ZHENXUAN MA

No.5 Wulumiqi Road, Jingan District, Shanghai, China +86 15221921716/zxma13@fudan.edu.cn

EDUCATION

Shanghai, China **Fudan University** Master of Internal Medicine 2018 - 2021Bachelor of Clinical Medicine 2013 - 2018**London School of Economics and Political Science** London, United Kingdom English for Academic Purposes (EAP) Pre-sessional Programme, LN909 Jul 2015 - Aug 2015

RESEARCH EXPERIENCE

Shibo Jiang's Lab, Fudan University

Shanghai, China

Research intern, supervised by Prof. Shibo Jiang

Aug 2015 – May 2018

Conducted in-depth research focusing on the mechanism and refinement of peptide-based fusion inhibitors, with the aim of advancing potential antiviral treatments.

Project: Creating an artificial tail-anchor as a novel strategy to enhance the potency of peptide-based HIV fusion inhibitors

- Pioneered the identification of an artificial structural component that amplifies the anti-HIV effect of fusion inhibitors.
- Successfully secured and completed the National Basic Science Personnel Training Fund (Project ID: J1210041) Capacity Improvement Project
- Mastered foundational techniques in molecular biology and immunology through rigorous laboratory work.
- Jiming Zhang's Lab, Fudan University

Shanghai, China Aug 2017 – Present

Master student, supervised by Prof. Jiming Zhang

Engaged in advanced studies under the mentorship of Prof. Jiming Zhang, focusing on the clinical treatment and fundamental research of chronic hepatitis B.

Project: Thyroid dysfunction incidence and risk factors in Chinese chronic hepatitis B patients treated with pegylated interferon alpha: a long-term follow-up study

- Implemented a retrospective observational approach to assess clinical outcomes, leading to the establishment of a predictive model for thyroid dysfunction incidence in pre-treatment patients.
- · Attained proficiency in clinical research design, follow-up study, and advanced statistical analysis methodologies, augmenting expertise in evidence-based medical research.
- National Clinical Research Center for Aging and Medicine, Fudan University Research assistant

Shanghai, China Jul 2021 – Present

Contribute to pioneering research at the National Clinical Research Center for Aging and Medicine, with a primary focus on understanding the clinical characteristics of prevalent diseases in elderly populations and optimizing their healthcare.

Project: A pivotal study evaluating the efficacy and safety of Paxlovid in super-elderly patients infected with the Omicron variant.

- Established and managed a clinical cohort study comprising elderly individuals, demonstrating expertise in designing and executing comprehensive research protocols.
- Specialized in the treatment of severe COVID-19 cases in elderly patients, while prioritizing the management of chronic comorbidities, exemplifying proficiency in geriatric healthcare.

PUBLICATIONS

Comparison of Pegylated Interferon Alfa Therapy in Combination with Tenofovir Alafenamide Fumarate or Tenofovir Disoproxil Fumarate for Treatment of Chronic Hepatitis B Patients.

[Jun,2023]

Jingjing He, Yifei Guo, Yao Zhang, Jiajia Han, Jingwen Chen, Yidi Jia, Zhenxuan Ma, Jingwen Wu, Shenyan Zhang, Fahong Li, Richeng Mao*, Jiming Zhang*.

Infection and Drug Resistance. *PMID: 37361938*

Reduction of Hepatitis B Surface Antigen May Be More Significant in PEGylated Interferon-Alpha Therapy Combined with Nucleotide Analogues than Combined with Nucleoside Analogues in Chronic Hepatitis B Patients: A Propensity Score Matching Study.

[Dec,2022]

Yiran Xie, Haoxiang Zhu, Yifei Guo, Zhenxuan Ma, Xun Qi, Feifei Yang, Richeng Mao*, Jiming

Canadian Journal of Gastroenterology and Hepatology. PMID: 36531834

^{*} indicates corresponding authors

Thyroid dysfunction incidence and risk factors in Chinese chronic hepatitis B patients treated with pegylated interferon alpha: A long-term follow-up study. (**Recommended as a cover article**)

Zhenxuan Ma, Yanli Qin, Yidi Jia, Yiran Xie, Xun Qi, Yifei Guo, Jingjing He, Yongmei Zhang, Fahong Li, Jie Yu, Haoxiang Zhu, Feifei Yang, Yu Zhang*, Richeng Mao*, Jiming Zhang*

