

CURRICULUM VITAE

Name: Tingting Yan (Ph.D., 2016.06); **Birth Date:** Feb 1991.

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Education and Work experience:

2007-2011: B.S. (Major: Pharmacy), China Pharmaceutical University, Nanjing, China.

2011-2016: Ph.D. (Major: Drug Metabolism and Pharmacokinetics), State Key Laboratory of Natural Medicines, Key Laboratory of Drug Metabolism and Pharmacokinetics, China Pharmaceutical University, Nanjing, China.

2016-2023: Postdoctoral Fellow, Cancer Innovation Laboratory, Center for Cancer Research, National Cancer Institute, National Institutes of Health Bethesda, Maryland.

2024-present: Professor, Department of pharmacology, School of Pharmacy, China Pharmaceutical University



Major Honors and Other Special Scientific Recognition:

- 23rd CCR-FYI Colloquium travel award, Outstanding Oral Presentations, 2023
- 2021 High Impact Paper Award, *Acta Pharmaceutica Sinica B*, 2021-2022
- Fellows Award for Research Excellence (FARE), National Institutes of Health, 2021
- Excellent NIH Graduate Award, National Institutes of Health, 2016
- Award for Excellent Graduate, China Pharmaceutical University, 2011

Selected Peer-reviewed Publications (in reverse chronological order):

1. Xia Y*, Zhang Y*, Zhang Z*, Yan N, Sawaswong V, Sun L, Guo W, Wang P, Krausz KW, Gavrilova O, Ntambi JM, Hao H[#], **Yan T[#]**, Gonzalez FJ[#]. Intestinal stearyl-coenzyme A desaturase-inhibition improves obesity-associated metabolic disorders. *Acta Pharmaceutica Sinica B*. 2025; 15(2):892-908. (*Co-first, [#]Corresponding).

2. **Yan T**, Yan N, Xia Y, Sawaswong V, Zhu X, Dias H.B., Aibara D, Takahashi S, Hamada K, Saito Y, Li G, Liu H, Yan H, Velenosi TJ, Krausz KW, Huang J, Kimura S, Rotman Y, Qu A[#], Hao H[#], Gonzalez FJ[#]: Hepatocyte-specific CCAAT/enhancer binding protein α restricts liver fibrosis progression. *Journal of Clinical Investigation*. 2024; 34(7):e166731. ([#]Corresponding).

3. Rimal B*, Collins SL*, Rocha ER, Grandal MA, Solanki S, Hoque N, Gentry EC, Koo I, **Yan T**, Bisanz JE, Krausz KW, Desai D, Amin S, Coleman JP, Shah YM, Gonzalez FJ, Vanden Heuvel J.P, Dorrestein, P.C., Weinert, E.E., Patterson, A.D.[#]: Bile acids are substrates for amine N-acyl transferase activity by bile salt hydrolase. *Nature*. 2024; 626(8000):859-863. (*Co-first, [#]Corresponding).

4. Gentry EC, Collins SL, Panitchpakdi M, Belda-Ferre P, Stewart AK, Terrazas MC, Lu H, Zuffa S, **Yan T**, Avila-Pacheco J, Plichta DR, Aron AT, Wang M, Jarmusch AK, Hao F, Syrkin-Nikolau M, Vlamakis H, Ananthakrishnan AN, Boland BS, Hemperly A, Castele NV, Gonzalez FJ, Clish CB, Xavier RJ, Chu H, Baker ES, Patterson AD, Knight R, Siege D, Dorrestein PC[#]: Reverse metabolomics for the discovery of chemical structures from humans. *Nature*. 2024; 626(7998):419-426. ([#]Corresponding).

5. **Yan T**^{*}, Nie L^{*}, Hao H[#]. Reverse metabolomics as a novel strategy to annotate the human metabolome. *Chinese Journal of Natural Medicine*, 2024; 22(4):289-290. (*Co-first, [#]Corresponding).

