RESUME

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Name: Qing Yang

Date of birth: Nov 27, 1970

Gender: Male Nationality: China

Birthplace: Qingdao, Shandong Province, P.R.China

Marital status: Married (Xiaoli Chen, Ph.D.)

Health: Excellent

Description: Height: 182cm. Weight: 72 kg

CAREER OBJECTIVE

To apply my strong knowledge of MOLECULAR BIOLOGY to biomedical research

SUMMARY

- > Ten years of experience in MOLECULAR BIOLOGY
- ➤ Good working knowledge of cancer gene therapy
- Experienced in gene regulation research
- ➤ Highly inquisitive, creative and resourceful
- 21 published papers





PROFESSIONAL EXPERIENCE

> July 2005 to present, Manager of Human Antibody Therapeutics Department

Human Antibodomics (Shanghai) Incorporation, Shanghai Human Antibodomics Institute Major research project: antibody engineering

- A molecular biology approach was applied to identify the human monoclonal antibodies.
 Antibody genes were cloned from antigen-enriched and Epstein-Barr virus immortalized human peripheral blood lymphocytes. ELISA-based assays were performed to screen clones that express binding antibodies. Until now, several new human antibodies against HBV and CMV were identified.
- 2. Lentiviral-based delivery of siRNA to mammalian cells to validate the functions of several new tumor specific biomarkers, which have the potentials to become the target antigens for antibody development.

> July 2001 to June 2005, Research Associate, Oncology

International Joint Cancer Institute, Second Military Medical University, Shanghai, China Major research project: telomerase regulation and cellular senescence

- 1. Studied the negative regulation of PTEN upon telomerase activity
 - Demonstrated the relationship between PTEN deletions and up-regulation of telomerase activity in primary liver carcinoma;
 - Observed that overexpression of PTEN could repress telomerase activity for three folds in cultured tumor cells, and showed that this effect was mediated at least in part at the level of the TERT promoter, by using pGL3 luciferase reporter vectors containing several different lengths of hTERT's promoter region;
 - Characterizing the precise inhibitory elements within the hTERT promoter sequence through site-directed mutagenesis.
- 2. Investigated the mechanism of c-Myc and other transcription factors in the up-regulation of telomerase
 - Observed that overexpression of c-Myc could upregulate telomerase activity *in vitro*;
 - Demonstrated the amount of c-Myc protein binding to E-box elements of hTERT promoter in primary liver carcinoma was much more abundant than that of in adjacent non-tumor liver tissues, by performing Chromatin Immunoprecipitation (ChIP) Assay;
 - Identifying several other transcription factors binding to the core promoter of hTERT by ChIP, 2D electrophoresis and mass spectrum.
- 3. Identified replicative senescence-associated genes and studied their function
 - Successfully established a rapid and convenient in vitro replicative senescence model of human embryonic kidney cells, supported by the special grant from the Major State Basic Research Program of China (G2000517001);
 - Cloned 47 genes and ESTs which were associated with replicative senescence on the basis of
 this model by suppressive subtraction hybridization, and demonstrated their absence in several
 tumor cell lines and tissues, implying that they might be involved in the tumor's escaping
 from replicative senescence;
 - Constructed several recombinant adenoviral vectors containing the above genes, and introduced into kidney carcinoma cells or normal presenescent kidney cells, to analyze their causal relationship with senescence. Up to now, three genes had been demonstrated to have

modest ability to induce or accelerate senescent phenotype, implying that their expressions were only secondary consequences of the senescence phenotype.

> 1996-2001, Ph.D., Molecular Oncology

Tumor Immunology & Gene Therapy Center, Second Military Medical University, Shanghai, China. Research Project: cancer gene therapy

- Applied a new and simplified bacterial homologous recombination system to construct several recombinant adenoviral vectors, carrying chemokines (IP-10, RANTES, MIP-1) or other immunoactive cytokines (flt3 ligand) and screened their antitumor activity for further detailed investigation;
- 2 Demonstrated the potent antitumor activity of Flt3 ligand in liver cancer model (long-lasting, specific and adaptable antitumor immunity) and the essential role of NK and CD8⁺ T cells in this process.
- > 1995-1996, Physician, Department of Digestive Disease, Military 141 Hospital, Qingdao, China. Learn the molecular genetics of several digestive diseases
- > 1989-1995, M.D.

