

Curriculum Vitae

Zhongliang Ma

PERSONAL DATA

Date of birth: Oct. 03, 1970

Gender male

Position Associate professor

Nationality People's Republic of China

Address

Department of Molecular Biology

The School of Life Science and Technology

China Pharmaceutical University

210009, 24th Tongjia xiang, Nanjing

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EDUCATION EXPERIENCE

Jun. 2003 Ph. D.

Institute of Microbiology, Chinese Academy of Sciences

Major Microbiology

Supervisor: Professor Po Tien, Member of Chinese Academy of Sciences

June 1996 Master of Science

Yangzhou University

Major: Biochemistry

Supervisor Professor Yongming Jiang

June 1993 Bachelor of Science

Yangzhou University

Major Plant biology

Scholarship and Awards

1993-1996 Jingwen Zhu scholarship.

1989-1993 College scholarship. Second-class prize.

1993 Outstanding student prize.

RESEARCH EXPERIENCE

Aug. 2005 Associate Professor, China Pharmaceutical University

Sept. 2003- Research fellow in China Pharmaceutical University (CPU)

Program New cytotoxic macrocyclic lactones from myxobacteria (*Sorangium cellulosum*):

Production, Isolation, Physico-chemical and Properties.

Results

1. More than 10 myxobacteria isolated from sea beach soil.

2. Purified the secondary metabolite of myxobacteria by TLC, Sephadex LH 20 and HPLC. Determined the structure by IR, NMR and LC-MS.
3. Assayed the antibacterial spectrum and anticancer cells. To our surprise, it suppressed the growth of *E. coli*, which was firstly found. It can induce apoptosis and inhibit the growth of cancer cells.

Experiences Supervision 2 graduate students and 3 undergraduate students.
HPLC, IR, NMR, Thin layer chromatography, and GC-MS.

1999; «**Aug. 2003** Research Assistant, Institute of Microbiology, Chinese Academy of Sciences.

Program Anti *rice dwarf virus* (RDV) by Posttranscriptional gene silencing.

Results

1. Constructed hairpin RNA to fight against Rice dwarf virus. Obtain high resistance to RDV transgenic rice of hairpin RNA of S8, S10.
2. Expressed S6, S7, S11 proteins and preparation antiserum of S6.
3. Cloned the genome of Rice dwarf virus (Fujian isolate). RDV segment 6, 7, 9 and 12 can be accessed in NCBI by AY302568, AY305383, AY340219, AY340218 respectively. Tobacco mosaic virus (TMV) movement protein, AY300161

Experiences: RNA interference used in plants, transgenic plants technique, cloning and expressing genes, site-directed mutagenesis, PCR, RT-PCR, Northern blotting, Southern blotting, Western blotting, virology and bioinformatics.

«**July 1999** Assistant Professor, CPU.

Program high output of phenylalanine from phenylpyruvic acid by immobilized genetic engineering bacteria.

Results

1. Obtained high quality immobilized genetic engineering bacterium.
2. High output of phenylalanine.

Experiences Enzyme engineering, fermentation engineering and familiar processes of industry pharmacy.

«**July 1996** Research Assistant, Yangzhou University.

Program: Studies on purification and properties of porcine thrombin and trypsin inhibitor.

Results

1. Purified thrombin by ion-exchange resin column, DEAE and affinity chromatography.
2. Purified trypsin inhibitor from human urine.

Experiences: zymogen activation, enzyme immobilization, affinity chromatography and ion exchange column chromatography.

«**July 1993** Research assistant.

Program Studies chemical hormones on cotton growth.

Results

1. Selection the best chemical hormone promoting growth of cotton in 5 chemicals.
2. Effects on qualities of cotton fibre by the selected hormone.

Experiences biostatistics, cotton management in field and growth characters analysis.

EMPLOYMENT

Sept. 2003- Research fellow in China Pharmaceutical University (CPU)

Teach Biochemistry in English, Biochemistry in Chinese and Biochemistry Experiments.

July 1999 Assistant Professor in CPU

Teach Biochemistry in English, Biochemistry in Chinese and Biochemistry Experiments.

HOBBIES

Climbing mountains; Playing Badminton.

Reading classic lecture.

PUBLICATIONS

MA Zhong-Liang, LI Yan-li. High Efficiency Against Rice Dwarf Virus by Hairpin RNA. (submitted to *Antivirus*, **In English**)

Ma Zhong-liang, Liu Ying, Wang Min. Isolation of myxobacteria and studies on its secondary metabolites bioactivities. (submitted to *Journal of antibiotics*)

Ma Zhong-liang, Li Jingjing, Wang Min. Identification of a new strain of *Streptomyces roseus* with high antibiotic activity. *Acta Microbiologica Sinica* (submitted).

Li Jingjing, **Ma Zhongliang*** Liu Ying, Wang Min*. Purifying the active material from a new strain *Streptomgces sp* and analysis its bioactivities. *Chinese journal of antibiotics* (submitted).

* corresponding author

Ma Zhongliang, Li Yan-li. Cloning of movement protein of cucumber mosaic virus and preparation of its antiserium. *Pharmacy biotechnology*. 2006**13**:6-9

Ma Zhong-liang, Li Yan-li, Jiao Ji-xiang. Studies on chitosan-immobilized yeast sucrase. *Pharmacy biotechnology* 2005, **12**:379-383.

MA Zhong-Liang, YANG Huai-Yi, WANG Rong, TIEN Po. Construct Hairpin RNA to Fight Against Rice Dwarf Virus. *Acta Botanica Sinica*. 2004, **46**: 332-336. (**In English**)

Li Yanli, **Ma Zhongliang**, Lin Jie, Tien Bo, Yang Huaiyi. Cloning of movement protein cDNA of tobacco mosaic virus and its expression in *Escherichia coli*. 2004 (2) *Acta Microbiologica Sinica*, 2004, **44**: 182-184.

Zhongliang Ma, Huaiyi Yang, Po Tien. Cloning of nonstructural protein S6 of RDV and preparation of its antiserium. *Virologica Sinica* 2003, **18**: 496-499.

MA Zhong-Liang, YANG Huai-Yi, TIEN Bo. Progress of miRNA and Its Functions in Eukaryotes. *Acta Genetica Sinica* 2003, **30**: 693-696.

Ma Zhongliang, Shi Yongchang, Jiang Yongming, Li Yanli, Zhao Guojun. Studies on Purification and Properties of Porcine Thrombin. *Jiangsu Agricultural Research*. 1998, **19**: 89-92.

Min-liang Guo, Yong-ming Jiang, **Zhong-Liang Ma**, Yan-Li Li. (1996) Hydrolytic Characteristics of Chitosan-immobilized AS 1.398 neutral Proteinase (from *B.subtilis*) to soybean protein. *Food Science* **55**: 373 (**In English**)

REFERENCES

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