: Funding to attend a research meeting

Time period: 30/06/2013 – 03/07/2013

Role: PI

Amount: R\$ 3769.37 + US\$ 2155.66

FAPESP 2011/23767-0 - Influence of sepsis and age on OATP1A2 activity using as model the pharmacokinetics-pharmacodynamics of rocuronium in patients surgical

Title: Research fellowship program for postdoctoral researcher

Time period: 22/01/2014 – 10/31-2015

Role: post-doctoral fellow

Amount: R\$ 55,200.69

SCIENTIFIC PUBLICATIONS:

1. Romao M, Pinto L, Duarte G, **de Moraes NV**, Abduljalil K, Moreira F. A mechanistic framework to predict maternal-placental-fetal pharmacokinetics of nifedipine employing physiologically based pharmacokinetics modeling approach. *Journal of Clinical Pharmacology* (in press)
2. Carvalho AF, **de Moraes NV**, Crotti EMA, Crevelin JE, Gonzaga dos Santos A. Casearia Essential Oil: An Updated Review on the Chemistry and Pharmacological Activities. *Chem Biodivers*. 2023 Sep;20(9):e202300492. doi: 10.1002/cbdv.202300492. PMID: 37410861
3. Oda FB, Carvalho FA, Yamamoto PA, de Oliveira JA, Peccinini RG, Zocolo GJ, Ribeiro PRV, **de Moraes NV**, dos Santos AG. Metabolism characterization and chemical and plasma stability of casearin B and caseargrewiin F. *Planta Medica*, 2023 May 26. doi: 10.1055/a-2078-5920. PMID: 37084791.
4. Schmidt S, Vozmediano V, Cristofolletti R, Kim S, Lin Z, **de Moraes N**, Azeredo F, Cicali B, Leuenberger H, Brown JD, Jin JY, Musante CJ, Tannenbaum S, Wang Y. Requirements, Expectations, Challenges & Opportunities Associated with Training the Next Generation of

Pharmacometricians. CPT: Pharmacometrics & Systems Pharmacology, 00 1-6, 2023. doi: 10.1002/psp4.12970

5. Yamamoto PA, Cristofolletti R, Vozmediano V, de Gaitani CM, da Silva R, Kemp R, Sankarankutty AK, dos Santos JS, **de Moraes NV**. Effect of Roux-en-Y gastric bypass in the pharmacokinetics of R-carvedilol and S-carvedilol. *Journal of Clinical Pharmacology*, 2023.
6. Machado MC, Yamamoto PA, **de Moraes NV**, Silva LP, Neves FMF, Martins Filho EF, Costa-Neto JM, Portela RD, Barrouin-Melo SM, Hielm-Bjorkmn A, Godoy ALPC, Estrela-Lima, A. Influence of cyclophosphamide on carboplatin population pharmacokinetics in female dogs with mammary carcinoma. *Animals*, 12(22), 2022. <https://doi.org/10.3390/ani12223109>
7. Moreira FL, Tarozzo MMB, Nardotto G, Goncalves JC, Schimidt S, **De Moraes NV**. Assessing the contribution of UGT isoforms on raltegravir drug disposition through PBPK modeling: model optimization for future model applications. *European Journal of Pharmaceutical Sciences*, v. 179, 106309, 2022. <https://doi.org/10.1016/j.ejps.2022.106309>
8. Kitayama AT, Oliveira CS, **de Moraes NV**, Lauretti CR, Defino HA, Lauretti GR. Epidural dexamethasone showed a better analgesic profile over epidural betamethasone as adjuvant in acute neuropathic lumbar pain. *Int J Adv Eng Res* 9 (9), 2022.
9. Yahouédéhou S, Neres J, **de Moraes NV**, Azeredo F, Fiuza LMF, da Guarda CC, Valverde SPC, Santiago RP, Lyra IM, Adorno EV, Fonseca AF, Godoy AL, Goncalves. MS-CAT -21A>T Variant Alters Hydroxyurea Pharmacokinetic Parameters in Brazilian Children with Sickle Cell Anemia. *Ann Case Report* 7: 920, 2022.
10. Gupta Y, Hossain M, Islam MR, Talukder MMH, Khokon MAR, Uddin MM, Kabir H, Carey M, Ralphs K, **de Moraes NV**, Meharg AA, Meharg C. Recycled Household Ash in Rice Paddies of Bangladesh for Sustainable Production of Rice Without Altering Grain Arsenic and Cadmium. *Expo Health* (2023). <https://doi.org/10.1007/s12403-023-00539-y>
11. Pavan MG, Yamamoto PA, Moreira da Silva R, Salgado Jr W, Santos JS, Kemp R, Sankarankutty AK, **de Moraes NV**, Gaitani CM. Chemometric optimization of salting-out assisted liquid-liquid extraction (SALLE) combined with LC-MS/MS for the analysis of carvedilol enantiomers in human plasma applied to clinical pharmacokinetics. *J Chromatogr B Analyt Technol Biomed Life Sci*, 1205:123338, 2022. doi: 10.1016/j.jchromb.2022.123338.
12. Yamamoto PA, Benzi JRL, Dach F, **De Moraes NV**. Therapeutic drug monitoring of gabapentin: the applicability in patients with neuropathic pain. *Braz J Pharm Sci*, 2022.
13. Costa ACC., Benzi JRL, Yamamoto PA, Freitas MCF, Zanelli CF, **Lauretti GR, De Moraes NV**. Population pharmacokinetics of gabapentin in patients with neuropathic pain: Lack of effect of diabetes or glycaemic control. *Br J Clin Pharmacol*, p. 1-9, 2021. doi: 10.1111/bcp.14594.
14. Mauro M, Silva RM, Campos ML, Bauermeister A, Lopes NP, **De Moraes NV**. In vitro metabolism of copalic and kaurenoic acids in rat and human liver microsomes. *Quimica Nova*, 44(6), 2021. <https://doi.org/10.21577/0100-4042.20170724>
15. Costa ACC, Yamamoto PA, Lauretti GR, Benzi JRL, Zanelli CF, Barz V, Ciarimboli G, **De Moraes NV**. Cetirizine reduces gabapentin plasma concentrations and effect: role of renal drug transporters for organic cations. *J Clin Pharmacol*, 1076-1086, 2020. doi: 10.1002/jcph.1603.
16. **De Moraes NV**, Carey M, Neville CE, Cruise S, McGuinness B, Kee F, Young IS, Woodside JV, Meharg AA. Water dilutes and alcohol concentrates urinary arsenic species when food is the dominant source of exposure. *Exposure and Health*, 2019. <https://doi.org/10.1007/s12403-019-00329-5>
17. Yamamoto PA, Costa ACC, Lauretti GR, **De Moraes NV**. Pharmacogenomics in chronic pain therapy: from disease to treatment and challenges for clinical practice. *Pharmacogenomics*, v. 20, 971-982, 2019. doi: 10.2217/pgs-2019-0066.
18. Demarque DP, Calejon DR, Pinto LG, Gouvea DR, **De Moraes NV**, Lopes JLC, Lopes NP, Guaratini T. Pharmacokinetic disposition of erythraline in rats after intravenous administration. *Braz J Pharmac*, 773-777, 2019. <https://doi.org/10.1016/j.bjp.2019.07.002>