Department of clinical medicine, Second Military Medical University, Shanghai, China.

Learned the basic molecular, microbiologic, immunologic, and morphologic techniques

EDUCATION

The Second Military Medical University, Shanghai, P.R. China

- ➤ Ph.D. in oncology, 2001
- MD, 1995

MAJOR TECHNICAL SKILLS

- > DNA and RNA manipulation: preparation and analysis, cloning, probe labeling, southern and northern blot, sequencing, PCR, and subtraction hybridization, et al.
- Protein: western blot, expression and purification, SDS and native PAGE; ELISA, et al.
- ➤ Cell: cell culture; transfection; immunocytochemistry; fluorescence microscopy; flow cytometry; fluorescence microscopy, et al.
- Adenovirus and lentiviral vector construction and application
- Animal experiment: establishment and usage of tumor model

WORKPLACE SKILLS

Years of education and experience have helped me develop the ability to

- Work cooperatively as a energetic team member or leader of a subgroup
- > Design and execute experiments independently
- > Complete tedious tasks with great precision
- Contribute new ideas, introduce and develop new techniques
- ➤ Communicate well with co-workers and colleagues

PUBLICATIONS

1. Li QG, Yang GS, <u>Yang Q</u>, Wei LX, Yang N, Zhou XP, Jia FQ. Disseminated tumor cells homing into rats' liver: a new possible mechanism of HCC recurrence. *World J Gastroenterol*, 2004 Mar 15;10(6):903-5.

- 2. Wang H, Dai J, Hou S, Qian W, Li B, Ma J, Fan X, Zhao J, Yang S, Sang H, <u>Yang Q</u>, Wang R, Guo Y. Treatment of hepatocellular carcinoma with adenoviral vector-mediated Flt3 ligand gene therapy. *Cancer Gene Ther*. 2005 Sep;12(9):769-77.
- 3. CHEN Xiaoli, **YANG Qing**, JIA Fengqi,LIYan, WEI Lixin,CAI Donglian. The protective effects of tea polyphenols on cultured bovine endothelial cells impaired b homocysteine. *Acta Nutrimenta Sinica*, 2004,26(1):61-64
- 4. LI Qigen, YANG Guangshun, <u>YANG Qing</u>, JIA Fengqi, WEI Lixin, WU Mengchao. ISH for chromosome to detect origin of hepatocellular carcinoma recurrence. *Chinese Journal of Hepatobiliary Surgery*, 2004,10(5):326-328
- FAN Ruifang, WEI Lixin WANG Weifeng, YOU Tiangeng, YANG Jiahe, <u>YANG Oing</u>, JIA Fengqi, JIANG Xiaoling, GUO Yajun, WU Mengchao. Clinical Significance of Detection of Telomerase Activity in Percutaneous Fine-needle Biopsied Tissues of Hepatocellular Carcinoma. *Chinese Journal* of Clinical Oncology, 2004,31(15):844-847
- LI Gang, WEI Lixin, <u>YANG Qing</u>, JIA fengqi, ZHANG Baihe, WU Mengchao. Treatment of hepatoma in mice by adenovirus-mediated FLT3-ligand combined with adriamycin. *Acad J Sec Mil Med Univ*, 2003,24(4):390-392
- 7. **YANG Qing**, YANG Guangshun, WEI Lixin, JIA Fengqi, WU Mengchao, GUO Yajun. Gene transfer of murine flt3 ligand mediated by adenoviral vector efficiently induces growth inhibition of murine liver cancer. *Natl Med J China*, 2002,82(11): 775-779
- 8. **YANG Qing**, WEI Lixin, JIA Fengqi, YANG Guangshun, WU Mengchao, GUO Yajun. Experimental gene therapy mediated by macrophage inflammatory protein-1 murine liver cancer. *Chin J Dig*, 2002, 22(9): 519-522
- 9. **YANG Qing**, YANG Guangshun, WEI Lixin, YANG Ning, JIA Fengqi, WU Mengchao. Gene therapy of murine liver cancer by intratumoral injection of recombinant adenoviral vector carrying murine flt3 ligand. *Chin J Exp Surg*, 2002, 19(4): 340-342
- 10. **YANG Qing**, YANG Guangshun, WEI Lixin, JIA Fengqi, WANG Weifeng, WU Mengchao, GUO Yajun. The *in vivo* antitumor activity of murine liver tumor vaccine expressing MIP-1 . *Chin J Surg*, 2002, 40(10): 789-791
- 11. **YANG Qing**, JIA Fengqi, WANG Weifeng, WEI Lixin, YANG Guangshun, GUO Yajun, WU Mengchao. Preparation of murine liver tumor vaccine modified by Flt3 ligand and its in vivo antitumor activity. *Acad J Sec Mil Med Univ*, 2002; 23(1): 15-17
- 12. YANG Qing, YANG Guangshun, WEI Lixin, JI Junjie, LI Dongsheng, JIA Fengqi, WU Mengchao, GUO Yajun. Cloning of two new alternative splicing isoforms of human Flt3 ligand. *Acad J Sec Mil Med Univ*, 2002; 23(1): 18-20
- 13. **YANG Qing**, WEI Lixin, YANG Guangshun. Advancement of research on Flt3 ligand and its potential clinical application. *Acad J Sec Mil Med Univ*, 2002,23(2): 224-227
- 14. CHEN Xiaoli, **YANG Qing**, CAI Donglian, WEI Lixin. Inhibitory effects of homocysteine on growth of cultured endothelial cells. *Acad J Sec Mil Med Univ*, 2002,23(2): 196-199
- 15. QIN Linhua, WEI Lixin, <u>YANG Qing</u>, LU Yan, WU Mengchao, GUO Yajun. Establishment of a mouse hepatocellular carcinoma cell line that produces mRANTES chemokines and its tumorigenicity of mRANTES transfected Hepa1-6. *Chinese Journal of Clinical Oncology*, 2002, 29(1): 53-57
- 16. CHEN Xiaoli, <u>YANG Qing</u>, CAI Donglian, HU Tongjie, LI Yan, WEI Lixin. Effect of homocysteine on the growth of smooth muscle cells. *Acta Nutrimenta Sinica*, 2002, 24(4): 385-388
- 17. WEI Lixin, FAN Ruifang, <u>YANG Qing</u>, JIA Fengqi, WANG Weifeng, GUO Yajun, WU Mengchao. Detection of telomerase activity in simulative fine-needle biopsy tissues of hepatocellular carcinoma