6. Yan T*, Luo Y*, Yan N, Hamada K, Zhao N, Xia Y, Wang P, Zhao C, Qi D, Yang S, Sun L, Cai J, Wang Q, Jiang C, Gavriloova O, Krausz KW, Patel DP, Yu X, Wu X, Hao H, Liu W#, Qu A#, Gonzalez FJ#. Intestinal peroxisome proliferator-activated receptor α -fatty acid-binding protein 1 axis modulates nonalcoholic steatohepatitis. *Hepatology*. 2023; 77(1): 239-255. (*Co-first, #Corresponding).
7. Zhang Y*, Yan T*#, Wang T, Liu X, Hamada K, Sun D, Sun Y, Yang Y, Wang J, Takahashi S, Wang Q, Krausz KW, Jiang C, Xie C, Yang X#, Gonzalez FJ#. Crosstalk between CYP2E1 and PPAR α substrates and agonists modulate adipose browning and obesity. *Acta Pharmaceutica Sinica B*. 2022; 12(5):2224-2238. (*Co-first, #Corresponding).
8. Xia Y*, Wang P*, Yan N, Gonzalez FJ#, Yan T#. Withaferin alleviates fulminant hepatitis via targeting macrophage and NLRP3. *Cell Death & Disease*. 2021; 12(2): 174. (*Co-first, #Corresponding).
9. Yagai T*, Yan T*, Luo Y*, Aibara D, Kim D, Brocker CN, Takahashi S, Gonzalez FJ#. Feedback repression of PPAR α signaling by Let-7 microRNA. *Cell Reports*. 2021; 36(6): 109506. (*Co-first, #Corresponding).
10. Yan T*, Luo Y*, Xia Y, Hamada K, Wang Q, Yan N, Krausz KW, Ward JM, Hao H, Ping W#, Gonzalez FJ#. St John's Wort alleviates dextran sodium sulfate-induced colitis through pregnane X receptor-mediated NF κ B antagonism. *FASEB Journal*. 2021; 35(11): e21968. (*Co-first, #Corresponding)
11. Hamada K*, Wang P*, Xia Y*, Yan N, Takahashi S, Krausz KW, Hao H, Yan T#, Gonzalez FJ#.: Withaferin A alleviates ethanol-induced liver injury by inhibiting hepatic lipogenesis. *Food and Chemical Toxicology*. 2021; 160: 112807. (*Co-first, #Corresponding)
12. Xia Y, Yan M, Wang P, Yan N, Hamada K, Wang G, Hao H#, Gonzalez FJ#, Yan T#. Withaferin A in the treatment of liver diseases: progress and pharmacokinetic insights into the future opportunities. *Drug Metabolism and Disposition*. 2021; 50(5): 685-693. (#Corresponding)
13. Yan N*, Yan T*#, Xia Y, Hao H#, Wang G#, Gonzalez FJ#. The pathophysiological function of non-gastrointestinal farnesoid X receptor. *Pharmacology & Therapeutics*. 2021; 226:107867. (*Co-first, #Corresponding)
14. Yan T*, Yan N*, Wang H, Yagai T, Luo Y, Takahashi S, Zhao M, Krausz KW, Wang G#, Hao H#, Gonzalez FJ#. FXR-Deoxycholic acid-TNF α axis modulates acetaminophen-induced hepatotoxicity. *Toxicological Sciences*. 2021. 181(2):273-284. (*Co-first, #Corresponding)
15. Zhang Y*, Yan T*, Sun D, Xie C, Wang T, Liu X, Wang J, Wang Q, Luo Y, Wang P, Yagai T, Krausz KW, Yang X#, Gonzalez FJ#. Rutaecarpine inhibits KEAP1-NRF2 interaction to activate NRF2 and ameliorate dextran sulfate sodium-induced colitis. *Free Radical Biology and Medicine*, 2020; 148:33-41. (*Co-first, #Corresponding)
16. Yan T*#, Yan N, Wang P, Xia Y, Hao H, Wang G, Gonzalez FJ. Herbal drug discovery for the treatment of nonalcoholic fatty liver disease. *Acta Pharmaceutica Sinica B*. 2019; 10(1): 3-18. (*Co-first). Review
17. Patel D*, Yan T*, Kim D, Dias H, Krausz K, Kimura S, Gonzalez FJ#. Withaferin improves non-alcoholic steatohepatitis in mice. *Journal of Pharmacology and Experimental Therapeutics*. 2019; 371(2):360-374. (*Co-first, #Corresponding)
18. Yan T, Wang H, Cao L, Wang Q, Takahashi S, Yagai T, Li G, Krausz KW, Wang G#, Gonzalez FJ#, Hao H#. Glycyrrhizin alleviates non-alcoholic steatohepatitis via modulating bile acids and meta-inflammation. *Drug Metabolism and Disposition*. 2018; 46:1-10. (#Corresponding)