19. Mauro M, De Grandis RA, Campos ML, Bauermeister A, Peccinini RG, Pavan FR, Lopes NP, **De Moraes NV**. Acid diterpenes from Copaiba oleoresin (*Copaifera langsdorffii*): Chemical and plasma stability and intestinal permeability using Caco-2 cells. *J Ethnopharmacol*, v. 235, 183-189, 2019. doi: 10.1016/j.jep.2019.02.017.
20. Malfara B, Benzi JRL, Filgueira GCO, Zanelli CF, Duarte G, Cavalli RC, **De Moraes NV**. ABCG2 c.421C>A polymorphism alters nifedipine transport to breast milk in hypertensive breastfeeding women. *Reproductive Toxicology*, in press, 2019. doi: 10.1016/j.reprotox.2019.01.007.
21. Godoy ALPC, **De Moraes NV**, Benzi JRL, Lanchote VL. Changes in tramadol enantioselective pharmacokinetics and metabolism in rats with experimental diabetes treated or not with insulin. *European Journal of Pharmaceutical Sciences*, 128: 97-102, 2019. doi: 10.1016/j.ejps.2018.11.032.
22. Benzi JRL, Baviera AM, Yamamoto PA, **De Moraes NV**. The role of organic cation transporter 2 inhibitor cimetidine, experimental diabetes mellitus and metformin on gabapentin pharmacokinetics in rats. *Life Sciences*, 63-68, 2018. doi: 10.1016/j.lfs.2018.03.012.
23. Yamamoto PA, Benzi JRL, Azeredo FJ, Dach F, Ianhez Jr E, Zanelli CF, **De Moraes NV**. Pharmacogenetics-based population pharmacokinetic analysis of gabapentin in patients with chronic pain: effect of OCT2 and OCTN1 gene polymorphisms. *Basic & Clinical Pharmacology & Toxicology*, 2018. DOI: 10.1111/bcpt.13126
24. Mauro M, Lepera JS, Borsari B, Capela JMV, **De Moraes NV**. Effect of inhalation exposure to toluene on the activity of organic anion transporting polypeptide (Oatp) using pravastatin as a probe drug in rats. *Xenobiotica*, 1-15, 2017. DOI: 10.1080/00498254.2017.1353717
25. Costa ACC, Coelho EB, Lanchote VL, Correia BV, Abumansur JT, Lauretti GR, **De Moraes NV**. The *SLCO1A2 -189_-188InsA* polymorphism reduces clearance of rocuronium in patients submitted to elective surgeries. *European Journal Of Clinical Pharmacology*, 73: 957-963, 2017. DOI: 10.1007/s00228-017-2243-1
26. Yamamoto PA, **De Moraes NV**, Silva VP, Lepera, JS. Análise simultânea dos indicadores biológicos de exposição aos solventes etilbenzeno, estireno, tolueno e xileno na urina por CLAE-UV. *Química Nova (Online)*, 1131-1135, 2016. <http://dx.doi.org/10.21577/0100-4042.20160128>
27. Varrigue RM, Matsumoto JA, Lanchote VL, Lauretti GR, **De Moraes NV**. Pharmacokinetics and pharmacodynamics of rocuronium in young adult and elderly patients undergoing elective surgery. *Journal of Pharmacy and Pharmacology*, 68: 1351-1358, 2016. DOI: 10.1111/jphp.12617
28. Lanchote VL, Almeida R, Barral A, Barral-Netto M, Marques MP, **De Moraes NV**, Silva AM, Souza T, Suarez-Kurtz, G. Impact of visceral leishmaniasis and curative chemotherapy on cytochrome P450 activity in Brazilian patients. *British Journal of Clinical Pharmacology*, 80: 1160-1168, 2015. doi: 10.1111/bcp.12677.
29. Cardoso JLC, Lanchote VL, Pereira MPM, Capela JMV, **De Moraes NV**, Lepera JS. Impact of inhalation to ethanol fuel on the pharmacokinetics of verapamil, ibuprofen and fluoxetine as in vivo probe drugs for CYP3A, CYP2C and CYP2D in rats. *Food and Chemical Toxicology*, 99-105, 2015. doi: 10.1016/j.fct.2015.08.002
30. **De Moraes NV**, Lauretti GR, Coelho EB, Godoy ALPC, Neves DV, Lanchote VL. Impact of fraction unbound, CYP3A and CYP2D6 in vivo activities, and other potential covariates to the clearance of tramadol enantiomers in patients with neuropathic pain. *Fundamental & Clinical Pharmacology*, 30: 153-161, 2015. doi: 10.1111/fcp.12168
31. **De Moraes NV**, Lauretti GR, Lopes BCP, Filgueira GCO, Lanchote VL. Analysis of rocuronium in human plasma by liquid chromatography-tandem mass spectrometry with application in clinical pharmacokinetics. *Journal of Pharmaceutical and Biomedical Analysis*, 90: 180-185, 2014. DOI: 10.1016/j.jpba.2013.11.032
32. Cardoso JLC, Lanchote VL, Marques MP, **De Moraes NV**, Lepera JS. Analysis of ibuprofen enantiomers in rat plasma by liquid chromatography with tandem mass spectrometry. *Journal of Separation Science*, 37: 944-949, 2014. doi: 10.1002/jssc.201301184
33. **De Moraes NV**, Lauretti GR, Lanchote VL. Effects of type 1 and type 2 diabetes on the pharmacokinetics of tramadol enantiomers in patients with neuropathic pain phenotyped as

- cytochrome P450 2D6 extensive metabolizers. *Journal of Pharmacy and Pharmacology*, 66:1222-1230, 2014. DOI: 10.1111/jphp.12255
34. Neves DV, Lanchote VL, De Souza L, Hayashida M, Nogueira MS, **De Moraes NV**, Cesarino, EJ. Metoprolol oxidation polymorphism in Brazilian elderly cardiac patients. *Journal of Pharmacy and Pharmacology*, 65: 1347-1353, 2013. DOI: 10.1111/jphp.12109
 35. **De Moraes NV**, Bergamaschi MM, Bianchi MLP, Bragheto JB, Malfará WR, Queiroz RHC. L-arginine, a nitric oxide precursor, reduces dapson-induced methemoglobinemia in rats. *Brazilian Journal of Pharmaceutical Sciences*, 48: 87-94, 2012.
 36. **De Moraes NV**, Lauretti GR, Napolitano MN, Santos NR, Godoy ALPC, Lanchote VL. Enantioselective analysis of unbound tramadol, O-desmethyltramadol and N-desmethyltramadol in plasma by ultrafiltration and LC MS/MS: Application to clinical pharmacokinetics. *Journal of Chromatography. B*, 880: 140-147, 2012. DOI: 10.1016/j.jchromb.2011.11.033
 37. Godoy ALPC, **De Moraes NV**, Martinez EZ, Carvalho TMJP, Marques MP, Lanchote VL. Simultaneous analysis of tramadol, O-desmethyltramadol, and N-desmethyltramadol enantiomers in rat plasma by high-performance liquid chromatography-tandem mass spectrometry: Application to pharmacokinetics. *Chirality*, 23: 287-293, 2011. DOI: 10.1002/chir.20914
 38. **De Moraes NV**, Moretti RAC, Furr III EB, McCurdy CR, Lanchote VL. Determination of mitragynine in rat plasma by LC MS/MS: Application to pharmacokinetics. *Journal of Chromatography B*, 877: 2593-2597, 2009. DOI: 10.1016/j.jchromb.2009.06.023
 39. **De Moraes NV**, Mello MH, Souza AM, Sampaio SV, Queiroz RHC. Potencialização do efeito metemoglobinizante da dapsona em ratos pela N-acetilcisteína. *Brazilian Journal of Pharmaceutical Sciences*, 44: 97-104, 2008.
 40. **De Moraes NV**, Grando MD, Valerio DAR, Oliveira DP. Exposição ambiental a desreguladores endócrinos: alterações na homeostase dos hormônios esteroidais e tireoidianos. *Revista Brasileira de Toxicologia*, 21:1-8, 2008.

