

Stanford

Weiguo Fan

Postdoctoral Scholar, Gastroenterology

Bio

BIO

My research focuses on liver diseases. I got my Ph.D. degree in virology and immune response at Institut Pasteur of Shanghai, Chinese Academy of Sciences. The two main projects during my Ph.D. program are: 1) explore the relationship between the immune response in Hepatitis C virus infection and Interferon treatment; and 2) investigate the function of ECM1 in liver fibrosis. As a postdoc in Stanford, I will try to integrate basic and translational liver research and focus on: 1) investigate molecular functions of liver immune cells in liver disease; 2) explore key factors determining the change of liver microenvironment that cause liver diseases; 3) use new techniques, such as next-generation sequencing, RNAseq or signal cell sequencing, to explore key factors affecting liver disease and treatment in patients.

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Trainee Member, AASLD (2019 - present)

PROFESSIONAL EDUCATION

- Bachelor of Science, Nanjing Agricultural College (2011)
- Doctor of Philosophy, Chinese Academy Of Sciences (2018)

STANFORD ADVISORS

- Natalie Torok, Postdoctoral Faculty Sponsor
- Natalie Torok, Postdoctoral Research Mentor

Publications

PUBLICATIONS

- **Shc is implicated in calreticulin-mediated sterile inflammation in alcoholic hepatitis.** *Cellular and molecular gastroenterology and hepatology*
Li, Y., Jiang, J. X., Fan, W., Fish, S. R., Das, S., Gupta, P., Mozes, G., Vancza, L., Sarkar, S., Kunimoto, K., Chen, D., Park, H., Clemens, et al
2022
- **Non-alcoholic Fatty Liver Disease and Liver Fibrosis during Aging.** *Aging and disease*
Li, Y., Adeniji, N. T., Fan, W., Kunimoto, K., Török, N. J.
2022; 13 (4): 1239-1251
- **Allergen protease-activated stress granule assembly and gasdermin D fragmentation control interleukin-33 secretion.** *Nature immunology*
Chen, W., Chen, S., Yan, C., Zhang, Y., Zhang, R., Chen, M., Zhong, S., Fan, W., Zhu, S., Zhang, D., Lu, X., Zhang, J., Huang, et al
2022
- **Non-alcoholic Fatty Liver Disease and Liver Fibrosis during Aging** *AGING AND DISEASE*
Li, Y., Adeniji, N. T., Fan, W., Kunimoto, K., Torok, N. J.
2022
- **3D Imaging of the Liver Extracellular Matrix in a Mouse Model of Non-Alcoholic Steatohepatitis.** *Journal of visualized experiments : JoVE*
Fan, W., Li, Y., Kunimoto, K., Torok, N. J.
2022

- **Transforming growth factor beta latency: A mechanism of cytokine storage and signalling regulation in liver homeostasis and disease.** *JHEP reports : innovation in hepatology*
Li, Y., Fan, W., Link, F., Wang, S., Dooley, S.
1800; 4 (2): 100397
- **4-METHYLBELLIFERONE IMPROVES LIVER STIFFNESS, CHOLANGIOCYTE PROLIFERATION AND FIBROSIS IN THE Mdr2-/- MOUSE MODEL OF PRIMARY SCLEROSING CHOLANGITIS (PSC)**
Kunimoto, K., Fan, W., Li, Y., Dehnad, A., Mozes, G., Wang, Y., Nagy, N., Bollyky, P., Torok, N. J.
WILEY.2021: 740A-741A
- **P46Shc-MEDIATED MITOCHONDRIAL DYSFUNCTION EXACERBATES NONALCOHOLIC STEATOHEPATITIS**
Li, Y., Jiang, J., Dehnad, A., Fish, S., Mozes, G., Fan, W., Tomilov, A., Cortopassi, G., Torok, N. J.
WILEY.2021: 1080A
- **Editorial: Noninvasive Fibrosis Biomarkers in Patients With NASH With Diabetes.** *Hepatology communications*
Fan, W., Torok, N. J.
2021; 5 (4): 553–55
- **Junctional and somatic hypermutation-induced CX4C motif is critical for the recognition of a highly conserved epitope on HCV E2 by a human broadly neutralizing antibody.** *Cellular & molecular immunology*
Yi, C., Xia, J., He, L., Ling, Z., Wang, X., Yan, Y., Wang, J., Zhao, X., Fan, W., Sun, X., Zhang, R., Ye, S., Zhang, et al
2020
- **TRIM34 attenuates colon inflammation and tumorigenesis by sustaining barrier integrity.** *Cellular & molecular immunology*
Lian, Q., Yan, S., Yin, Q., Yan, C., Zheng, W., Gu, W., Zhao, X., Fan, W., Li, X., Ma, L., Ling, Z., Zhang, Y., Liu, et al
2020
- **ECM1 is an essential factor for the determination of M1 macrophage polarization in IBD in response to LPS stimulation.** *Proceedings of the National Academy of Sciences of the United States of America*
Zhang, Y., Li, X., Luo, Z., Ma, L., Zhu, S., Wang, Z., Wen, J., Cheng, S., Gu, W., Lian, Q., Zhao, X., Fan, W., Ling, et al
2020
- **Non-phagocytic Activation of NOX2 is Implicated in Progressive Non-alcoholic Steatohepatitis During Aging.** *Hepatology (Baltimore, Md.)*
Jiang, J. X., Fish, S. R., Tomilov, A. n., Li, Y. n., Fan, W. n., Dehnad, A. n., Gae, D. n., Das, S. n., Mozes, G. n., Charville, G. W., Ramsey, J. n., Cortopassi, G. n., Török, et al
2020
- **AGER1 downregulation associates with fibrosis in nonalcoholic steatohepatitis and type 2 diabetes.** *The Journal of clinical investigation*
Dehnad, A. n., Fan, W. n., Jiang, J. X., Fish, S. R., Li, Y. n., Das, S. n., Mozes, G. n., Wong, K. A., Olson, K. A., Charville, G. W., Ali, M. n., Török, N. J.
2020
- **ECM1 Prevents Activation of Transforming Growth Factor β , Hepatic Stellate Cells, and Fibrogenesis in Mice.** *Gastroenterology*
Fan, W., Liu, T., Chen, W., Hammad, S., Longerich, T., Hausser, I., Fu, Y., Li, N., He, Y., Liu, C., Zhang, Y., Lian, Q., Zhao, et al
2019; 157 (5): 1352-1367.e13
- **Extracellular matrix protein 1 promotes follicular helper T cell differentiation and antibody production.** *Proceedings of the National Academy of Sciences of the United States of America*
He, L., Gu, W., Wang, M., Chang, X., Sun, X., Zhang, Y., Lin, X., Yan, C., Fan, W., Su, P., Wang, Y., Yi, C., Lin, et al
2018; 115 (34): 8621-8626
- **IFN- β desensitizes the response to IFN- α treatment in chronic hepatitis C through long-term induction of USP18.** *The Journal of general virology*
Fan, W., Xie, S., Zhao, X., Li, N., Chang, C., Li, L., Yu, G., Chi, X., Pan, Y., Niu, J., Zhong, J., Sun, B.
2016; 97 (9): 2210-2220