

## Science Bridges China Research Profile

**Name:** Professor Lijuan Chen  
**Position:** Deputy Director of State Key Laboratory of Biotherapy  
**Institute/division:** State key Laboratory of Biotherapy, West China Hospital, Sichuan University  
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### SUMMARY OF MY RELEVANT RESEARCH AREAS:

**Screening bioactive compounds from natural compounds; modifications of small molecular compounds and drug delivery system. Novel drug development for Cancer**

天然及小分子抗肿瘤、抗炎活性成分筛选、合成及相关新药研发；新型缓释药物载体材料的应用；液相色谱与质谱技术在药物代谢及药物动力学中的研究。

### Primary Research Interests:

Prof Lijuan Chen was graduated from Sichuan University in 1995 and got her Ph.D in University of Wales Swansea, UK in 2004. In late 2004, she came back to Sichuan University and entered the State Key laboratory of Biotherapy(SKLB) as deputy director of Cancer Centre, West China Hospital, Sichuan University. Her research field includes screening bioactive compounds from natural compounds; modifications of small molecular compounds; drug delivery system and pharmaceuticals. For the past 7 years, she has made great progress in drug discovery and development. She held more than 4 national level key projects, including the National Basic Research Program (973 program) and the National Hi-Tech Research and Development Program (863 program) and 5 province level key projects with a total funding of over 50,000,000 RMB (£3,330,000). She also got cooperation and funding from local pharmaceutical company. She has published over 100 scientific papers, some of which have been published in high impact journals such as *Mass Spectrom Rev* (IF:11.5), *J Control Release*(IF:5.69), *Clin Cancer Res* (IF:6.25), *J Med Chem* (IF: 5.2). She has applied for more than 30 patents.

Main research projects include:

**Healthcare:** Novel Drug screening and Development: Anticancer drug, obesity and diabetes

**Separation and Purification of Bioactive compounds:** separate and purify bioactive compounds from natural plants. Study on high speed countercurrent chromatography, High performance liquid chromatography

**Drug delivery System:** Nanomedicine, liposome, Polymer

### Topics in which you would like to develop collaborative research:

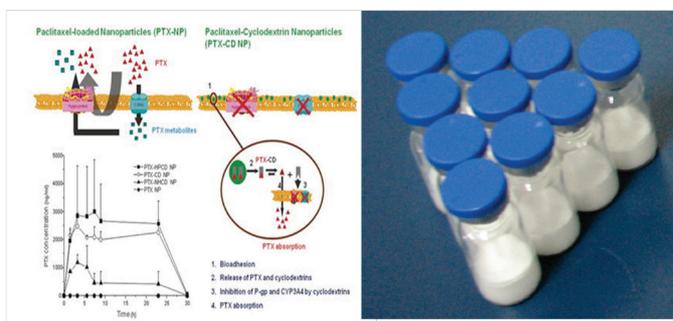
**Screening bioactive compounds using novel bioassay technologies and drug delivery system.**

**Relevant existing collaborations (academic/clinical/commercial) inside or outside China.**

University of Glasgow , UK

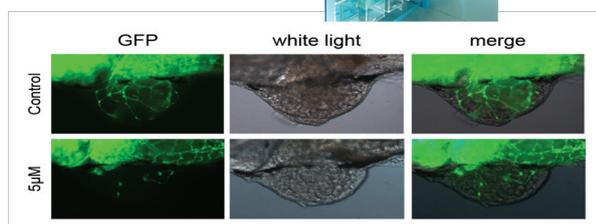
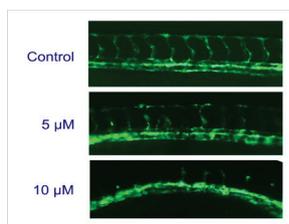
Tian Jin University , China

**Relevant graphics, figures, pictures:**



**Paclitaxel-loaded Nanoparticles**

**Animal Center ( 60,000 mice)**



**Screening for Angiogenesis inhibitor using zebrafish model**

**Safety Evaluation for Novel Drug (GLP)**

**Publications and other outputs relevant to your interest in this programme (up to 5)**

1. Liu X-Y, Yang J-L, **Chen L-J\***, Wei Y-Q\*. A review of current applications of mass spectrometry for neuroproteomics in epilepsy: many technologies one goal. *Mass Spec Rev.* 2010,29:197-246. (IF=11.507)
2. Chen X, Wang X-H, Wang Y-S, Yang L\*, Hu J, Xiao W-J, Fu A-F, Cai L-L, Li X, Ye X, Liu Y-L, Wu W-S, Shao X-M, Mao Y-Q, Wei Y-Q, **Chen L-J\***. Improved Tumor-Targeting Drug Delivery and Therapeutic Efficacy by Cationic Liposome Modified with Truncated bFGF Peptide. *J Control Release*, 2010, 145,17–25 (IF=5.69)
3. Luo Y-F, Zheng H, **Chen L-J\***, Li R, He C-M, Yang S-Y, Ye X, Chen Z-Z, Li Z-C, Gao Y, Han J, He G, Yang L, Wei Y-Q. Discovery of (Z)-5-(4-Methoxybenzylidene) thiazolidine -2, 4-dione, a Readily Available and Orally Active Glitazone for the Treatment of Concanavalin A-induced Acute Liver Injury of BALB/c Mice. *J Med Chem.* 2010, 53(1), 273–281. (IF=4.898)
4. Hu J, Ye H-Y, Fu A-F, Chen X, Wang Y-S, Chen X-C, Ye X, Xiao W-J, Duan X-M, Wei Y-Q, **Chen L-J\***. Deguelin-an inhibitor to tumor lymphangiogenesis and lymphatic metastasis by down-regulation of vascular endothelial cell growth factor-D in lung tumor model. *Inter J Cancer.* 2010,126(5),1282-1292. (IF=4.734)
5. Wang X-H, Zhou J-C, Wang Y-S, Zhu Z-Y, Lu Y, Wei Y-Q, **Chen L-J\***. A phase I clinical and pharmacokinetic study of paclitaxel liposome infused in non-small-cell lung cancer patients with malignant pleural effusions. *Eur J Cancer.* 2010,46(2),449-455. (IF=4.475)