BOOK CHAPTER

1. Lepera JS, **De Moraes NV**. Agentes Metemoglobinizantes. In: Oga S, Camargo MMA, Batistuzzo, JAO. (Org.). Fundamentos de toxicologia. 4ed. São Paulo: Atheneu, 2021.
2. Yamamoto PA, **De Moraes NV**. Agentes indutores de metemoglobinemia. In: Dorta D, eds. Toxicologia Ocupacional. São Paulo: EDUSP, 2021 (SUBMITTED).
3. Lepera JS, **De Moraes NV**. Chumbo - Determinação no sangue por espectrofotometria de absorção atômica; determinação da atividade da delta-aminolevulínico desidratase eritorcitária por espectrofotometria; determinação do ácido delta-aminolevulínico em urina por espectrofotometria e cr. In: Regina Lucia de Moraes Moreau; Maria Elisa Pereira Bastos de Siqueira. (Org.). Toxicologia Analítica. 2aed. Rio de Janeiro: Guanabara Koogan, 2016, v, p. 236-243.
4. Lepera JS, **De Moraes NV**. Agentes Metemoglobinizantes. In: Oga S, Camargo MMA, Batistuzzo, JAO. (Org.). Fundamentos de toxicologia. 4ed. São Paulo: Atheneu, 2014, v. 1, p. 265-275.

TECHNICAL REPORTS

1. De Moraes NV. Setting health-based exposure limit for leflunomide, 2020.
2. De Moraes NV. Setting health-based exposure limit for cefepime, 2020.
3. De Moraes NV. Setting health-based exposure limit for imatinib, 2020.
4. De Moraes NV. Setting health-based exposure limit for cefuroxime, 2020.
5. De Moraes NV. Setting health-based exposure limit for fentanyl, 2020.
6. De Moraes NV. Setting health-based exposure limit for temozolomide, 2020.
7. De Moraes NV. Setting health-based exposure limit for dexpanthenol, 2020.
8. De Moraes NV. Setting health-based exposure limit for sugammadex sodium, 2020.
9. De Moraes NV. Setting health-based exposure limit for imipenem monohydrate/sodium cilastatin, 2021.
10. De Moraes NV. Setting health-based exposure limit for capecitabine, 2021.
11. De Moraes NV. Setting health-based exposure limit for morphine sulphate, 2021.
12. De Moraes NV. Setting health-based exposure limit for sodium enoxaparin, 2021.
13. Avelino ERAF, De Moraes NV. Setting health-based exposure limit for sodium hyaluronate, 2021.
14. Pinto LSR, De Moraes NV. Setting health-based exposure limit for quetiapine hemifumarate, 2021.
15. Avelino ERAF, De Moraes NV. Setting health-based exposure limit for etodolac, 2021.
16. Pinto LSR, De Moraes NV. Setting health-based exposure limit for ibuprofen, 2021.
17. Avelino ERAF, De Moraes NV. Setting health-based exposure limit for codeine phosphate, 2021.
18. Avelino ERAF, De Moraes NV. Setting health-based exposure limit for sodium phenytoin, 2021.
19. Avelino ERAF, De Moraes NV. Setting health-based exposure limit for bimatoprost, 2021.
20. Pinto LSR, De Moraes NV. Setting health-based exposure limit for timolol maleate, 2021.
21. Pinto LSR, De Moraes NV. Setting health-based exposure limit for oseltamivir phosphate, 2021.
22. Avelino ERAF, De Moraes NV. Setting health-based exposure limit for cloramphenicol, 2021.
23. Avelino ERAF, De Moraes NV. Setting health-based exposure limit for azatioprine, 2021.
24. Avelino ERAF, De Moraes NV. Setting health-based exposure limit for lidocaine hydrochloride, 2021.
25. Avelino ERAF, De Moraes NV. Setting health-based exposure limit for haloperidol, 2021.
26. Avelino ERAF, De Moraes NV. Setting health-based exposure limit for gemcitabine hydrochloride, 2021.
27. Avelino ERAF, De Moraes NV. Setting health-based exposure limit for docetaxel, 2021.
28. Avelino ERAF, De Moraes NV. Setting health-based exposure limit for hydroxyurea, 2021.
29. Avelino ERAF, De Moraes NV. Setting health-based exposure limit for diazepam, 2021.
30. Avelino ERAF, De Moraes NV. Setting health-based exposure limit for phenobarbital, 2021.
31. Avelino ERAF, De Moraes NV. Setting health-based exposure limit for voriconazole, 2021.
32. Avelino ERAF, De Moraes NV. Setting health-based exposure limit for azacitadine, 2021.
33. Avelino ERAF, De Moraes NV. Setting health-based exposure limit for zidovudine, 2021.
34. Avelino ERAF, De Moraes NV. Setting health-based exposure limit for escitalopram oxalate, 2021.
35. Avelino ERAF, De Moraes NV. Setting health-based exposure limit for esomeprazole sodium, 2021.
36. Avelino ERAF, De Moraes NV. Setting health-based exposure limit for tobramycin, 2021.
37. Avelino ERAF, De Moraes NV. Setting health-based exposure limit for dexmedetomidine, 2021.

CONFERENCE COMMUNICATIONS

1. Rodriguez-Vera L, Vozmediano V, Marochi-Telles JP, Moreira FL, de Moraes. Unraveling the Roadmap for Amikacin TDM in Critically Ill Cancer Patients. Accepted for presentation at the 2023 ACCP Annual Meeting. ***Top 16 Student & Trainee Abstracts**

