

SHANG Peng (Ph.D.)

Academic qualifications:

- 2000-2003: Ph.D. Institute of Life Science and Technology, Xian Jiaotong University, Xi'an, China
- 1997-2000: M. Med. Department of Pharmacology, Fourth Military Medical University, Xi'an, China
- 1982-1987: B. Eng. Department of Precision Instrument Engineering, Tianjin University, Tianjin, China

Previous academic positions held:

- 2015-2016: Professor, Directors & Dean, Institute for Research & Development in Shenzhen, Northwestern Polytechnical University, Shenzhen, Guangdong, China.
- 2004-2014: Professor, Directors, Dean, Key Laboratory for Space Biosciences & Biotechnology, Institute of Special Environmental Biophysics, School of Life Sciences, Northwestern Polytechnical University, Xi'an, Shaanxi, China.
- 2002-2004: Vice Director, Cell Engineering Research Center, Department of Cell Biology, Fourth Military Medical University, Xi'an, China.
- 2000-2004: Associate Professor, Department of Cell Biology, Fourth Military Medical University, Xi'an, Shaanxi, China.

Present academic position:

- 2016-now: Professor, Institute for Research & Development in Shenzhen, Northwestern Polytechnical University, Shenzhen, Guangdong, China.
- 2007-now: Directors, Key Laboratory for Space Biosciences & Biotechnology, Institute of Special Environmental Biophysics, Northwestern Polytechnical University, Xi'an, Shaanxi, China.

Previous relevant research work:

- Expertise in Space Biology: Focus on investigating the molecular and cellular mechanism of bone loss during space flight and how bone cells sense weightlessness and various mechanical environments; Heavy ion radiation and weightlessness complex effects on cells and model animals.
- Expertise in Magneto-biology: Focus on investigating the biological effects of high, moderate magnetic fields and zero or hypo-magnetic fields.
- Expertise in Space Biomedical Engineering: Focus on developing countermeasures for bone loss induced by weightlessness; and anti-angiogenesis and tumor metastasis effects of magnetic fields.

Publication records:

Section A-Five most representative publications in the recent five years (* Corresponding Author)

1. Yang J, Meng X, Dong D, Xue Y, Chen X, Wang S, Shen Y, Zhang G, **Shang P***. Iron overload involved in the enhancement of unloading-induced bone loss by hypomagnetic field. *Bone*. 2018, 114:235-245.

2. Wang S, Luo J, Zhang Z, Dong D, Shen Y, Fang Y, Hu L, Liu M, Dai C, Peng S, Fang Z, **Shang P***. Iron and magnetic: new research direction of the ferroptosis-based cancer therapy. *Am J Cancer Res*. 2018, 8: 1933-1946
3. Huyan T, Du Y, Dong D, Li Q, Zhang R, Yang J, Yang Z, Li J, **Shang P***. Osteoclast-derived exosomes inhibit osteogenic differentiation through Wnt/ β -catenin signaling pathway in simulated microgravity model. *Acta Astronautica*. 2018
4. Zhao B, Li X, Wang Y, **Shang P***. Iron-dependent cell death as executioner of cancer stem cells. *J Exp Clin Cancer Res*. 2018, 37: 79
5. Zhang J, Meng X, Ding C, Xie L, Yang P, **Shang P***. Regulation of osteoclast differentiation by static magnetic fields. *Electromagn Biol Med*. 2018, 36: 8-19

Section B - Five representative publications beyond the recent five-year period with the latest publication entered first

1. **Shang P** Zhang J, Qian A, Li J, Meng R, Di S, Hu L, Gu Z. Bone cells under microgravity, *Journal of Mechanics in Medicine and Biology*, 2013, 13(5): 1340006.
2. **Shang P**, Qian AR, Yang TH, Jia M, Mei QB, Cho CH, Zhao WM, Chen ZN. Experimental study of anti-tumor effects of polysaccharides from *Angelica sinensis*. *World J Gastroenterol*. 2003 Sep;9(9):1963-7.
3. **Shang P**, Qian A, Hu P, Ma F, Zhu P, Chen Z.. Effects of HAb18G/CD147 antagonist peptide on angiogenesis in vivo (in Chinese). *Chinese Pharmacological Bulletin*. 2003;19(3):355-357.
4. **Shang P**, Yang T, Jia M, Zhu D, Mei Q, Zhao D. Extraction and identification of *Angelica sinensis* polysaccharide AP-1 and its antitumor activity (in Chinese). *Northwest Pharmaceutical Journal*, 2000; 15: 80.
5. **Shang P**, Yang T, Jia M, Mei Q, Zhao W, Cao Z, Zhao D. Isolation, purification and analysis of *Angelica sinensis* polysaccharide (in Chinese). *J Fourt Mil Med Univ*. 2001, 22(14):1311-1314

Award:

1. 2015, Study on the Process and Mechanism of Crystal Materials Preparation by Special Physical Environment, **the second prize of Shaanxi Science and Technology**, No. 14-044
2. 2007, Basic Research on the Application of *Angelica* Polysaccharide and *Rhubarb* Polysaccharide, **the first prize of Shaanxi Science and Technology Award**, No. 07-1-21-R5, (No. 5)
3. 2005, Research and Application of Liver Cancer Radioimmunotargeted Drug and Its Target Molecule HAb18G/CD147, **the second prize of National Science and Technology Progress Award**, No. 2005-J-235-2-C4-R06
4. 1994, Experimental Study on the Application of Monoclonal Antibodies Against Human Melanoma, **the second prize of the Army Science and Technology Progress Award**, No. 94-2-41-5