

## Yitian Zhou, *Curriculum Vitae*

**Date of birth** May 10<sup>th</sup> 1991  
**Nationality** Chinese  
**Gender** Male  
**Address** Armégatan 32 A, 17171, Solna, Sweden  
**E-mail** [yitian.zhou@ki.se](mailto:yitian.zhou@ki.se)  
**Phone** (+46) 76 7609233  
**ORCID ID** 0000-0003-3066-5444

### Education

---

**Dec 2017 – Present      PhD student**

at Section of Pharmacogenetics, Department of Physiology and Pharmacology, Karolinska Institutet, Stockholm, Sweden

Research project:

Assessing the importance of rare genetic variants for drug response and disease

- 1) Systematically characterize genetic variability of pharmacogenes with a focus on Cytochrome P450 genes
- 2) Interpret the functionality of pharmacogenetic variants and emphasize the importance of rare genetic variants for drug response and disease
- 3) Study population pharmacogenomics, particularly for *HLA* alleles that are associated with severe adverse drug reactions

**Aug 2015 – June 2017      Master of Science in Toxicology**

at Institute of Environmental Medicine, Karolinska Institutet, Stockholm, Sweden

Received the degree of MSc with a thesis entitled “Genetic predisposition and a novel in vitro platform for the assessments of hepatic drug metabolism”

**Sep 2008 – May 2012      Bachelor of science in Pharmacy**

at China Pharmaceutical University, Nanjing, China

### Extra Courses

---

**Jan 2019 – Present      Swedish National Graduate School in Medical Bioinformatics**

at Linköping university and many other universities across Sweden

Acquire bioinformatic knowledge such as machine learning and experimental design

**Feb 2019 – April 2019      Health Innovation and Entrepreneurship**

at University of Oslo, in partnership with NTNU and Karolinska Institutet and in collaboration with the University of Bergen and the University of Tromsø

Learn how to turn research results and ideas into business ventures and how to create innovative services in a clinical setting

**Jan 2018 – Mar 2018      Pharmaceutical Bioinformatics**

at Uppsala University, Uppsala, Sweden

Learn theory and methods for analysis of experimental data, design of experiments, calculation of drug candidate properties, proteochemistry, docking, and virtual drug screening.

**Mar 2016 – Apr 2016      Mouse Histology Course**

at University of Turku, Turku, Finland

**Professional Experience**

---

**May 2020 – Present      Review Editor**

at Frontiers (Scientific Journal)

Design and finalize Research Topic: Population pharmacogenomics (PGx): from variant identification to clinical implementation

Review manuscripts submitted to this Research Topic

**July 2017 – Nov 2017      Pre-PhD Intern**

at Section of Pharmacogenetics, Department of Physiology and Pharmacology, Karolinska Institutet, Stockholm, Sweden

Research project: 1) Pharmacogenetics/Personalized medicine 2) Applying 3D hepatic spheroid on drug hepatotoxicity screening

**Dec 2012 – June 2015      Research Assistant**

at Suzhou Institute of Nano-Tech and Nano-Bionics, Chinese Academy of Sciences, Suzhou, China