- by non-radioisotopic silver staining telomeric repeat amplification protocol. *Chinese Journal of Clinical Oncology*, 2002, 29(11): 772-774
- 18. YANG Qing, YANG Guangshun, WEI Lixin, QIN Linhua, JIA Fengqi, WU Mengchao, GUO Yajun. Construction of adenovirus vector carrying murine flt3 ligand by using bacterial homologous recombination system and its expression in hepatocellular carcinoma. *Chin J Gen Surg*, 2001, 16(5): 306-308
- 19. **YANG Qing**, YANG Guangshun, WEI Lixin, QIN Linhua, HUANG Yongsheng, JIA Fengqi, SHI Junxia, WU Mengchao, GUO Yajun.. Establishment and preliminary application of bacterial system for generating recombinant adenoviruses. *Acad J Sec Mil Med Univ*, 2001; 22(1): 90-91
- 20. YANG Guangshun, **YANG Qing**. Immune and gene therapy of primary hepatocellular carcinoma. *Chin J Prac Surg*, 2001, 21 (9): 519-521
- 21. QIN Linhua, WEI Lixin, <u>YANG Qing</u>, LU Yan, WU Mengchao, GUO Yajun. Establishment of a mouse hepatocellular carcinoma cell line producing mMIP-1 transfected Hepa1-6. *Acad J Sec Mil Med Univ*, 2001,22(5): 418-420
- 22. <u>YANG Qing</u>, WEI Lixin, CHEN Xiaoli. High expression of stress-induced-phosphoprotein 1 is a secondary consequence of the senescence phenotype. (Manuscript in preparation)
- 23. <u>YANG Qing</u>, CHEN Xiaoli, WEI Lixin, GUO Yajun. PTEN negatively regulates telomerase activity. (Manuscript in preparation)

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Available upon request