

Pengfei Li

 3015GD Rotterdam, The Netherlands

 p.li@erasmusmc.nl

 01/05/1992

 +31 626317880

Education

10/2018 – present Rotterdam, The Netherlands	PhD candidate, Erasmus University Medical Center Gastroenterology&Hepatology
09/2015 – 07/2018 Tai'an city, China	Master, Shandong Agricultural University Preventive Veterinary Medicine
09/2011 – 06/2015 Tai'an city, China	Bachelor, Shandong Agricultural University Veterinary Medicine

Profile (Brief summary of research)

At the early stage of my research (Veterinary Medicine), I dedicated to investigating the epidemiology of emerging viruses among waterfowls in China, and developing specific preventive or therapeutic antivirals against these animal viruses. In 2018, I moved to The Netherlands and started my PhD research. Incorporating previous experience in animal diseases, my research interests have expanded to analyzing epidemiology of emerging cross-species viruses, studying virus-host interactions, as well as developing antiviral therapies. So far, I have contributed to 41 publications on these topics, with 14 publications as first author. My current research focuses on:

1. Developing human-derived primary organoids based models, including liver organoids, intestinal organoids and airway organoids, for viral infections. Based on these 3D-constructed organoids, I aim to understand the pathogenesis, host responses and antiviral therapies against human rotavirus, hepatitis E virus, seasonal coronaviruses (OC43, 229E and NL63), and SARS-CoV-2.
2. Systematically mapping epidemiological and clinical features of emerging viruses infections by employing multiple bioinformatics analyzing approaches.

International Meeting & Awards

EASL International Liver Congress 2021

Oral presentation & Young investigator bursary

Science management & Membership

Global Hepatitis E Platform, Coordinator Assistant ☐

European Association for the Study of the Liver (EASL), Membership

Royal Dutch Society for Microbiology, Membership

Dutch Society of Gastroenterology, Membership

Publications

- 2022 **1. Monitoring and managing SARS-CoV-2 evolution in immunocompromised populations** ↗
Li P, de Vries AC, Kamar N, Peppelenbosch MP, Pan Q. *Lancet Microbe*. 2022 May;3(5):e325-e326.
- 2022 **2. SARS-CoV-2 Omicron variant is highly sensitive to molnupiravir, nirmatrelvir, and the combination** ↗
Li P, Wang Y, Lavrijsen M, Lamers MM, de Vries AC, Rottier RJ, Bruno MJ, Peppelenbosch MP, Haagmans BL, Pan Q. *Cell Research*. 2022 Mar;32(3):322-324. (IF: **26.8**; top10%)
- 2022 **3. Recapitulating hepatitis E virus-host interactions and facilitating antiviral drug discovery in human liver-derived organoids** ↗
Li P, Li Y, Wang Y, Liu J, Lavrijsen M, Li Y, Zhang R, Versteegen MMA, Wang Y, Li TC, Ma Z, Kainov DE, Bruno MJ, de Man RA, van der Laan LJW, Peppelenbosch MP, Pan Q. *Science Advances*. 2022 Jan 21;8(3):eabj5908. (IF:**14.1**; top10%)
- 2022 **4. Differing pan-coronavirus antiviral potency of boceprevir and GC376 in vitro despite discordant molecular docking predictions** ↗
Wang Y, **Li P**, Lavrijsen M, Li Y, Ma Z, Peppelenbosch MP, Baig MS, Pan Q. *Archives of Virology*. 2022 Apr;167(4):1125-1130.
- 2022 **5. Repurposing dyphylline as a pan-coronavirus antiviral therapy** ↗
Wang Y*, Rajpoot S*, **Li P***, Lavrijsen M, Ma Z, Hirani N, Saqib U, Pan Q, Baig MS. *Future Medical Chemistry*. 2022 May;14(10):685-699.
- 2022 **6. Niclosamide inhibits hepatitis E virus through suppression of NF-kappaB signalling** ↗
Li Y, **Li P**, He Q, Zhang R, Li Y, Kamar N, Peppelenbosch MP, de Man RA, Wang L, Pan Q. *Antiviral Research*. 2022 Jan;197:105228. (IF: **5.97**; top10%)
- 2022 **7. Probing the direct effects of antiretroviral drugs on hepatitis E virus replication in cell culture models** ↗
Li Y, **Li P**, de Man RA, Peppelenbosch MP, Pan Q. *Liver International*. 2022 Mar;42(3):716-717.
- 2022 **8. Hepatitis E virus infection activates NOD-like receptor family pyrin domain-containing 3 inflammasome antagonizing interferon response but therapeutically targetable** ↗
Li Y, Yu P, Kessler AL, Shu J, Liu X, Liang Z, Liu J, Li Y, **Li P**, Wang L, Wang Y, Ma Z, Liu A, Wang L, Bruno MJ, de Man RA, Peppelenbosch MP, Buschow SI, Wang L, Wang Y, Pan Q. *Hepatology*. 2022 Jan;75(1):196-212.
- 2022 **9. Systematically comparing epidemiological and clinical features of MAFLD and NAFLD by meta-analysis: Focusing on the non-overlap groups** ↗
Ayada I, van Kleef LA, Alferink LJM, **Li P**, de Knegt RJ, Pan Q. *Liver International*. 2022 Feb;42(2):277-287.