Research project: Screening drugs that inhibit telomerase activity

**June 2012 – Nov 2012.      Hospital Pharmacist**

at Fourth Medical Center of PLA General Hospital, Beijing, China

**Other Experience**

---

**Oct 2019**

at Seville, Spain

Poster presentation

**The 5th ESPT congress****Jan 2019**

at Silicon Valley, US

**PMWC 2019****June 2018**

at Nyborg, Denmark

Poster presentation

**First Nordic Conference on Personalized Medicine 2018**

**Oct 2015 – June 2017      Student Ambassador**

at Karolinska Institutet, Sweden

Write student blogs for prospective students

**May 2017                      JRC Summer School on Alternative Approaches for Risk Assessment**

at Joint Research Center, European Commission, Italy

**Mar 2017                      Coordinator at Careers in Health and Science Exposition (CHASE)  
Career Fair**

at Medicinska Föreningen i Stockholm

**Publications**

---

1. **Zhou Y**, Krebs K, Milani L, Lauschke VM. Global frequencies of clinically important HLA alleles and their implications for the cost-effectiveness of preemptive pharmacogenetic testing. *Clinical Pharmacology & Therapeutics*. 2020
2. Xiao Q, **Zhou Y**, Winter S, Büttner F, Schaeffeler E, Schwab M, et al. Germline variant burden in multidrug resistance transporters is a therapy-specific predictor of survival in breast cancer patients. *International Journal of Cancer*. 2020;146 (9), 2475-2487
3. Xiao Q, **Zhou Y**, Lauschke VM. Ethnogeographic and inter-individual variability of human ABC transporters. *Human Genetics*. 2020;1–24.
4. Russell LE, **Zhou Y**, Lauschke VM, Kim RB. In Vitro Functional Characterization and in Silico Prediction of Rare Genetic Variation in the Bile Acid and Drug Transporter, Na<sup>+</sup>-Taurocholate Cotransporting Polypeptide (NTCP, SLC10A1). *Molecular Pharmaceutics*. 2020 Feb 26;17(4):1170–81.
5. **Zhou Y**, Lauschke VM. Pharmacogenomic network analysis of the gene-drug interaction landscape underlying drug disposition. *Computational and Structural Biotechnology Journal*. 2020;18:52–8.
6. Lauschke VM, Nordling Å, **Zhou Y**, Fontalva S, Barragan I, Ingelman-Sundberg M. CYP3A5 is unlikely to mediate anticancer drug resistance in hepatocellular carcinoma. *Pharmacogenomics*. 2019;20(15):1085–92.
7. **Zhou Y**, Mkrтчian S, Kumondai M, Hiratsuka M, Lauschke VM. An optimized prediction framework to assess the functional impact of pharmacogenetic variants. *Pharmacogenomics J*. 2018 Sep 12;28(Suppl 3):1.
8. Lauschke VM, **Zhou Y**, Ingelman-Sundberg M. Novel genetic and epigenetic factors of importance for inter-individual differences in drug disposition, response and toxicity. *Pharmacol Ther*. 2019 May 1;197:122–52.
9. **Zhou Y**, Shen J, Lauschke VM. Comprehensive evaluation of current organotypic and microphysiological liver models for prediction of drug-induced liver injury. *Front Pharmacol*. 2019;10:1093.

10. **Zhou Y**, Fujikura K, Mkrтчian S, Lauschke VM. Computational Methods for the Pharmacogenetic Interpretation of Next Generation Sequencing Data. *Front Pharmacol.* 2018 Dec 4;9:248.
11. Ingelman-Sundberg M, Mkrтчian S, **Zhou Y**, Lauschke VM. Integrating rare genetic variants into pharmacogenetic drug response predictions. *Human Genomics.* 2018 Dec 1;12(1):26.
12. **Zhou Y**, Mägi R, Milani L, Lauschke VM. Global genetic diversity of human apolipoproteins and effects on cardiovascular disease risk. *J Lipid Res.* 2018 Oct;59(10):1987–2000.
13. **Zhou Y**, Lauschke VM. Comprehensive overview of the pharmacogenetic diversity in Ashkenazi Jews. *Journal of Medical Genetics.* 2018 Sep 1;55(9):617–27.
14. Vorrink SU, **Zhou Y**, Ingelman-Sundberg M, Lauschke VM. Prediction of drug-induced hepatotoxicity using long-term stable primary hepatic 3D spheroid cultures in chemically defined conditions. *Toxicological Sciences.* 2018;163(2):655–65.
15. **Zhou Y**, Ingelman-Sundberg M, Lauschke VM. Worldwide distribution of cytochrome P450 alleles: a meta-analysis of population-scale sequencing projects. *Clinical Pharmacology & Therapeutics.* 2017;102(4):688–700.
16. **Zhou Y**, Zhou P, Xin Y, Wang J, Zhu Z, Hu J, et al. Trend of telomerase activity change during human iPSC self-renewal and differentiation revealed by a quartz crystal microbalance based assay. *Scientific reports.* 2014;4:6978.
17. Lv B, **Zhou Y**, Cha W, Wu Y, Hu J, Li L, et al. Molecular composition, grafting density and film area affect the swelling-induced Au–S bond breakage. *ACS applied materials & interfaces.* 2014;6(11):8313–9.