

CURRICULUM VITAE

NAME: Bo Huang

ADDRESS: National Laboratory of Medical Molecular Biology

Department of immunology

Institute of Basic Medical Sciences

Chinese Academy of Medical Sciences

5 Dong Dan San Tiao

Beijing 100005

Email: tjhuangbo@hotmail.com

Tel: 86-10-65229258

Education and research experience

September 1988- July 1993: Undergraduate Student, Hubei Medical University,
Hubei, China.

July 1993- September 1996: Teaching assistant, School of medicine, Wuhan
University of Science and Technology, Wuhan, China.

September 1996- July 1999: Master, Dept. of Biochemistry and Molecular Biology,
Tongji Medical University, Wuhan, China.

September 1999- May 2002: Ph.D., Dept. of Biochemistry and Molecular Biology,
Huazhong University of Science and Technology, Wuhan,
China.

May 2002- December 2002: Postdoctoral Associate, Karolinska Institutet, Sweden

January 2003- July 2003: Postdoctoral Associate, Faculty of Medicine, University of
Calgary, Canada

August 2003- February 2006: Postdoctoral Associate, Mount Sinai School of
Medicine, New York, United States

March 2006- October 2008: Associate Professor, Dept. of Biochemistry and
Molecular Biology, Huazhong University of Science and

Technology, Wuhan, China.

November 2008- February 2012: Professor, Dept. of Biochemistry and Molecular Biology, Huazhong University of Science and Technology, Wuhan, China.

March 2012- present: Professor, Dept. of immunology, Institute of Basic Medical Sciences, Chinese Academy of Medical Sciences, Beijing, China.

Deputy Secretary-General of Chinese Society for Immunology

Selected Publications

- 1 Zhao J, Zeng W, Cao Y, Liang X, **Huang B**. Immunotherapy of HPV infection-caused genital warts using low dose cyclophosphamide. *Expert Rev Clin Immunol*. 2014 Jun;10(6):791-9.
- 2 Tan Y, Tajik A, Chen J, Jia Q, Chowdhury F, Wang L, Chen J, Zhang S, Hong Y, Yi H, Wu DC, Zhang Y, Wei F, Poh YC, Seong J, Singh R, Lin LJ, Doğanay S, Li Y, Jia H, Ha T, Wang Y, **Huang B**, Wang N. Matrix softness regulates plasticity of tumour-repopulating cells via H3K9 demethylation and Sox2 expression. *Nat Commun*. 2014;5:4619.
- 3 Li D, Cai W, Gu R, Zhang Y, Zhang H, Tang K, Xu P, Katirai F, Shi W, Wang L, Huang T, **Huang B**. Th17 cell plays a role in the pathogenesis of Hashimoto's thyroiditis in patients. *Clin Immunol*. 2013 Dec;149(3):411-20.
- 4 Ma R, Zhang W, Tang K, Zhang H, Zhang Y, Li D, Li Y, Xu P, Luo S, Cai W, Ji T, Katirai F, Ye D, **Huang B**. Switch of glycolysis to gluconeogenesis by dexamethasone for treatment of hepatocarcinoma. *Nat Commun*. 2013;4:2508.
- 5 Ma J, Cai W, Zhang Y, Huang C, Zhang H, Liu J, Tang K, Xu P, Katirai F, Zhang J, He W, Ye D, Shen GX, **Huang B**. Innate immune cell-derived microparticles facilitate hepatocarcinoma metastasis by transferring integrin $\alpha M\beta 2$ to tumor cells. *J Immunol*. 2013;191:3453-61.
- 6 Xu Z, Zhao J, Zhang H, Ke T, Xu P, Cai W, Katirai F, Ye D, Huang Y, **Huang B**.

