

## ***Publications:***

### **Publication in English (Submitted: 7, Published: 7)**

#### ***A. Journals:***

1. **Hao S**, Jinying Yuan and Jim Xiang. A highly effective exosome-targeted CD4<sup>+</sup> T cell vaccine by breaking immune tolerance. **Nat Med**, Under consideration, 2006.
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4. **Hao S\***, Hui Huang\*, David Froeger, Junbao Yang, Wu-Shiun Hou, and Jim Xiang. CD4<sup>+</sup> Th1 cells promote CD8<sup>+</sup> Tc1 cell survival, memory response, tumor localization and therapy via targeted delivery of helper interleukin-2 by acquired PMHC I complexes. **Blood**, submitted, 2006. (**\* co-first author**).
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Book chapters:

1. **Hao S**, Chan T and Xiang J, Genetically Engineered Myeloma Cell Vaccine. In **Molecular Medicine**, (eds. Brown, R., and P Joy Ho), pp233-242, Humana, Totowa, NJ, 2004.

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17. Hao SG, Zou ZH, Yang JC, et al. Effects of hematopoietic growth factors on proliferation and differentiation of hematopoietic stem/ progenitor cells in long-term bone marrow culture. **Acta Universitatis Medicinalis Anhui**, 1997,32(4):307
18. Hao SG, Zou ZH. Progresses in researches in biological property and expansion of hematopoietic stem cells. **Foreign Medical Science (Hematology section)**, (review) 1995, 18:75
19. Hao SG. Researches in biological property and potential value in clinical applications of IL-11. **Foreign Medical Science (Medicine section)**, (review) 1995, 22: 507
20. Dai. MS, Hao SG. Cocurrence of solid tumor with leukemia. **Chinese Journal of Hematology, (review)**, 1993, 14:78
21. Hao SG. The clinical significance of detection of  $\beta$ 2-Microglobulin. **Acta Universitatis**

***B. Book chapter:***

1. **Signo Hao.** Hematology Section (Lymphoma, Multiple Myeloma, malignant histocytosis). The Principle of Diagnosis and Treatment (eds. Gao SM ). *Science and Technology Press of Anhui province.* Hefei, China 2000.
2. **Signo Hao.** The section of the biological properties of Hematopoietic progenitor and stem cells. Medical Cell Engineering(eds. Yang JC ). Shanghai Jiaotong University Press. Shanghai, China 2000.
3. **Signo Hao,** Tim Chan and Jim Xiang, Methods in Molecular Medicine Series, 2005 Edition Multiple Myeloma : Methods and Protocols – Editors Ross Brown and P Joy Ho Genetically Engineered Myeloma Cell Vaccine
4. **Signo Hao.** The Section of cytokines. Medical molecular Biology (eds. Yang JC, Chen ZX). Chemical Industry Press. Beijing, China 2004..

***Research Experiences:***

- Research on biological properties and ex-vivo expansion of hematopoietic stem cells in MNC from human bone marrow.
- Research on telomerase activity of hematopoietic stem/progenitor cells in purified CD34<sup>+</sup> and AC133<sup>+</sup> cells from umbilical cord blood by PCR- ELISA.
- Research on biological properties and ex-vivo expansion of purified CD133<sup>+</sup> cells from human umbilical cord blood.
- Studies on leukemia cell lines differentiation-induced by all-trans retinoic acid and apoptosis- induced by arsenic trioxide.
- I have a fair experience in following techniques involved in cell biology and molecular biology:
  1. Clonogenic assay of hematopoietic stem/progenitor cells.
  2. Ex-vivo expansion of hematopoietic stem/progenitor cells.
  3. RT-PCR, Western-blotting, Southern-blotting.
  4. Gene transfer.
  5. Purification of CD34<sup>+</sup> and AC133<sup>+</sup> cells from different sources by MACS, and the purity of selected CD34<sup>+</sup> and AC133<sup>+</sup> cells are up to 98%.
  6. Long-Term bone marrow culture.
  7. Analysis of cell cycle and CD expression on cells by flow cytometry.

8. Induction and culturing of dendritic cells from bone marrow and spleen of mice.
9. Purification of exsomes derived from various kinds of cells.
10. Some cellular biological experiments involving immunology, such as cytotoxicity assay in vitro and in vivo, proliferation assay, ELISPOT, purify CD4+ and CD8+ cells, induction and culture of bone marrow and spleen derived dendritic cells, analysis of molecules expression by flow cytometry, MLR, immunize and inoculate mice via subcutaneously, tail vein and footpad, collect blood from mice, etc.

### **Academic Honours and Awards**

1. **A nature science prize (No.3)** was awarded by Science Committee of Anhui Province in 2001 (first researcher).
2. **Outstanding medical student prize No.2** was awarded (once a year) by Shanghai Second Medical university in 2001-2002
3. **Outstanding medical student prize No.1** was awarded (once a year) by Shanghai Second Medical university in 2002-2003
4. **Federal education Award** was awarded (once 2 year) by Hangkong Federal pharmaceutic company foundation for outstanding Ph.D student in 2003

### **Research Awards Currently Held or Applied For**

<b>Type of Award</b>	<b>Agency</b>	<b>Total Amount of Award</b>	<b>Start Date (mm/yyyy)</b>	<b>End Date (mm/yyyy)</b>	<b>Indicate: A = applied H = held</b>

1. National Natural Science Fund	National Natural Science Foundation of China	190,000YMB	01/2003	12/2005	Second Applicant (H)
2. Provincial (10.5) Key Project of Anhui Province	Science Committee of Anhui Province	200,000 YMB	01/2001	12/2005	Third Applicant(H)
3. Operating grant of Tongji University	Science Committee of Tongji University	8000YMB	07/2003	7/2005	First Applicant(H)
4. Postdoctoral Fellowship	Saskatchewan Health Research Foundation	\$90,000	07/2004	07/2006	First Applicant(H)

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