2. Pippa LF, Yamamoto PA, Cristofolletti R, Vozmediano V, de Moraes. Simulating (R)-omeprazole and (S)-omeprazole pharmacokinetics in obese and post-bariatric surgery patients by physiologically based pharmacokinetic modeling. Accepted for presentation at the 2023 ACCP Annual Meeting. ***Top 16 Student & Trainee Abstracts**
3. Abdelmageed M, **de Moraes N**, Vozmediano V, Schmidt S, Kraft W, Boelig R. Application of population modeling to characterize the effect of pregnancy on aspirin pharmacokinetics. 43rd Annual Pregnancy Meeting, 2023.
4. Marques de Medeiros JI, Yamamoto PA, dos Santos BM, Salgado Jr W, dos Santos JS, Kemp R, Sankarankutty AK, Vozmediano V, Cristofolletti R, **de Moraes NV**. Hepatic CYP3A4 activity in obese and post-bariatric patients: an exploratory analysis using midazolam single time point concentration. SBFTE, 2022.
5. Yamamoto P, Salgado Jr W, dos Santos JS, Kemp R, Sankarankutty A, de Gaitani CM, da Silva RM, **de Moraes NV**. Pharmacokinetics of carvedilol enantiomers in obese and post-Roux-em-Y gastric by-pass patients. 2022 ACCP Annual Meeting.
6. Yamamoto P, Salgado Jr W, dos Santos JS, Kemp R, Sankarankutty A, de Gaitani CM, da Silva RM, **de Moraes NV**. Carvedilol pharmacokinetics and PBPK modeling in obesity and post-Roux-en-Y gastric bypass patients. 2022 EACPT Hybrid Meeting, Athens, 25-28 June, 2022.
7. Silva JQ, Guimarães LMA, Romão MAW, Gavazza BV, Nardotto, GHB, Gonçalves JCS, Schmidt S, **de Moraes NV**, Moreira F. Prediction of raltegravir pharmacokinetics in UGT1A1 metabolizers using physiologically based pharmacokinetic modeling. ISoP QSP Virtual Student Symposium. 2022
8. Vasconcelos MED, Gaitani CM, **De Moraes NV**, Demets MB. A. Development of a method for analysis of simvastatin and simvastatin hydroxyacid by HPLC in human plasma using HF-LPME extraction In: Congresso Brasileiro de Toxicologia, 2022.
9. Pavan M, Yamamoto PA, Silva RM, Sankarankutty AK, Kemp R, Dos Santos JS, Salgado W, **De Moraes NV**, Gaitani C. M. Analysis of carvedilol enantiomers in human plasma using SALLE and LC-MS/MS: application in pharmacokinetics after single dose administration In: 13th International Congress of Pharmaceutical Sciences, 2021, Ribeirao Preto. 13th International Congress of Pharmaceutical Sciences Abstracts, 2021.
10. Yamamoto PA, Pavan M, Sankarankutty AK, Kemp R, Dos Santos JS, Salgado W, Gaitani CM, **De Moraes NV**. PBPK modeling to predict carvedilol exposure in patients undergoing Roux-en-Y gastric bypass surgery. In: 13th International Congress of Pharmaceutical Sciences, 2021, Ribeirao Preto. 13th International Congress of Pharmaceutical Sciences Abstracts, 2021.
11. Oliveira IS, Gomez TP, Yamamoto PA, Medeiros JIM, **De Moraes N.V**. Physiologically based pharmacokinetic (PBPK) modeling to predict the impact of Roux-en Y gastric bypass (RYGB) on gabapentin pharmacokinetics In: 13th International Congress of Pharmaceutical Sciences, 2021. 13th International Congress of Pharmaceutical Sciences Abstracts, 2021.
12. Micheletto AL, Yamamoto PA, **De Moraes NV**. Predictions of complex drug-drug-disease interactions with carvedilol using physiologically based pharmacokinetics (PBPK) In: 52nd Brazilian Congress of Pharmacology and Experimental Therapeutics, 2021. 52nd Brazilian Congress of Pharmacology and Experimental Therapeutics, 2021.

13. Oda FB, Carvalho FA, Oliveira JA, Peccinini RG, Ribeiro PRV, Zocolo GJ, **De Moraes NV**, Santos AG. Caracterização in vitro de propriedades cinéticas dos diterpenos clerodânicos da *Casearia sylvestris* Sw.: caseargrewiina F e casearina B, 2020. V Congresso da Associação Brasileira de Ciências Farmacêuticas.
14. Yamamoto PA, Benzi JRL, Lauretti GR, Zanelli CF, De Paula FJA, Freitas MCF, Costa ACC, **De Moraes NV**. Farmacocinética populacional da gabapentina em pacientes com dor neuropática: avaliação do efeito do diabetes e da hiperglicemia, 2020. V Congresso da Associação Brasileira de Ciências Farmacêuticas. ****Best poster award**
15. Gomez TP, Oliveira IS, **De Moraes NV**. Modelagem farmacocinética fisiologicamente baseada para prever concentrações plasmáticas de gabapentina em voluntários saudáveis, 2020. BIOTECFARMA, Jornada Farmacêutica da FCF-UNESP
16. Pavan M, Montanari C, **De Moraes NV**, Gaitani CM. Enantioselective analysis of carvedilol in human plasma by SALLE/LC-MS/MS. In: 12th International Congress of Pharmaceutical Sciences, 2019, Ribeirão Preto. Anais do 12th CIFARP, 2019.
17. Costa ACC, Yamamoto PA, Benzi JRL, Lauretti GR, Ciarimboli G, **De Moraes NV**. Gabapentin pharmacokinetics and renal excretion: the role of glycemic control and the drug transporters hOCTs, hOCTN1 and hMATEs. In: 12th International Congress of Pharmaceutical Sciences, 2019, Ribeirão Preto. Anais do 12th CIFARP, 2019. ****Best oral presentation award**
18. Godoy ALPC, Silva LP, Neves FMF, Silva ACSS, Yamamoto PA, **De Moraes NV**, Machado MCA, Estrela-Lima A. Drug safe association set to neoplasia - focus in pharmacokinetics investigation (pilot group). In: 51st Brazilian Congress of Pharmacology and Experimental Therapeutics, 2019, Maceió, Brazil - 51st Brazilian Congress of Pharmacology and Experimental Therapeutics, 2019.
19. Costa ACC, Yamamoto PA, Benzi JRL, Lauretti GR, **De Moraes NV**. Impact of diabetes on gabapentin pharmacokinetics in patients with neuropathic pain. In: 54th Congress of the European Societies of Toxicology (EUROTOX 2018), 2018, Brussels. Toxicology Letters, ABSTRACTS of the 54th Congress of the European Societies of Toxicology (EUROTOX 2018). Dorchester: Elsevier, 2018. p. 27-27.
20. Mauro M, De Grandis RA, Campos ML, Peccinini RG, Lopes NP, **De Moraes NV**. Intestinal permeability of copalic and kaurenoic acids using Caco-2 cells. In: IV Congress of the Brazilian Association of Pharmaceutical Sciences, 2018, Sao Paulo. Brazilian Journal of Pharmaceutical Sciences, 2018. v. 54. p. 3.
21. Malfara BN, Cavalli RC, Benzi JRL, Filgueira, GCO, Zanelli CF, Duarte G, **De Moraes NV**. ABCG2/BCRP c.421c>a polymorphism alters nifedipine transport to breast milk in chronic hypertensive breastfeeding women. In: IV Congress of the Brazilian Association of Pharmaceutical Sciences, 2018, Sao Paulo. Brazilian Journal of Pharmaceutical Sciences, 2018. v. 54. p. 3.
22. Yamamoto PA, Benzi JRL, Azeredo FJ, Ianhez Jr E, Zanelli CF, **De Moraes NV**. Pharmacogenetics-based population pharmacokinetic analysis of gabapentin in patients with chronic pain: effect of oct2 and octn1 gene polymorphisms. In: IV Congress of the Brazilian Association of Pharmaceutical Sciences, 2018, Sao Paulo. Brazilian Journal of Pharmaceutical Sciences, 2018. v. 54. p. 3.

