Curriculum Vitae

Personal information

Joyce van der Heijden

Work experience

Aug 2024 – Present - Clinical pharmacokinetic assessor at the Dutch Medicines Evaluation Board (MEB), the Netherlands. Assessment of clinical pharmacokinetic data.

Aug 2020 – June 2024 - PhD student at the division of Pharmacology and Toxicology (PharmTox), department of Pharmacy, Radboudumc, the Netherlands. Dissertation: Serving the underserved – Tackling complex drug dosing challenges through physiologically-based pharmacokinetic modeling.

Jun – Jul 2020 - Junior researcher, PharmTox, Radboudumc, the Netherlands. See PhD.

Education and training

June 2020 – June 2024 - PhD program at Radboud Institute for Medical Innovation (RIMI) Graduate School, Radboudumc, Nijmegen, the Netherlands

2023 - Ecotoxicology (Postgraduate Education in Toxicology; PET)

2022 - Organ toxicology (Postgraduate Education in Toxicology; PET)

2022 - Simcyp Pregnancy and lactation focused workshop

2021 - Legal and regulatory toxicology (Postgraduate Education in Toxicology; PET)

2020 - Simcyp Absorption I focused workshop

2020 - Simcyp Paediatrics focused workshop

Sep 2017 – Mar 2020 - Master Biomedical Science, Radboud University, Nijmegen

Sep 2014 – July 2017 - Bachelor Biomedische Wetenschappen, Radboud University, Nijmegen, the Netherlands

Sep 2008 – June 2014 - Pre-university secondary education, Zwijsen College, Veghel, the Netherlands

Additional information

Publications

Publication list

Dissertation

Serving the underserved – Tackling complex drug dosing challenges through physiologically-based pharmacokinetic modeling, 2024 (ISBN: 978-94-6506-859-6)
Promotor: Prof. dr. Saskia N. de Wildt; Copromotors: Dr. Rick Greupink and Dr. Jolien J.M. Freriksen

Journal articles

1. Rietjens SJ, van der Heijden JEM, de Lange DW. Poisoning in older adults: characterization of exposures reported to the Dutch Poisons Information Center. Clin Toxicol (Phila). 2022 Nov;60(11):1240-1247. doi: 10.1080/15563650.2022.2116339. Epub 2022 Sep 23. PMID: 36149343.
2. van der Zanden TM, Smeets NJL, de Hoop-Sommen M, Schwerzel MFT, Huang HJ, Barten LJC, van der Heijden JEM, Freriksen JJM, Horstink AAL, Holsappel IHG, Mooij MG, de Hoog M, de Wildt SN. Off-Label, but on-Evidence? A Review of the Level of Evidence for Pediatric Pharmacotherapy. Clin Pharmacol Ther. 2022 Dec;112(6):1243-1253. doi: 10.1002/cpt.2736. Epub 2022 Sep 25. PMID: 36069288; PMCID: PMC9828396.
3. van der Heijden JEM, Freriksen JJM, de Hoop-Sommen MA, van Bussel LPM, Driessen SHP, Orlebeke AEM, Verscheijden LFM, Greupink R, de Wildt SN. Feasibility of a Pragmatic PBPK Modeling Approach: Towards Model-Informed Dosing in Pediatric Clinical Care. Clin Pharmacokinet. 2022 Dec;61(12):1705-1717. doi: 10.1007/s40262-022-01181-8. Epub 2022 Nov 11. PMID: 36369327; PMCID: PMC9651907.
4. Freriksen JJM, van der Heijden JEM, de Hoop-Sommen MA, Greupink R, de Wildt SN. Physiologically Based Pharmacokinetic (PBPK) Model-Informed Dosing Guidelines for Pediatric Clinical Care: A Pragmatic Approach for a Special Population. Paediatr Drugs. 2023 Jan;25(1):5-11. doi: 10.1007/s40272-022-00535-w. Epub 2022 Oct 6. PMID: 36201128; PMCID: PMC9534738.
5. Jacobs TG, de Hoop-Sommen MA, Nieuwenstein T, van der Heijden JEM, de Wildt SN, Burger DM, Colbers A, Freriksen JJM. Lamivudine and Emtricitabine Dosing Proposal for Children with HIV and Chronic Kidney Disease, Supported by Physiologically Based Pharmacokinetic Modelling. Pharmaceutics. 2023 May 6;15(5):1424. doi: 10.3390/pharmaceutics15051424. PMID: 37242665; PMCID: PMC10221211.
6. van der Heijden JEM, Freriksen JJM, de Hoop-Sommen MA, Greupink R, de Wildt SN. Physiologically-Based Pharmacokinetic Modeling for Drug Dosing in Pediatric Patients: A Tutorial for a Pragmatic Approach in Clinical Care. Clin Pharmacol Ther. 2023 Nov;114(5):960-971. doi: 10.1002/cpt.3023. Epub 2023 Sep 5. PMID: 37553784.
7. Freriksen J, van der Heijden J, de Hoop-Sommen M et al. Demystifying physiologically based pharmacokinetic modelling among non-modelers towards model-informed medicine use in under-served populations. [version 1; peer review: 1 approved]. Gates Open Res 2023, 7:128 (https://doi.org/10.12688/gatesopenres.14896.1)