- 2021 **10. Viral polymerase binding and broad-spectrum antiviral activity of molnupiravir against human seasonal coronaviruses** 
Wang Y, **Li P**, Solanki K, Li Y, Ma Z, Peppelenbosch MP, Baig MS, Pan Q. *Virology*. 2021 Dec;564:33-38.
- 2021 **11. Estimating the global prevalence of hepatitis E virus in swine and pork products** 
Li P*, Ji Y*, Li Y, Ma Z, Pan Q. *One Health*. 2021 Dec 14;14:100362. (IF: 3.8; top10%)
- 2021 **12. Estimating the burden and modeling mitigation strategies of pork-related hepatitis E virus foodborne transmission in representative European countries** 
Ji Y*, **Li P***, Jia Y, Wang X, Zheng Q, Peppelenbosch MP, Ma Z, Pan Q. *One Health*. 2021 Nov 18;13:100350.
- 2021 **13. Distinct effectiveness in containing COVID-19 epidemic: Comparative analysis of two cities in China by mathematical modeling** 
Y Ji, **P Li**, Q Zheng, Z Ma, Q Pan. *PLOS Global Public Health*. 2021; 1(11): e0000043.
- 2021 **14. Systematically mapping clinical features of infections with classical endemic human coronaviruses** 
Li P, Ikram A, Peppelenbosch MP, Ma Z, Pan Q. *Clinical Infectious Diseases*. 2021 Aug 2;73(3):554-555. (IF: 9; top10%)
- 2021 **15. Systematically comparing COVID-19 with the 2009 influenza pandemic for hospitalized patients** 
Li P, Wang Y, Peppelenbosch MP, Ma Z, Pan Q. *International Journal of Infectious Diseases*. 2021 Jan;102:375-380.
- 2021 **16. Cancer-Associated Fibroblasts Provide a Stromal Niche for Liver Cancer Organoids That Confers Trophic Effects and Therapy Resistance** 
Liu J, **Li P**, Wang L, Li M, Ge Z, Noordam L, Lieshout R, Verstegen MMA, Ma B, Su J, Yang Q, Zhang R, Zhou G, Carrascosa LC, Sprengers D, IJzermans JNM, Smits R, Kwekkeboom J, van der Laan LJW, Peppelenbosch MP, Pan Q, Cao W. *Cell Mol Gastroenterol Hepatol*. 2021;11(2):407-431. (IF: 9.2; top10%)
- 2021 **17. Comparative assessment of favipiravir and remdesivir against human coronavirus NL63 in molecular docking and cell culture models** 
Wang Y, **Li P**, Rajpoot S, Saqib U, Yu P, Li Y, Li Y, Ma Z, Baig MS, Pan Q. *Scientific Reports*. 2021 Dec 6;11(1):23465.
- 2021 **18. Ivermectin effectively inhibits hepatitis E virus replication, requiring the host nuclear transport protein importin $\alpha 1$** 
Li Y, Miao Z, **Li P**, Zhang R, Kainov DE, Ma Z, de Man RA, Peppelenbosch MP, Pan Q. *Archives of Virology*. 2021 Jul;166(7):2005-2010.

