

***Cite this as:*** Yapeng YANG, Xiang TAN, Zeyue ZHANG, Lifeng LIANG, Zhifeng WU, Jinhui HE, Yuqing WANG, Miaomiao DONG, Jixia ZHENG, Hang ZHANG, Shuaifei FENG, Wei CHENG, Bota CUI, Hong WEI, Qinjin LI. Metagenomic sequencing reveals high reproducibility of human donor microbiota transplanted into germ-free mice via lower gut route. *Journal of Zhejiang University-SCIENCE B*, 2026, 27(4):375-389. <https://doi.org/10.1631/jzus.B2400495>

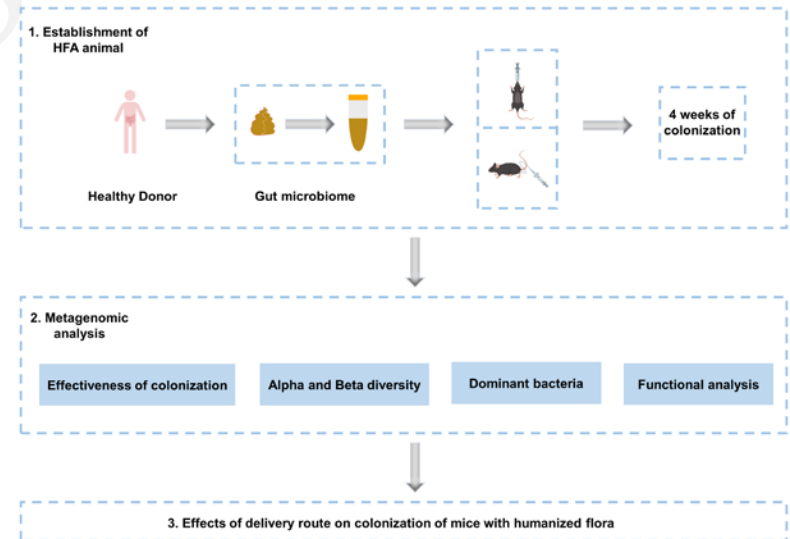
# **Metagenomic sequencing reveals high reproducibility of human donor microbiota transplanted into germ-free mice via lower gut route**

**Key words:** Fecal microbiota transplantation; Germ-free mice; Lower gut; Gavage; Metagenome

# Research Summary

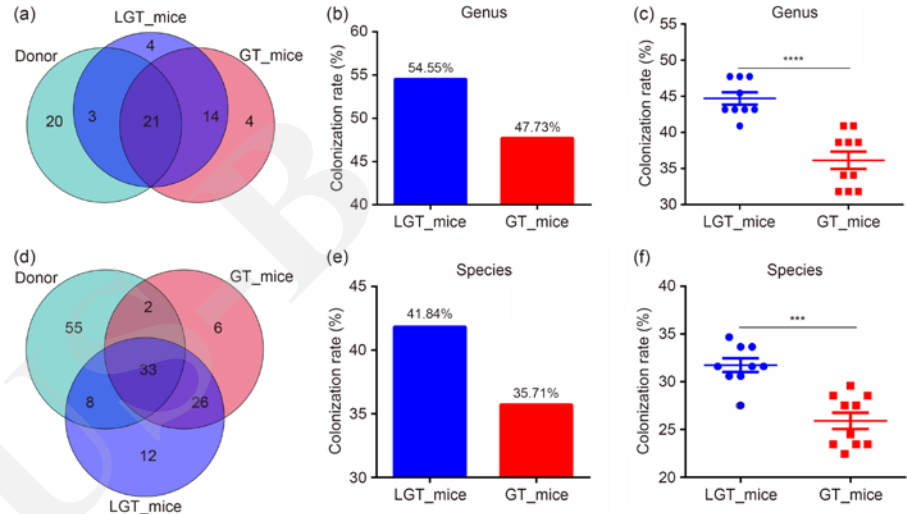
In this study, we explored the reproducibility of recipient-to-donor gut microbiota community structure and function under different transplantation routes.

- The efficiency of microbial colonization
- Lower gut transplantation has better donor microbial community and function reproducibility.



# Innovation points

- Introduction of the factors influencing microbial colonization



- Exploring the efficiency of different transplantation route of colony transplantation for colonization of germ-free mice.