19. Zhang Y*, **Yan T***, Sun D, Xie C, Zheng Y, Zhang L, Yagai T, Krausz KW, Bisson WH, Yang X#, Gonzalez FJ#. Structure-activity relationships of the main bioactive constituents of *Euodia ruticarpa* on aryl hydrocarbon receptor activation and associated bile acid homeostasis. ***Drug Metabolism and Disposition***. 2018; 46(7):1030-1040. (***co-first**, #Corresponding)
20. Li G*#, Brocker C*, **Yan T***, Xie C, Krausz KW, Xiang R, Gonzalez FJ#. Metabolic adaptation to intermittent fasting is independent of peroxisome proliferator-activated receptor alpha. ***Molecular Metabolism***. 2018; 7: 80-89. (***Co-first**, #Corresponding)
21. **Yan T**, Wang H, Zhao M, Yagai T, Chai Y, Krausz KW, Xie C, Cheng X, Zhang J, Che Y, Li F, Wu Y, Brocker CN, Gonzalez FJ, Wang G#, Hao H#. Glycyrrhizin protects against acetaminophen-induced acute liver injury via alleviating TNF α mediated apoptosis. ***Drug Metabolism and Disposition***. 2016; 44 (5): 20-31. (#Corresponding)
22. Lu D, Liu Y*, Luo Y, Zhao J, Feng C, Xue L, Xu J, Wang Q, **Yan T**, Xiao P, Krausz KW, Gonzalez FJ#, Xie C#. Intestinal farnesoid X receptor signaling controls hepatic fatty acid oxidation. ***Biochimica et Biophysica Acta (BBA)-Molecular and Cell Biology of Lipids***. 2021; 1867(2): 159089. (*co-first; #corresponding)
23. Cui S, Pan X, Ge C, Guo Y, Zhang P, **Yan T**, Zhou J, He Q, Cheng L, Wang G, Hao H#, Wang H#. Silybin alleviates hepatic lipid accumulation in methionine-choline deficient diet-induced nonalcoholic fatty liver disease in mice via peroxisome proliferator-activated receptor α . ***Chinese Journal of Natural Medicines***. 2021; 19(6): 401-411. (#corresponding)
24. Wang H*, Ge C*, Zhou J*, Guo Y, Cui S, Huang N, **Yan T**, Cao L, Che Y, Zhen Q, Zheng X, Gonzalez FJ, Wang G#, Hao H#. Noncanonical farnesoid X receptor signaling inhibits apoptosis and impedes liver fibrosis. ***EBioMedicine***, 2018; 37: 322-323. (*co-first; #corresponding)
25. Brocker CN, Patel DP, Velenosi TJ, Kim D, **Yan T**, Yue J, Li G, Kristopher KW, Gonzalez FJ. Extrahepatic PPAR α modulates fatty acid oxidation and attenuates fasting-induced hepatosteatosis in mice. ***Journal of Lipid Research***. 2018; 59: 2140-2152.
26. Takahashi S, Tanaka N, Fukami T, Xie C, Yagai T, Kim D, Velenosi TJ, **Yan T**, Krausz KW, Levi M, Gonzalez FJ. Role of farnesoid X receptor and bile acids in hepatic tumor development. ***Hepatology Communications***. 2018; 12(12):1567-1582.
27. Li G, Xie C, Lu S, Nichols RG, Tian Y, Li L, Patel D, Ma Y, Brocker CN, **Yan T**, Krausz KW, Xiang R, Gavriloova O, Patterson AD, Gonzalez FJ. Intermittent fasting promotes white adipose browning and Decreases obesity by shaping the gut microbiota. ***Cell Metabolism***. 2017; 4: 672-685.
28. Li G, Brocker C, Xie C, **Yan T**, Noguchi A, Krausz KW, Xiang R, Gonzalez FJ. Hepatic peroxisome proliferator-activated receptor alpha mediates the major metabolic effects of Wy14643. ***Journal of Gastroenterology and Hepatology***. 2017; 5: 1138-1145.
29. Zhao M, Xu W, Shen H, Shen P, Zhang J, Wang D, Xu H, Wang H, **Yan T**, Wang L, Hao HP, Wang GJ, Cao LJ. Comparison of bioactive components and pharmacological activities of ophiopogon japonicas extracts from different geographical origins. ***Journal of Pharmaceutical and Biomedical Analysis***. 2017; 138:134-141.
30. Wang H, **Yan T**, Xie Y, Zhao M, Che Y, Zhang J, Liu H, Cao L, Cheng X, Xie Y, Li F, Qi Q, Wang G#, Hao H. Mechanism-based inhibitory and peroxisome proliferator-activated receptor alpha-dependent modulating effects of silybin on principal hepatic drug-metabolizing enzymes. ***Drug Metabolism and Disposition***. 2015; 43: 444-454.

31. Zhang J, Cao L, Wang H, Cheng X, Wang L, Zhu L, **Yan T**, Xie Y, Wu Y, Zhao M, Ma S, Wu M, Wang G, Hao H. Ginsenosides regulate PXR/NF- κ B signaling and attenuate DSS-induced colitis. ***Drug Metabolism and Disposition***. 2015; 43(8): 1181-9.
32. Xie H, Sun S, Cheng X, **Yan T**, Zheng X, Li F, Qi Q, Wang G, Hao H. Dysregulations of intestinal and colonic UDP-glucuronosyltransferases in rats with type 2 diabetes. ***Drug Metabolism and Pharmacokinetics***. 2013; 28(5): 427-34.
33. Li FY, Hao HP, Hao K, **Yan T**, Wang GJ. Effect of diammonium glycyrrhizinate on entecavir pharmacokinetics in rats. ***Chinese Journal of Natural Medicines***. 2013; 11: 309-13.
34. Cheng X, Liu F, **Yan T**, Zhou X, Wu L, Liao K, Wang G, Hao H. Metabolic profile, enzyme kinetics, and reaction phenotyping of beta-lapachone metabolism in human liver and intestine in vitro. ***Molecular Pharmaceutics***. 2012; 9(12): 3476-85.