# Jonny H. Kinzi

## Research Experience

## University of Basel Basel, CH

## Postdoctoral Researcher with Prof. Henriette E. Meyer zu Schwabedissen

11/2023 – present

- Drug metabolism and pharmacokinetics in Slco2b1-knockout and SLCO2B1-humanized rat models
- Elucidation of factor impacting of the hepatic biomarkers coproporphyrin I and III in drug-drug interactions

### PhD Candidate with Prof. Henriette E. Meyer zu Schwabedissen

08/2019 - 11/2023

Physiological and pharmacological phenotyping of Slco2b1-knockout and SLCO2B1-humanized rat models

- Performed in vitro experiments to assess protein kinetics of drug transporters
- Executed *in vivo* studies to evaluate the role of uptake transporter OATP2B1 on atorvastatin pharmacokinetics, insulin and glucose tolerance, mRNA and protein expression characterization of rat models
- Responsible for implementation, validation and execution of LC-MS based bioanalytical methods

Novartis Pharma AG Basel, CH

#### Preclinical Formulation Scientist with Dr. Paulo A. F. G. Dos Santos

09/2018 - 07/2019

Preparation and evaluation of formulations from pure drug substances candidates for first in vivo (preclinical) testing

- Characterization of drug candidates on physicochemical properties using solid-state analytics
- Performed screenings of formulation vehicles to achieve favored solubility in physiological relevant fluids
- Assessed short-term stability against stress conditions (temperature, light, humidity)

Novartis Pharma AG Basel, CH

#### Postgraduate Intern with Dr. Toni Widmer

08/2017 - 06/2018

Investigating the interaction and stability of drug substances and excipients in amorphous solid dispersions (ASD)

- Performed hot melt extrusion and lyophilization to obtain ASD
- Assessed recrystallization degree by orthogonal analytical measurements of temperature humidity
- Collected raw data into database and summarized results as kinetics of recrystallization

Philochem AG Otelfingen, CH

## Master Thesis Student with. Dr. Tim Fugman

09/2016 - 02/2017

Implementation of data-independent acquisition (DIA) and spectral library searching for investigation of HLA-eluted peptides on Q Exactive Orbitrap MS

- Performed cell culture handling and preparation of biological samples
- Build spectral libraries from data-dependent acquisition runs
- Implemented workflow for DIA proteomic analysis and performed DIA parameter benchmarking

ETH Zurich Zurich, CH

#### Master Student with Prof. Dario Neri

09/2015 - 12/2015

- Executed large scale expression and purification of MHC-I complex H-2Ld in E. coli
- Performed cloning of HLA-I complex B\*07
- Generation of anti-murine Tenascin C antibody using Antibody Phage Display technology

## **Education**

University of Basel, Department of Pharmaceutical Sciences	Basel, CH
Ph.D., Biopharmacy Research Group	08/2019 - 11/2023
ETH Zurich, Department of Chemistry and Applied Biosciences	Zurich, CH
M.Sc., Medicinal and Industrial Pharmaceutical Sciences ETHZ	03/2016 - 09/2017
B.Sc., Pharmaceutical Sciences ETHZ	09/2012 - 03/2016
B.Sc., Interdisciplinary Natural Sciences ETHZ	09/2011 - 08/2012

### **Grants and Awards**

Travel Grant Award 09/2022

International Society for the Study of Xenobiotics

## **Teaching Experience**

University of Basel, Department of Pharmaceutical Sciences	Basel, CH
Lab supervision of PhD students	07/2023 – present
Lab supervision of Master Students	08/2019 - 11/2023

## **Activities and Engagement**

ETH Zurich, Akademischer Pharmaziestudierenden Verband APV

2013 - 2016

Board member and responsible for IT activities

#### **Publications**

**Kinzi**, J., Grube, M., Hussner, J., Seibert, I., Hamburger, M., Meyer zu Schwabedissen. H. E. (2023). The influence of OATP2B1 and atorvastatin on coproporphyrin isomers in rats. Journal of Pharmacological Sciences. 153(3). 170-174.