2021

19. The biological process of lysine-tRNA charging is therapeutically targetable in liver cancer ☐

Zhang R, Noordam L, Ou X, Ma B, Li Y, Das P, Shi S, Liu J, Wang L, **Li P**, Verstegen MMA, Reddy DS, van der Laan LJW, Peppelenbosch MP, Kwekkeboom J, Smits R, Pan Q. *Liver International*. 2021 Jan;41(1):206-219.

2020

20. Drug screening identified gemcitabine inhibiting hepatitis E virus by inducing interferon-like response via activation of STAT1 phosphorylation ☐

Li Y, **Li P**, Li Y, Zhang R, Yu P, Ma Z, Kainov DE, de Man RA, Peppelenbosch MP, Pan Q. *Antiviral Research*. 2020 Dec;184:104967.

2020

21. Does cross-neutralization of SARS-CoV-2 only relate to high pathogenic coronaviruses? ☐

Ma Z, **Li P**, Ikram A, Pan Q. *Trends in Immunology*. 2020 Oct;41(10):851-853. (IF: **16.7**; top10%)

2020

22. Rotavirus Infection and Cytopathogenesis in Human Biliary Organoids Potentially Recapitulate Biliary Atresia Development ☐

Chen S, **Li P**, Wang Y, Yin Y, de Ruiter PE, Verstegen MMA, Peppelenbosch MP, van der Laan LJW, Pan Q. *mBio*. 2020 Aug 25;11(4):e01968-20. (IF: **6.78**; top10%)

2020

23. Cross-reactivity towards SARS-CoV-2: the potential role of low-pathogenic human coronaviruses ☐

Ma Z, **Li P**, Ji Y, Ikram A, Pan Q. *Lancet Microbe*. 2020 Aug;1(4):e151.

2020

24. Drug screening identifies gemcitabine inhibiting rotavirus through alteration of pyrimidine nucleotide synthesis pathway ☐

Chen S, Wang Y, **Li P**, Yin Y, Bijvelds MJ, de Jonge HR, Peppelenbosch MP, Kainov DE, Pan Q. *Antiviral Research*. 2020 Aug;180:104823.

2020

25. Estimating global epidemiology of low-pathogenic human coronaviruses in relation to the COVID-19 context ☐

Li P, Liu J, Ma Z, Bramer WM, Peppelenbosch MP, Pan Q. *Journal of Infectious Diseases*. 2020 Jul 23;222(4):695-696. (IF: **5.2**; top10%)

2020

26. The global epidemiology of hepatitis E virus infection: A systematic review and meta-analysis ☐

Li P, Liu J, Li Y, Su J, Ma Z, Bramer WM, Cao W, de Man RA, Peppelenbosch MP, Pan Q. *Liver International*. 2020 Jul;40(7):1516-1528. (IF: **5.8**)

2020

27. Occurrence and Molecular Characteristics of Mcr-1-Positive Escherichia coli from Healthy Meat Ducks in Shandong Province of China ☐

Liu F, Zhang R, Yang Y, Li H, Wang J, Lan J, **Li P**, Zhu Y, Xie Z, Jiang S. *Animals (Basel)*. 2020 Jul 29;10(8):1299.