23. Costa ACC, Yamamoto PA, Benzi JRL, Lauretti GR, **De Moraes NV**. Cetirizine - gabapentin interaction in patients with neuropathic pain: pharmacokinetics. In: XX Congresso Brasileiro de Toxicologia, 2017, Goiânia. Anais do XX Congresso Brasileiro de Toxicologia, 2017. v. 2. p. 46-46.
**** Presentation awarded**
24. Mauro M, Lepera JS, Capela JMV, **De Moraes NV**. Effect of inhalation exposure to toluene in Oatp activity using pravastatin as a probe drug in rats. In: 53rd Congress of the European Societies of Toxicology, 2017, Bratislava. Abstracts of the 53rd Congress of the European Societies of Toxicology (EUROTOX) Bratislava, Slovakia, Sep 2017. v. 280. p. S1-S346.
25. Benzi JRL, Yamamoto PA, Baviera AM, **De Moraes NV**. Influence of cimetidine and experimental diabetes mellitus on gabapentin pharmacokinetics in rats. In: 53rd Congress of the European Societies of Toxicology, 2017, Bratislava. Abstracts of the 53rd Congress of the European Societies of Toxicology (EUROTOX) Bratislava, Slovakia, Sep 2017. v. 280. p. S1-S346.
26. Costa ACC, Yamamoto PA, Benzi JRL, Lauretti GR, **De Moraes NV**. Influence of cetirizine on gabapentin kinetic disposition and pharmacodynamics in patients with neuropathic pain. In: 49th Brazilian Congress of Pharmacology and Experimental Therapeutics, 2017, Ribeirão Preto. Abstracts of 49th Brazilian Congress of Pharmacology and Experimental Therapeutics, 2017. p. 11.018.
27. Mauro M, Campos ML, Lopes NP, **De Moraes NV**. Desenvolvimento e validação de método analítico e bioanalítico para determinação do log P e estabilidade dos ácidos copálico e caurenóico. In: XIII Jornada Paulista de Plantas Mediciniais, 2017, Araraquara. Anais da XIII Jornada Paulista de Plantas Mediciniais, 2017.
28. Varrique RM, Costa ACC, Lauretti GR, Lanchote VL, **De Moraes NV**. Effect of age, sex, creatinine clearance and body mass index on the pharmacokinetics of rocuronium in patients undergoing elective surgery. In: 10th International Congress of Pharmaceutical Sciences - CIFARP, 2015, Ribeirão Preto. Abstracts, 2015.
29. Costa ACC, Coelho EB, Lauretti GR, Varrique RM, Lanchote VL, **De Moraes NV**. Contribution of genetic polymorphisms of OATP1A2 on the kinetic disposition of rocuronium in patients under general anesthesia. In: 10th International Congress of Pharmaceutical Sciences - CIFARP, 2015, Ribeirão Preto. Abstracts, 2015.
30. **De Moraes NV**, Lanchote VL, Filgueira GCO, Lopes BCP, Lepera JS, Lauretti GR. Impact of advanced age on the Pharmacokinetics and Pharmacodynamics of Rocuronium in patients undergoing elective surgery. In: 12th Congress of the European Association for Clinical Pharmacology and Therapeutics (EACPT), 2015, Madri. Clinical Therapeutics, 2015. v. 37. p. e11-e11.
31. Yamamoto PA, **De Moraes NV**, Silva VP, Lepera JS. Simultaneous analysis of exposure biomarkers to ethylbenzene, styrene, toluene and xilenes in urine by HPLC-UV. 2015.
****Presentation awarded**
32. Lauretti GR, Lopes BCP, Filgueira GCO, Lanchote VL, **De Moraes NV**. Pharmacokinetics and pharmacodynamics of rocuronium in patients undergoing elective surgeries. In: II Congress of the Brazilian Association of Pharmaceutical Sciences, 2014, Buzios, RJ. Abstract Book, 2014. p. 202-202.

33. **de Moraes NV**, Lauretti GR, Lopes BCP, Lanchote VL. Simple LC-MS/MS method for analysis of rocuronium in human plasma: application to clinical pharmacokinetics. In: 24th International Symposium on Pharmaceutical and Biomedical Analysis, 2013, Bologna. 24th International Symposium on Pharmaceutical and Biomedical Analysis (PBA 2013) - Recent Developments in Pharmaceutical Analysis (RDPA 2013), 2013. p. P2.32-P2.32.
34. **De Moraes NV**, Gertz M, Rostami A, Galetin A. Mechanistic Modelling of Atorvastatin Uptake and Acid-Lactone Inter-conversion in Plated Rat and Human Hepatocytes. In: 12th European Meeting of the International Society for the Study of Xenobiotics, 2012, Amsterdam. ISSX Online Abstracts, Supplement 7, No. 1, 2012, 2012. v. 7.
35. **De Moraes NV**, Lauretti GR, Napolitano MN, Nardini V, Lanchote VL. Pharmacokinetics-pharmacodynamics of tramadol enantiomers in patients with neuropathic pain phenotyped as CYP2D6 extensive metabolizers. In: 2012 American College of Clinical Pharmacology Annual Meeting, 2012, San Diego. Clinical Pharmacology in Drug Development, 2012. v. 1. p. 175-229.
36. **De Moraes NV**, Lauretti GR, Napolitano MN, Santos NR, Lanchote VL. Influence of type-1 and type-2 diabetes mellitus on the kinetic disposition, unbound fraction and metabolism of tramadol enantiomers in patients with neuropathic pain. In: 10th Congress of the European Association of Clinical Pharmacology and Therapeutics, 2011, Budapeste. Basic & Clinical Pharmacology and Toxicology, 2011. v. 109. p. 33-33.
37. **De Moraes NV**, Lauretti GR, Napolitano MN, Santos NR, Lanchote VL. Influência do diabetes mellitus tipo 1 na disposição cinética, fração livre e metabolismo dos enantiômeros do tramadol em pacientes portadores de dor neuropática. In: Congresso Brasileiro de Toxicologia, 2011, Ribeirão Preto. Revista Brasileira de Toxicologia. São Paulo: Sociedade Brasileira de Toxicologia, 2011. v. 24. p. 293-293.
38. **De Moraes NV**, Lauretti GR, Napolitano MN, Santos NR, Godoy ALPC, Lanchote VL. Abstracts Thirty-Ninth Annual Meeting American College of Clinical Pharmacology September 12-14, 2010 Baltimore, Maryland. In: 39th American College of Clinical Pharmacology Annual Meeting, 2010, Baltimore. The Journal of Clinical Pharmacology. v. 50. p. 1058-1095.
39. Santos NR, **De Moraes NV**, Lauretti GR, Napolitano MN, Lanchote VL. Enantiosseletividade na disposição cinética e no metabolismo do tramadol em pacientes com dor neuropática. In: XVIII Simpósio Internacional de Iniciação Científica, 2010, Ribeirão Preto. Siicusp trabalho online, 2010.
40. Santos NR, **De Moraes NV**, Godoy ALPC, Napolitano MN, Lauretti GR, Lanchote VL. Enantioselective kinetic disposition of tramadol in patients with neuropathic pain. In: XVI Congresso Paulista de Farmacêuticos, 2010, São Paulo. Anais de congresso, 2010.
41. **De Moraes NV**, Santos NR, Lauretti GR, Napolitano MN, Godoy ALPC, Lanchote VL. In vivo activity of CYP2D6 and enantioselective tramadol clearance in patients with neuropathic pain. In: 4th International Symposium of Pos-graduation and Research, 2010, Ribeirão Preto. Anais de congresso, 2010.
42. Godoy ALPC, **de Moraes NV**, Lanchote VL. Influence of streptozotocin-induced diabetes on the pharmacokinetics of tramadol enantiomers. In: 38th American College of Clinical Pharmacology

Annual Meeting, 2009, San Antonio, TX. *Journal of Clinical Pharmacology*, 2009. v. 49. p. 1091-1130.