Journal of Viral Hepatitis. PMID: 35293082

Hepatitis B e antigen induces the expansion of monocytic myeloid-derived suppressor cells to dampen T-cell function in chronic hepatitis B virus infection. [Apr,2019]

Feifei Yang, Xueping Yu, Chenliang Zhou, Richeng Mao, Mengqi Zhu, Haoxiang Zhu, **Zhenxuan Ma**, Bidisha Mitra, Gan Zhao, Yuxian Huang, Haitao Guo*, Bin Wang*, Jiming Zhang*

PLoS Pathogens. PMID: 30998767

Adding an Artificial Tail—Anchor to a Peptide-Based HIV-1 Fusion Inhibitor for Improvement of Its

[Nov,2017]

Potency and Resistance Profile.

Shan Su, Zhenxuan Ma, Chen Hua, Weihua Li, Lu Lu*, Shibo Jiang*

Molecules. PMID: 29156603

Creating an artificial tail anchor as a novel strategy to enhance the potency of peptide-based HIV fusion inhibitors.

[Dec,2016]

[Jun,2022]

Shan Su, Yun Zhu, Sheng Ye, Qianqian Qi, Shuai Xia, <u>Zhenxuan Ma</u>, Fei Yu, Qian Wang, Rongguang Zhang, Shibo Jiang*, Lu Lu*

Journal of Virology. PMID: 27795416

Rational improvement of gp41-targeting HIV-1 fusion inhibitors: an innovatively designed Ile-Asp-Leu tail with alternative conformations.

[Sep,2016]

Yun Zhu, Shan Su, Lili Qin, Qian Wang, Lei Shi, <u>Zhenxuan Ma</u>, Jianchao Tang, Shibo Jiang, Lu Lu*, Sheng Ye*, Rongguang Zhang*

Scientific Reports. PMID: 27666394

WORK EXPERIENCE

Huashan Hospital affiliated to Fudan University Geriatric Specialist

Shanghai, China Jul 2021 – Present

 Engaged in a specialized geriatric training program, demonstrating a high level of expertise in providing comprehensive care for elderly patients.

- Engaged in clinical responsibilities of various positions, including outpatient, inpatient, and emergency department duties.
- Implemented and oversaw enduring chronic disease management protocols for geriatric patients, meticulously capturing critical data for clinical research endeavors.
- Focused on aging-related factors in the elderly population, contributing to a comprehensive understanding of human aging mechanism.

Resident Jul 2018 – Jul 2021

- Completed a rigorous standardized training program for internal medicine residents, gaining proficiency in the diagnosis, treatment, and management of a wide range of medical conditions.
- Delivered patient-centered care, applying evidence-based approaches and participating in complex case discussions to enhance clinical decision-making skills.
- Proficient in diagnosing and treating prevalent infectious diseases, including hepatitis B, tuberculosis, central nervous system infection, fever of unknown origin and rational antibiotic utilization.
- Contributed to research initiatives, including data collection, analysis, and presentation of findings at conferences and in publications.

Internship Jul 2017 – Jul 2018

- Conducted internships within various specialty departments, cultivating a diverse skill set and valuable clinical experience.
- Actively engaged in patient education and communication, fostering trust and ensuring clear understanding of treatment plans.

SELECTED AWARDS AND HONORS

• Academic Excellent Scholarship, Fudan University

2014/2017/2018

• First prize for excellent paper, Chinese Society of Hepatology annual conference

Sep 2020

JOURNAL REVIEWERS

• International Journal of Peptide Research and Therapeutics

Nov 2022

COURSEWORK AND SKILLS

- **Curriculums**: Advanced Mathematics, Medical Immunology, Medical Microbiology, Internal Medicine, Surgery, Infectious Diseases, Preventive Medicine, Biostatistics, Programming
- Experiment: Cell culture, ELISA, PCR, Western blot, Pseudovirus, Transfection, Flow cytometry
- Statistics: Propensity-score matching, Clinical trials, Survival analysis, Logistic regression analysis
- **Hobbies**: Rubik's cube, social sciences, swimming, jogging, badminton
- Software: R programming, SPSS, Microsoft Office, Photoshop

ADDITIONAL ACTIVITIES

•	Volunteer work in Shanghai Science and Technology Museum	May 2014
•	Bilingual volunteer work in Cai Yuanpei's former residence	Jun 2015
•	Compilation work of Shanghai Medical College academician alumnus biography	Sep 2017
•	Science popularization public welfare activity "Face to Face with Scientists"	Nov 2020