8. de Hoop-Sommen MA, van der Heijden JEM, Freriksen JJM, Greupink R, de Wildt SN. Pragmatic physiologically-based pharmacokinetic modeling to support clinical implementation of optimized gentamicin dosing in term neonates and infants: proof-of-concept. Front Pediatr. 2023 Nov 21;11:1288376. doi: 10.3389/fped.2023.1288376. PMID: 38078320; PMCID: PMC10702772.
9. Roelofsen D, van Hove H, van der Heijden J, Dallmann A, and Greupink R. (2024). Tissue-based ex vivo models for placental barrier permeability studies. doi: 10.1016/B978-0-443-15510-9.00024-4.
10. van Der Heijden JEM*, Van Hove H*, Van Elst NM, Van Den Broek P, Van Drongelen J, Scheepers HCJ, De Wildt SN, Greupink R. Optimization of the betamethasone and dexamethasone dosing regimen during pregnancy: a combined placenta perfusion and pregnancy physiologically based pharmacokinetic modeling approach. Am J Obstet Gynecol. 2024 May 17:S0002-9378(24)00594-5. doi: 10.1016/j.ajog.2024.05.012. Epub ahead of print. PMID: 38763343.
*Authors contributed equally

11. van der Heijden JEM, de Hoop-Sommen M, Hoevenaars N, Freriksen JJM, Joosten K, Greupink R, de Wildt SN. Getting the dose right using physiologically-based pharmacokinetic modeling: dexamethasone to prevent post-extubation stridor in children as proof of concept. Front. Pediatr. 2024, 12. doi: 10.3389/fped.2024.1416440
12. van der Heijden JEM, de Wildt SN, Greupink R. Physiologically based pharmacokinetic modeling to guide dose optimization in obstetrical pharmacology clinical trials: a response. Am J Obstet Gynecol. 2025 Jan;232(1):e23. doi: 10.1016/j.ajog.2024.07.034. Epub 2024 Jul 30. PMID: 39084499.
13. van der Heijden JEM, Gijsen V, van Uden AM, de Hoop-Sommen M, Freriksen JJM, Jacobs E, Greupink R, de Wildt SN. Physiologically Based Pharmacokinetic Modeling-Based Evaluation of Current Carbamazepine and Valproic Acid Dosing Guidelines for Pediatric Epilepsy Treatment. Paediatr Drugs. 2025 Sep;27(5):641-652. doi: 10.1007/s40272-025-00707-4. Epub 2025 Jul 2. PMID: 40603737; PMCID: PMC12378131.
14. van Hove H, van der Heijden JEM, van Uden A, Gijsen V, Greupink R, de Wildt SN, van Drongelen J. Sotalol dose optimization for fetal tachycardia: a pregnancy physiologically based pharmacokinetic model study. Preprint: medRxiv 2024.12.17.24319139; doi: https://doi.org/10.1101/2024.12.17.24319139

Projects

-

Memberships

-

Other Relevant Information

-