43. Godoy ALPC, **de Moraes NV**, Lanchote VL. Simultaneous analysis of tramadol, O-desmethyltramadol and N-desmethyltramadol enantiomers in rat plasma by high-performance liquid chromatography-tandem mass spectrometry: application to pharmacokinetics. In: 7th International Congress of Pharmaceutical Sciences, 2009, Ribeirão Preto. Livro de Resumos, 2009. p. TO014-TO014.
44. **De Moraes NV**, McCurdy CR, Lanchote VL. Determination of mitragynine in rat plasma by LC-MS/MS: application to pharmacokinetics. In: 7th International Congress of Pharmaceutical Sciences, 2009, Ribeirão Preto. Livro de Resumos, 2009. p. TO015-TO015.
45. Bergamaschi MM, **De Moraes NV**, Bragheto JB, Bianchi MLP, Queiroz RHC. L-arginine fails to reduce dapsone toxicity in rats in single dose regimen. In: 7th International Congress of Pharmaceutical Sciences, 2009, Ribeirão Preto. CD de Resumos, 2009.
46. Godoy ALPC, **De Moraes NV**, Marques MP, Lanchote VL. Influência do diabetes experimental na disposição cinética e no metabolismo enantiosseletivos do trans-tramadol em ratos. In: XV Congresso Brasileiro de Toxicologia, 2009, Belo Horizonte. *Revista Brasileira de Toxicologia*, 2009. v. 22. p. 190-190.
47. **De Moraes NV**, Bergamaschi MM, Bragheto JB, Bianchi MLP, Queiroz RHC. L-arginine reduces dapsone-induced methemoglobinemia in rats in multiple dose regimens. In: 41º Congresso Brasileiro de Farmacologia e Terapêutica Experimental, 2009, Ribeirão Preto. Livro de Resumos, 2009.
48. **De Moraes NV**, Santos NR, McCurdy CR, Lanchote VL. Pharmacokinetics of mitragynine after intravenous and oral administration in rats. In: XVI Congresso Brasileiro de Toxicologia, 2009, Belo Horizonte. *Revista Brasileira de Toxicologia*, 2009. v. 22. p. 216-216.
49. Bergamaschi MM, **De Moraes NV**, Bragheto JB, Silva JP, Bianchi MLP, Queiroz RHC. Comparison of effects of L-arginine and curcumin in dapsone-induced methemoglobinemia in rats. In: XVI Congresso Brasileiro de Toxicologia, 2009, Belo Horizonte. *Revista Brasileira de Toxicologia*, 2009. v. 22. p. 172-172.
50. Godoy ALPC, **De Moraes NV**, Carvalho TMJP, Lanchote VL. Influence of quinidine on the enantioselective metabolism of tramadol in rats. In: 41º Congresso Brasileiro de Farmacologia e Terapêutica Experimental, 2009, Ribeirão Preto. Livro de Resumos, 2009.
51. **De Moraes NV**, Moretti RAC, McCurdy CR, Lanchote VL. Mitragynine analysis in rat plasma by liquid chromatography tandem mass spectrometry. In: 3rd International Symposium of Post-Graduation and Research, 2008, Ribeirão Preto. Livro de Resumos, 2008.
52. Moretti RAC, **De Moraes NV**, McCurdy CR, Lanchote VL. Disposição cinética da mitraginina em ratos após administração oral. In: 16º Simpósio Internacional de Iniciação Científica da USP - SIICUSP, 2008, Ribeirão Preto. Livro de Resumos, 2008.
53. Adkins JE, **De Moraes NV**, White N, Tadlock LA, Nieto MJ, McCurdy CR. HPLC method for determination of mitragynine, an indole alkaloid, in crude extracts of *Mitragyna speciosa*. In:

International Narcotics Research Conference, 2007, Berlin. International Narcotics Research Conference Abstracts, 2007.

54. **De Moraes NV**, Adkins JE, White N, Tadlock LA, Nieto MJ, McCurdy CR. HPLC method for determination of mitragynine, an indole alkaloid, in crude extracts of *Mitragyna speciosa*. In: XV Congresso Brasileiro de Toxicologia, 2007, Búzios, RJ. Revista Brasileira de Toxicologia, Nov 2007. v. 20. p. 37-37.
55. Adkins JE, **De Moraes NV**, Nieto MJ, Mccurdy CR. Quantification of mitragynine, an opioid agonist, in crude extracts of different chemotypes of *Mitragyna speciosa* by HPLC. In: 59th Southeastern Regional Meeting of the American Chemical Society (SERMACS), 2007, Greenville, SC - EUA. SERMACS 2007 Meeting Abstracts, 2007. p. 131-131.
56. **De Moraes NV**, Granco MD, Valerio DAR, Oliveira DP. Endocrine disruptors - alterations in steroidal hormone homeostasis. In: 6th International Congress of Pharmaceutical Sciences, 2007, Ribeirão Preto. Anais do 6th International Congress of Pharmaceutical Sciences, 2007. v. 1.
57. Adkins JE, **De Moraes NV**, White N, Tadlock LA, Nieto MJ, Mccurdy CR. Isolation, purification and identification of mitragynine, an indole alkaloid, from *Mitragyna speciosa* with simultaneous determination by LC and UPLC/MS methods. In: 2006 AAPS Annual Meeting and Exposition, 2006, San Antonio. 2006 AAPS Annual Meeting Abstracts.
58. Mello MH, **De Moraes NV**, Malfará WR, Barbosa HS, Homem-De-Mello P, Souza AM, Queiroz RHC. Glutathione improves oxidant effect of dapsone in male wistar rats. In: XIII Biennial Meeting of the Society for Free Radical Research International, 2006, Davos. Free Radical Research. v. 40.
59. Mello MH, **De Moraes NV**, Malfará WR, Queiroz RHC. Effects on the dapsone induced methemoglobinemia by N-acetylcysteine. In: International Congress of Pharmaceutical Sciences, 2005, Ribeirão Preto. Revista Brasileira de Ciências Farmacêuticas, 2005. v. 41. p. 480-480.
60. Mello MH; **De Moraes NV**, Malfará WR, Sampaio SV, Souza AM, Queiroz RHC. An overview on dapsone metabolism and its toxicity mechanisms. In: International Congress of Pharmaceutical Sciences, 2005, Ribeirão Preto. Revista Brasileira de Ciências Farmacêuticas, 2005. v. 41. p. 489-489.
61. Clagnan SS, Constantino JC, **De Moraes NV**, Leite-Panissi CRA. Estresse de contenção e dor orofacial. In: V Congresso Interno de Pesquisa FORP/USP, 2003, Ribeirão Preto. Anais da Faculdade de Odontologia de Ribeirão Preto da Universidade de São Paulo, 2003. p. 15-15.

MEETINGS, EVENTS, WORKSHOPS

1. 2024 Florida Winter School, Orlando FL, Jan 2024
2. 2023 ACOP, National Harbor MD, Nov 2023
3. 2023 ACCP, Seattle, Sep 2023
4. LNLC Meeting 2023, Lake Nona, Apr 2022
5. 2022 ACCP, N Bethesda, Sept 2022
6. LNLC Meeting 2022, Lake Nona, Apr 2022.
7. SBFTE 2021, Brazil, Nov 2021.
8. CIFARP 2021, Ribeirao Preto, Brazil, Nov 2021.

