

Curriculum Vitae Professor Dr Maode Lai

Name: Maode Lai
Date of birth: 29 June 1960

Research Priorities: Molecular biology, tumour pathology, intestinal cancer, colorectal carcinoma, early cancer detection, risk markers, metabolic syndrome

Maode Lai is a Chinese pathologist. His research focuses primarily on tumour pathology, especially intestinal cancer. He identifies risk markers for early cancer detection and studies mechanisms of metastasis. He also examines the molecular foundations of metabolic syndrome. The results of his research have contributed to the development of personalised medicine.

Academic and Professional Career

since 2013	President, China Pharmaceutical University (CPU), Nanjing, China
1998 - 2012	Vice-President, Zhejiang University, Hangzhou, China
1996 - 1998	Vice-President, Zhejiang Medical University, Hangzhou, China (since 1998: Zhejiang University), Hangzhou, China
since 1995	Chairperson, Department of Pathology, Zhejiang University, Hangzhou, China
since 1994	Professor of Pathology, Department of Pathology, Key Laboratory of Disease Proteomics of Zhejiang Province, School of Medicine, Zhejiang University, Hangzhou, China
1991 - 1994	Associate Professor of Pathology, Zhejiang Medical University, China
1990	PhD in Pathology, University of Lübeck, Lübeck, Germany
1989 - 1990	Degree in Pathology, University of Lübeck, Lübeck, Germany
1987	Master's Degree in Medicine, Zhejiang Medical University, Hangzhou, China
1984 - 1987	Degree in Pathology, Zhejiang Medical University, Hangzhou, China

Functions in Scientific Societies and Committees

since 2010	Chairperson, Chinese Society of Pathology (CSP), China
since 2010	Chairperson, Zhejiang Pathology Association, Hangzhou, China
since 2007	Vice Chairperson, CSP, China
since 2007	Vice Chairperson, National Committee of Medical Education of Basic Sciences, Ministry of Education, China
2005 - 2009	Vice Chairperson, Committees for Tumour Pathology, Chinese Anti-Cancer Association (CACA), China
since 2004	Chairperson, Zhejiang Pathology Association, Hangzhou, China
since 1999	Vice Chairperson, Zhejiang Medical Association, Hangzhou, China
	Editor in Chief, Journal of Zhejiang University
	Associate Editor, Chinese Journal of Pathology
	Associate Editor, Practical Journal of Oncology
	Associate Editor, Chinese Journal of Clinical and Experimental Pathology
	Member, Editorial Board, Clinica Chimica Acta

Project Coordination, Membership in Collaborative Research Projects

2011 - 2014	Director, Research Programme "Mechanism of epithelial-mesenchymal transition in metastasis of colorectal carcinoma", National Natural Science Foundation of China (NSFC), China
2010 - 2012	Co-Organiser, Project "The molecular mechanism of cancers, Sino-German Center", NSFC, China and German Research Foundation (DFG)
2010 - 2012	Principal Investigator, Project "Regulation mechanism of Reg IV in colorectal tumor", NSFC, China
2009 - 2013	Director, Project "Early identification and intervention technique of metabolic syndrome", Ministry of Science and Technology of the People's Republic of China, China
2008 - 2010	Principal Investigator, Project "Regulation mechanism of IGFBP-rP1 methylation", NSFC, China
2007 - 2010	Principal Investigator, Project "Development of diagnostic techniques of malignancies", Municipal Science and Technology Bureau, Taizhou, China

2007 - 2012	Co-Investigator, Project "Clinical evaluation of tumour bio markers of common malignancies", Ministry of Science and Technology of the People's Republic of China, China
2007 - 2010	Co-Investigator, Subproject "Structure and function of IGFBP-7", 973-Project, Ministry of Science and Technology of the People's Republic of China, China
2006 - 2008	Principal Investigator, Project "Regulation of IGFBP-7 expression and Identification of effective molecules", NSFC, China
2004 - 2006	Principal Investigator, Project "Identification of C6orf37 homologous sequence in the colonic carcinogenesis", NSFC, China
2001	Principal Investigator, Project "CpG island aberrant methylation in morphologically normal mucosa adjacent to colorectal carcinomas", NSFC, China

Honours and Awarded Memberships

2011	Top Specialist, Zhejiang Province, China
2011	First Award of Science and Technology, Zhejiang Province, China
2005	First Award of Science and Technology, Zhejiang Province, China
2004	Second Award of Science and Technology, Zhejiang Province, China
2003	Outstanding Youth Scientist Award, Zhejiang Province, China
1998	Third Award of Science and Technology, Zhejiang Province, China
1994	Third Award of Science and Technology, Zhejiang Province, China
1993	Excellent Teacher Award, Ministry of Education, China
1990	Huo Yingdong Excellent Young Teacher Award, Ministry of Education, China
1988	Second Award of Science and Technology, Ministry of Health, China

Research Priorities

Maode Lai is a Chinese pathologist. His research focuses primarily on tumour pathology, especially intestinal cancer. He identifies risk markers for early cancer detection and studies mechanisms of metastasis. He also examines the molecular foundations of metabolic syndrome. The results of his research have contributed to the development of personalised medicine.

Intestinal cancer can occur frequently within families; the reasons may lie in a genetic predisposition, but they may also be lifestyle-related. Maode Lai researches the molecular foundations of intestinal cancer (colorectal carcinoma) and, in particular, looks for risk genes for the development of intestinal cancer. He initiated a platform allowing for the systematic cataloguing and comparison of identified genetic mutations.

In many cancer patients, metastases form, a process in which epithelial mesenchymal transition (EMT) is involved. During this process, tumour cells detach themselves from the cell structure, move into tissue and blood and lymphatic vessels, and form metastases there. Maode Lai sequences tumour samples and studies these mechanisms. Together with his team, he develops molecular tests in order to identify biomarkers for early cancer detection, in particular intestinal cancer and liver metastases. This means that at-risk patients can be offered early treatment strategies.

His group was able to show that the protein IGFBP7 plays an important role in insulin resistance and is associated with metabolic syndrome. Metabolic syndrome comprises illnesses characterised by, among other things, blood pressure, blood lipid, and weight values and which, when aberrational, increase the risk of cardiovascular disease and certain cancers. Maode Lai aims to further demystify the foundational mechanisms.