- 2020 **28. MDA5 against enteric viruses through induction of interferon-like response partially via the JAK-STAT cascade** ↗
Li Y, Yu P, Qu C, **Li P**, Li Y, Ma Z, Wang W, de Man RA, Peppelenbosch MP, Pan Q. *Antiviral Research*. 2020 Apr;176:104743.
- 2019 **29. FDA-drug screening identifies deptropine inhibiting hepatitis E virus involving the NF-κB-RIPK1-caspase axis** ↗
Qu C, Li Y, Li Y, Yu P, **Li P**, Donkers JM, van de Graaf SFJ, de Man RA, Peppelenbosch MP, Pan Q. *Antiviral Research*. 2019 Oct;170:104588.
- 2019 **30. Identification of a Type-Specific Epitope in the ORF2 Protein of Duck Astrovirus Type 1** ↗
Lan J, Zhang R, **Li P**, Chen J, Xie Z, Jiang S. *Animals (Basel)*. 2019 Dec 2;9(12):1069.
- 2019 **31. IGF2BP1 Significantly Enhances Translation Efficiency of Duck Hepatitis A Virus Type 1 without Affecting Viral Replication** ↗
Chen J, Zhang R, Lan J, Lin S, **Li P**, Gao J, Wang Y, Xie ZJ, Li FC, Jiang SJ. *Biomolecules*. 2019 Oct 10;9(10):594.
- 2019 **32. Identification of a functional nuclear localization signal in 3D pol/3CD of duck hepatitis A virus 1** ↗
Chen JH, Zhang RH, Lin SL, **Li PF**, Lan JJ, Gao JM, Xie ZJ, Li FC, Jiang SJ. *Virus Research*. 2019 Sep;270:197670.
- 2019 **33. Oral vaccine of recombinant Lactococcus lactis expressing the VP1 protein of duck hepatitis A virus type 3 induces mucosal and systemic immune responses** ↗
Song S*, **Li P***, Zhang R, Chen J, Lan J, Lin S, Guo G, Xie Z, Jiang S. *Vaccine*. 2019 Jul 18;37(31):4364-4369.
- 2019 **34. Suppression of pyrimidine biosynthesis by targeting DHODH enzyme robustly inhibits rotavirus replication** ↗
Chen S, Ding S, Yin Y, Xu L, **Li P**, Peppelenbosch MP, Pan Q, Wang W. *Antiviral Research*. 2019 Jul;167:35-44.
- 2019 **35. Identification and characterization of a novel nanobody against duck hepatitis A virus type 1** ↗
Xue W, Zhao Q, **Li P**, Zhang R, Lan J, Wang J, Yang X, Xie Z, Jiang S. *Virology*. 2019 Feb;528:101-109.
- 2018 **36. Novel duck hepatitis A virus type 1 isolates from adult ducks showing egg drop syndrome** ↗
Zhang R, Chen J, Zhang J, Yang Y, **Li P**, Lan J, Xie Z, Jiang S. *Veterinary Microbiology*. 2018 Jul;221:33-37. (top10%)
- 2018 **37. Isolation and characterization of novel goose parvovirus-related virus reveal the evolution of waterfowl parvovirus** ↗
Li P, Lin S, Zhang R, Chen J, Sun D, Lan J, Song S, Xie Z, Jiang S. *Transboundary and Emerging Diseases*. 2018 Apr;65(2):e284-e295. (IF: 5; top10%)

2018

38. Duck "beak atrophy and dwarfism syndrome" disease complex: Interplay of novel goose parvovirus-related virus and duck circovirus? ↗
Li P, Li J, Zhang R, Chen J, Wang W, Lan J, Xie Z, Jiang S. *Transboundary and Emerging Diseases*. 2018 Apr;65(2):345-351. (IF: 5; top10%)

2018

39. The Functional Role of the 3' Untranslated Region and Poly(A) Tail of Duck Hepatitis A Virus Type 1 in Viral Replication and Regulation of IRES-Mediated Translation ↗
Chen JH, Zhang RH, Lin SL, **Li PF**, Lan JJ, Song SS, Gao JM, Wang Y, Xie ZJ, Li FC, Jiang SJ. ***Frontiers in Microbiology***. 2018 Sep 25;9:2250.

2017

40. Construction and characterization of an improved DNA-launched infectious clone of duck hepatitis a virus type 1 ↗
Chen J, Zhang R, Lin S, **Li P**, Lan J, Xie Z, Wang Y, Jiang S. ***Virology Journal***. 2017 Nov 3;14(1):212.

2017

41. Development of a duplex semi-nested PCR assay for detection of classical goose parvovirus and novel goose parvovirus-related virus in sick or dead ducks with short beak and dwarfism syndrome ↗
Li P, Zhang R, Chen J, Sun D, Lan J, Lin S, Song S, Xie Z, Jiang S. *Journal of Virological Methods*. 2017 Nov;249:165-169.