9. ACoP12 meeting, November 2021.
10. RedIF 2021 Hands-On Workshop: Population PKPD Modeling & Simulation with the MonolixSuite 2021. Sept 2021.
11. Introductory course on Pharmacometrics: concepts, nomenclature & applications" by Red Iberoamericana de Farmacometria, Jul 2021.
12. SIMCYP, CERTARA. Hands-on Experience with Automated Model-based Drug Development. Nov, 2020.
13. Workshop of the Red Iberoamericana de Farmacometría (RedIF) 2020. Oct 2020
14. V Congress of Brazilian Association of Pharmaceutical Sciences (ABCF). Oct 2020.
15. NCA Analyst using Phoenix WinNonlin versions 8.1 and 8.2 certified by CERTARA (valid from 2020 – 2023)
16. 12th International Congress of Pharmaceutical Sciences (CIFARP), Ribeirão Preto. Nov 2019.
17. I Brazilian Symposium of Modelling and Simulation, ANVISA, Brasilia. Nov 2019.
18. 49th Congress of the Brazilian Society of Pharmacology and Therapeutics (SBFTE). Oct 2017.
19. 53rd EUROTOX, Bratislava, Slovakia. Sep 2017.
20. 6th Meeting of the Research Ethics Committees, FOB-USP and HRAC-USP. Oct 2017.
21. V Toxicology Summer School Escola de Verão em Toxicologia, Jan 2016.
22. 12th EACPT, Budapeste, Jun 2015.
23. II Congress of the Brazilian Association of Pharmaceutical Sciences, Ribeirao Preto. Sep 2014.
24. 24th International Symposium on Pharmaceutical and Biomedical Analysis (PBA 2013), Bologna, Italy. Jul 2013.
25. 2012 ACCP Annual Meeting, San Diego. Sep 2012.
26. 2nd Latin American Pharmacogenomics and Personalized Medicine Congress, Rio de Janeiro. Jun 2012.
27. 10th Congress of the European Association of Clinical Pharmacology and Therapeutics (EACPT). Jun 2011.
28. Annual Meeting of the Centre for Applied Pharmacokinetic Research (CAPKR), Sep 2011.
29. 39th American College of Clinical Pharmacology Annual Meeting, Baltimore. Sep 2010.
30. Intensive course on the concepts and applications of predicting ADME, pharmacokinetics and population variability, SIMCYP, Sheffield. Sep 2010.
31. 41° Congresso Brasileiro de Farmacologia e Terapêutica Experimental, Ribeirão Preto. 2009.
32. 7th International Congress of Pharmaceutical Sciences, Ribeirão Preto. 2009.
33. High School Studies in Toxicology, Ribeirão Preto. Nov 2009.
34. XVI Brazilian Congress of Toxicology, 2009.
35. 6th International Congress of Pharmaceutical Sciences, 2007.
36. XV Brazilian Congress of Toxicology, Buzios. Nov 2007.
37. International Congress of Pharmaceutical Sciences. 2005.

INVITED CONFERENCES, COURSES AND SEMINARS

1. Participation as chair of the Thematic Session "Pharmacometric modelling and simulation in research and clinical practice" in the 13th International Congress of Pharmaceutical Sciences (13th CIFARP), Nov 2021.
2. Participation as speaker in the online roundtable "Pharmacometric applications in drug development and dosing optimization for clinical practice". SBFTE, Nov 2021.
3. Participation as tutor in the RedIF 2021 Hands-On Workshop: Population PKPD Modeling & Simulation with the MonolixSuite 2021, tutoring the Hands-On sessions #3 – PK/PD modelling with Monolix and #4 – Clinical trial simulation. Sept 2021.
4. Participation as speaker in the online workshop "Introductory course on Pharmacometrics: concepts, nomenclature & applications", presenting the topic "Applications in precision dosing", Jul 2021.

5. Participation as speaker in the V Congress of the Brazilian Association of Pharmaceutical Sciences (ABCF). Presentation title: Pharmacometrics-guided drug development: drug-drug interaction and special populations. Oct 2020.
6. Participation as speaker in the IX Toxicology Summer School. Presentation title: Pharmacometrics to Personalized Drug Therapy, 2020, School of Pharmaceutical Sciences of Ribeirao Preto, University of Sao Paulo.
7. Participation as a speaker in the Chemistry Week, 2019. Presentation title: Toxicology of arsenic, Institute of Chemistry, Sao Paulo State University
8. Participation as a speaker in the V Toxicology Summer School, 2016. Presentation title: Pharmacogenetics and individualized drug therapy. School of Pharmaceutical Sciences of Ribeirao Preto, University of Sao Paulo.
9. Participation as a speaker in the IV Toxicology Summer School, 2015. Presentation title: Impact of drug transporters in the safety and efficacy of many drugs. School of Pharmaceutical Sciences of Ribeirao Preto, University of Sao Paulo.
10. Participation as a speaker in the III Toxicology Summer School, 2014. Presentation title: Solvent-drug interaction. School of Pharmaceutical Sciences of Ribeirao Preto, University of Sao Paulo.
11. Collaboration with the presentation Atorvastatin – assessment of metabolism and hepatic uptake of the acid and lactone forms, presented in the Annual Meeting of the Centre for Applied Pharmacokinetic Research. Gertz M, De Moraes NV, Rostami A, Galetin A, 2011, Manchester, UK
12. Participation as a speaker in the course "Pharmacogenetics" in the VI Toxicology Summer School, 2017. School of Pharmaceutical Sciences of Ribeirao Preto, University of Sao Paulo.
13. Participation with the course "Therapeutic drug monitoring" in the II Toxicology Summer School, 2013. School of Pharmaceutical Sciences of Ribeirao Preto, University of Sao Paulo, in a total of 8 hours of teaching.
14. Participation as a speaker in the course "Therapeutic drug monitoring" in the Toxicology Summer School, 2012, in a total of 3 hours.
15. Participation as a speaker in the course "Fundamental of Pharmacokinetics", Universidade Paulista, 8 hours, 2012

AWARDS AND HONORS

- 2023 Top 16 Student & Tranee Abstracts submitted to the Annual Meeting of ACCP - Unraveling the Roadmap for Amikacin TDM in Critically Ill Cancer Patients
- 2023 Top 16 Student & Tranee Abstracts submitted to the Annual Meeting of ACCP - Simulating (R)-omeprazole and (S)-omeprazole pharmacokinetics in obese and post-bariatric surgery by physiologically based pharmacokinetic modeling
- 2021 Honorable mention at Virtual Congress on Pharmaceutical Sciences. Poster title: Current overview of pharmacokinetic studies of natural products.
- 2020 Best poster at the V Congress of the Brazilian Association of Pharmaceutical Sciences. Poster title: Population pharmacokinetics of gabapentin in patients with neuropathic pain: evaluation of the effect of diabetes and hyperglycemia.
- 2019 Best oral presentation at the 12th International Congress of Pharmaceutical Sciences (CIFARP). Presentation title "Gabapentin pharmacokinetics and renal excretion: the role of glycemic control and the drug transporters hOCTs, hOCTN1 and hMATEs".
- 2017 53rd Congress of the European Societies of Toxicology, Travel grant (FAPESP), 2017
- 2017 Honorable Mention at the XX Brazilian Congress of Toxicology. Poster title: Cetirizine-gabapentin pharmacokinetic interaction in patients with neuropathic pain.
- 2015 Honorable Mention at the 8 Congress of University Extension of UNESP, São Paulo State University.
- 2014 Honored professor of the 81st Class of Pharmacy-Biochemistry, School of Pharmaceutical Sciences, São Paulo State University, Araraquara.

