Novel pathways in cholesterol metabolism to combat cardiometabolic diseases

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List of publications

Zhou E, Nakashima H, Li R, van der Zande HJP, Liu C, Li Z, Müller C, Bracher F, Mohammed Y, de Boer JF, Kuipers F, Guigas B, Rensen PCN, Giera M, Wang Y. Inhibition of DHCR24 ameliorates hepatic steatosis and inflammation through LXRα without inducing hyperlipidemia. *Submitted*.

Paalvast Y, **Zhou E**, Mulder NL, Koehorst M, Wolters JC, van Dijk KW, Rensen PCN, Kuivenhoven JA, Kremoser C, Wang Y, Kuipers F, van Riel NAW, Groen AK, de Boer JK. FXR activation resolves dyslipidemia and decreases adiposity in APOE*3-Leiden.CETP transgenic mice fed a Western-type diet. *Submitted*.

Li Z, **Zhou E**, Liu C, Wicks H, Yildiz S, Razack F, Ying Z, Kooijman S, Koonen D, Heijink M, Giera M, Smits WK, Kuijper EJ, Groen AK, Willems van Dijk K, Rensen PCN, Wang Y. Dietary butyrate selectively promotes specific gut bacteria to induce satiety, attenuate weight gain and ameliorate metabolic health. *Submitted*.

Li Z, **Zhou E**, Razack F, Kooijman S, Willems van Dijk K, Rensen PCN, Wang Y. Dietary butyrate promotes intestinal GLP-1 release, reduces appetite and induces fat oxidation via central GLP-1 receptor signaling. *Submitted*.

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Curriculum vitae

Enchen Zhou was born on 28 January 1991 in Gongzhuling, Jilin province, China. In September 2009, he started his bachelor program 'Marine Biological Resources and Environment' and received his BSc degree in June 2013, at the Ocean University of China, Qingdao, Shandong province, China. Later on, in September 2013, he was admitted as a postgraduate candidate exempt from the Admission Exam and majored in 'Pathophysiology' at the Key Laboratory of Molecular Cardiovascular Sciences of the Ministry of Education, Health Science Center, Peking University, Beijing, China. During this 3-year master program, he completed the thesis entitled 'Metabolic regulation of endothelial cells by high density lipoprotein', under the supervision of Prof. dr. Lemin Zheng, and obtained his MSc degree in June 2016.

Subsequently, he was awarded financial support from the China Scholarship Council and started his PhD program in October 2016 under the supervision of Prof. dr. Patrick C.N. Rensen and Prof. dr. Yanan Wang, at the Division of Endocrinology of the Department of Internal Medicine, Leiden University Medical Center, Leiden, The Netherlands. His research mainly focused on the discovery of novel targets in cholesterol metabolism for the treatment of cardiometabolic diseases, including atherosclerosis and nonalcoholic steatohepatitis. The results of his PhD studies are presented in this thesis. In January 2021, he continued his research on the role of myeloid cells in cardiometabolic diseases as a postdoc scholar under the supervision of Prof. dr. Christopher K. Glass, at the Department of Cellular and Molecular Medicine in The University of California, San Diego, School of Medicine.

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