**Kinzi**, J., Grube, M., Brecht, K., Seibert, I., Siegmund, W., Meyer zu Schwabedissen. H. E. (2023). Various effects of repeated rifampin dosing on coproporphyrin levels in humans. Clinical and Translation Science. 188. 114534.

Rysz, A. M., **Kinzi**, **J.**, Schäfer, A. M., In-Albon, K., Zürcher, S., Schmidlin, S., Seibert, I., Schwardt, O., Ricklin, D., Meyer zu Schwabedissen. H. E. (2023). Simultaneous quantification of atorvastatin, erlotinib and OSI-420 in rat serum and liver microsomes using a novel liquid chromatography-mass spectrometry method. Journal of Pharmaceutical and Biomedical Analysis. 236. 115716.

Kinzi, J., Hussner, J., Schäfer, A. M., Treyer, A., Seibert. I, Tillmann, A., Müller, V., Gherardi, C., Vonwyl, C., Hamburger, M., M., Meyer zu Schwabedissen. H. E. (2023). Influence of Slco2b1-knockout and SLCO2B1-humanization on coproporphyrin I and III levels in rats. British Journal of Pharmacology. 2023. 1-18.

**Kinzi**, **J.**, Grube, M., Meyer zu Schwabedissen. H. E. (2021). OATP2B1 – The underrated member of the organic anion transporting polypeptide family of drug transporters?. Biochemical Pharmacology. 188. 114534.

Ritz, D., **Kinzi, J.,** Neri, D., Fugmann, T. (2017). Data-Independent Acquisition of HLA Class I Peptidomes on the Q Exactive Mass Spectrometer Platform. Proteomics. 17. 1700177.

#### **Conference Presentations**

**Kinzi**, J., Rysz, M. A. Presentation talk delivered at the Annual Research Meeting of the Department of Pharmaceutical Sciences at the University of Basel, February 2023

**Kinzi, J.,** Hussner, J., Seibert, I., Zuercher, S., Rysz, M. A., Tillmann, A., Vythilingam, M., Schwardt, O., Ricklin, D., Meyer zu Schwabedissen, H. E. Influence of knockout and humanization of *SLCO2B1* on atorvastatin disposition in rats. P183. Poster presentation delivered at the 13th International Meeting of the International Society for the Study of Xenobiotics and 24th International Symposium on Microsomes and Drug Oxidations, Seattle, WA, September 2022

**Kinzi**, **J.**, Hussner, J., Seibert, I., Tillmann, A., Vythilingam, M., Schwardt, O., Ricklin, D., Meyer zu Schwabedissen, H. E. Differences in hepatic disposition of atorvastatin in *SLCO2B1*-knockout and humanized rat model. P-VIII-6. Poster presentation delivered at the 15th Swiss Pharma Science Day of the Swiss Academy of Pharmaceutical Sciences, Bern, August 2022

**Kinzi, J.,** Hussner, J., Seibert, I., Tillmann, A., Vythilingam, M., Schwardt, O., Ricklin, D., Meyer zu Schwabedissen, H. E. Pharmacokinetics of atorvastatin in Slco2b1-knockout and *SLCO2B1*-humanized rats. P181. Poster presentation delivered at the 88th Annual Meeting of the German Society for Experimental and Clinical Pharmacology and Toxicology, digital, March 2022

**Kinzi**, **J.**, Hussner, J., A. M. Schaefer, Treyer, A., Seibert, I., Hamburger, M., Meyer zu Schwabedissen, H. E. Oatp2b1 influences coproporphyrin serum levels as determined in a novel *Slco2b1*<sup>-/-</sup> rat model. P-VIII-11. Poster presentation delivered at the 14th Swiss Pharma Science Day of the Swiss Academy of Pharmaceutical Sciences, digital, August 2021

Kinzi, J., Schaefer, A. M., Hussner, J., Treyer, A., Seibert, I., Hamburger, M., Meyer zu Schwabedissen, H. E. Coproporphyrins in rats - results of a study in a novel Oatp2b1-knockout model. P-15. Poster presentation delivered at and the Virtual Workshop of the International Society for the Study of Xenobiotics and the International Consortium for Innovation and Quality in Pharmaceutical Development, digital, March 2021