2013 24th International Symposium on Pharmaceutical and Biomedical Analysis (PBA 2013), Travel award (FAPESP), 2013

2010 Honorable Mention - Clinical and Toxicological Analysis Area, Regional Pharmacy Council of the State of São Paulo.

STUDENT AND TECHNICIAN SUPERVISION, PRECEPTING AND ADVISING

Supervisory Committee of Graduate Student

Role	Student	Major	Complete Date
Member Ph.D.	Bassma S. Eltanameli	Pharmaceutical Sciences (UF)	
Member Ph.D.	Huili Chen	Pharmaceutical Sciences (UF)	
Member Ph.D.	Shyam Ramesh	Pharmaceutical Sciences (UF)	
Member Ph.D.	Omar Elashkar	Pharmaceutical Sciences (UF)	
Chair Ph.D.	Priscila Yamamoto	Pharmaceutical Sciences (UF)	
Member Ph.D.	Dain Chun	Pharmaceutical Sciences (UF)	
Member Ph.D.	Anthony Gebhart	Pharmaceutical Sciences (UF)	
Member Ph.D.	Leandro Francisco Pippa	Toxicology (USP)	2022
Member Ph.D.	Maísa Daniela Habenschus	Chemistry (USP)	2021
Member M.S.	Thayna Rocco Machado	Pharmaceutical Sciences (UFRJ)	2021
Member M.S.	Julia Macente	Pharmaceutical Sciences (UEM)	2021
Chair Ph.D.	Mariana Mauro	Pharmaceutical Sciences (UNESP)	2020
Member Ph.D.	Luísa Helena Perin de Melo	Biological Sciences (UFOP)	2019
Chair Ph.D.	Ana Carolina Conchon Costa	Toxicology (USP)	2019
Member Ph.D.	Julia Martins	Pharmaceutical Sciences (USP)	2019
Chair M.S.	Priscila Akemi Yamamoto	Pharmaceutical Sciences (UNESP)	2018
Member Ph.D.	Diego Alberto Ciscato Cusinato	Toxicology (USP)	2017
Member Ph.D.	Fabiana Rossi Varallo	Pharmaceutical Sciences (UNESP)	2017
Member M.S.	Mariana Chavari	Pharmaceutical Sciences (UEM)	2017
Member M.S.	Fernando Bombarda Oda	Pharmaceutical Sciences (UNESP)	2017
Chair M.S.	Mariana Mauro	Pharmaceutical Sciences (UNESP)	2016
Member M.S.	Samir Antonio Rodrigues Abjaude	Pharmaceutical Sciences (UNESP)	2015
Member M.S.	Gabriela Amaral Buqui	Toxicology (USP)	2013
Member M.S.	Suélien Cristina Rennó Silva	Pharmaceutical Sciences (U)	2012

Supervisory Committee of Qualifying Exams of Graduate Students

Role	Student	Major	Complete Date
Member Ph.D.	Icaro Salgado Perovani	Chemistry (USP)	2022

Chair Ph.D.	Jhohann Richard de Lima Benzi	Toxicology (USP)	2022
Member M.S.	Julia Macente	Biological Sciences (UFOP)	2021
Member Ph.D.	Leandro Francisco Pippa	Toxicology (USP)	2019
Chair Ph.D.	Mariana Mauro	Pharmaceutical Sciences (UNESP)	2019
Member Ph.D.	Carla Brigagão Pacheco da Silva	Toxicology (USP)	2018
Member M.S.	Celsa Raquel Villaverde Melgarejo	Pharmaceutical Sciences (UNESP)	2018
Chair M.S.	Priscila Akemi Yamamoto	Pharmaceutical Sciences (UNESP)	2018
Chair M.S.	Bianca Nayra Malfará	Pharmaceutical Sciences (UNESP)	2017
Member Ph.D	Tahisa Marcela Pedroso	Pharmaceutical Sciences (UNESP)	2015
Member M.S.	Gabriela Campos de Oliveira Filgueira	Gynecology (USP)	2014
Member M.S.	Fabiana Angelo Marques	Pharmaceutical Sciences (UNESP)	2014
Member Ph.D	Thiago Branco Hanna	Toxicology (USP)	2013
Member M.S.	Ingrid Albrecht	Pharmaceutical Sciences (UNESP)	2013
Member M.S.	Otávio Pelegrino Rocha	Toxicology (USP)	2012
Member Ph.D	Leandro de Santis Ferreira	Pharmaceutical Sciences (USP)	2012

Ongoing Research Supervision

Postdoctoral Fellow

Leandro F Pippa, UF – 2022 – present

Amira Soliman, UF – 2023 – present

Ph.D. students

Priscila A Yamamoto, University of Florida – 2022 – present

Priscila A Yamamoto, USP – 2019 – present

Dain Chun, UF – 2023 - present

Completed Research Supervision

Postdoctoral Fellow

Leonardo R Pinto, UNESP – 2021 – 2021

Elisa R A Avelino, UNESP – 2021 – 2021

Ph.D. Supervision

Mariana Mauro, UNESP - 2016-2020

Ana Carolina C Costa (UF, current postdoc fellow), University of São Paulo – 2014-2019

Fernando B Oda, UNESP – 2017 – 2021 (Co-advisor)

José I M Medeiros, UNESP – 2019 – 2023

Masters Students

Bianca N Malfará, UNESP – 2015-2017

Mariana Mauro, UNESP – 2014-2016

Priscila A Yamamoto, UNESP (PhD candidate, USP) – 2016-2018

Jhohann R L Benzi, USP (PhD candidate, USP) – 2016-2018

Winner D Rodrigues, UNESP – 2020 – 2022 (co-advisor)
Gabriella S G Ribeiro, UNESP – 2020 – 2022
Mayrla E D Vasconcelos, USP – 2020 – 2023 (co-advisor)

Technical training

Fernando Bombarda Oda – 2021 – 2021
Carla Brigagão Pacheco Silva – 2021 – 2021
Jonata Augusto Oliveira – 2021 – 2021
Évelin dos Santos Martins Teodoro – 2021 – 2021
Fabiane Neves – 2023 – 2024

Undergraduate students

Ana Luiza Micheletto, UNESP 2019-2021
Diovanna S de Carvalho, UNESP 2020-2021
Isabella S de Oliveira, UNESP 2019-2021
Thayna Pizzocaró Gomes, UNESP 2019-2020
André L M Gimenez, UNESP (Eli Lilly) 2018-2019
Beatriz V Correia, UNESP – 2015-2017
Bruno Borsari, UNESP – 2015-2017
Guilherme R Nascimento, UNESP – 2014-2015
Julia A Matsumoto, UNESP – 2014-2015
Priscila A Yamamoto, UNESP (PhD candidate, USP) – 2014-2015
Andressa F Bonjorno, UNESP – 2021 – 2021
Julia L Bueno, UNESP – 2021 – 2021

International exchange students

Level	Student	Institution	Complete Date
Undergraduate	Jessica Stevens	University of Houston (Germany)	2017-2017
M.S. student	Miriam Happ	University of Bonn (Germany)	2022-2022