- Spontaneous miscarriages are explained by the stress/glucocorticoid/lipoxin A4 axis. *J Immunol.* 2013;190:6051-8.
- 7 Tang K, Zhang Y, Zhang H, Xu P, Liu J, Ma J, Lv M, Li D, Katirai F, Shen GX, Zhang G, Feng ZH, Ye D, **Huang B**. Delivery of chemotherapeutic drugs in tumour cell-derived microparticles. *Nat Commun.* 2012;3:1282.
 - 8 Liu J, Tan Y, Zhang H, Zhang Y, Xu P, Chen J, Poh YC, Tang K, Wang N, **Huang B**. Soft fibrin gels promote selection and growth of tumorigenic cells. *Nat Mater.* 2012;11:734-41.
 - 9 Zhang Y, Zhang R, Zhang H, Liu J, Yang Z, Xu P, Cai W, Lu G, Cui M, Schwendener RA, Shi HZ, Xiong H, **Huang B**. Microparticles released by *Listeria monocytogenes*-infected macrophages are required for dendritic cell-elicited protective immunity. *Cell Mol Immunol.* 2012;9:489-96.
 - 10 Li D, Jia H, Zhang H, Lv M, Liu J, Zhang Y, Huang T, **Huang B**. TLR4 signaling induces the release of microparticles by tumor cells that regulate inflammatory cytokine IL-6 of macrophages via microRNA let-7b. *Oncoimmunology.* 2012; 1:687-693.
 - 11 Lv M, Zhang X, Jia H, Li D, Zhang B, Zhang H, Hong M, Jiang T, Jiang Q, Lu J, Huang X, **Huang B**. An oncogenic role of miR-142-3p in human T cell acute lymphoblastic leukemia (T-ALL) by targeting glucocorticoid receptor alpha and cAMP/PKA pathways. *Leukemia.* 2012; 26:769-77.
 - 12 Liu J, Zhao J, Hu L, Cao Y, **Huang B**. Low Dosages: new chemotherapeutic weapons on the battlefield of immune-related diseases. *Cell Mol Immunol.* 2011; 8:289-95.
 - 13 Liu J, Zhang Y, Zhao J, Yang Z, Li D, Katirai F, Huang B*. Mast cell: insight into remodeling a tumor microenvironment. *Cancer Metastasis Rev.* 2011; 30:177-84.
 - 14 Ouyang X, Yang Z, Zhang R, Arnaboldi P, Lu G, Li Q, Wang W, Zhang B, Cui M, Zhang H, Liang-Chen J, Qin L, Zheng F, **Huang B**, Xiong H. Potentiation of Th17 cytokines in aging process contributes to the development of colitis. *Cell Immunol.* 2011;266:208-17.
 - 15 Zhang B, Jia H, Liu J, Yang Z, Jiang T, Tang K, Li D, Huang C, Ma J, Shen GX,

- Ye D, **Huang B**. Depletion of T regulatory cells facilitates growth of established tumors: a mechanism involving the regulation of myeloid-derived suppressor cells by lipoxin A4. *J Immunol.* 2010;185:7199-206.
- 16 Tang K, Liu J, Yang Z, Zhang B, Zhang H, Huang C, Ma J, Shen GX, Ye D, **Huang B**. Microparticles mediate enzyme transfer from platelets to mast cells: A new pathway for lipoxin A4 biosynthesis. *Biochem Biophys Res Commun.* 2010;400:432-6.
- 17 Zhao J, Cao Y, Lei Z, Yang Z, Zhang B, **Huang B**. Selective Depletion of CD4+CD25+Foxp3+ Regulatory T Cells by Low-Dose Cyclophosphamide Is Explained by Reduced Intracellular ATP Levels. *Cancer Res.* 2010;70:4850-8.
- 18 Cao Y, Zhao J, Yang Z, Cai Z, Zhang B, Zhou Y, Shen GX, Chen X, Li S, **Huang B**. CD4+FOXP3+ regulatory T cell depletion by low-dose cyclophosphamide prevents recurrence in patients with large condylomata acuminata after laser therapy. *Clin Immunol.* 2010;136:21-29.
- 19 Zhou Y, Wang S, Ma JW, Lei Z, Zhu HF, Lei P, Yang ZS, Zhang B, Yao XX, Shi C, Sun LF, Wu XW, Ning Q, Shen GX, **Huang B**. HBx-induced expression of the CXC chemokine IP-10 is mediated through activation of NF-kappaB and increases migration of leukocytes. *J Biol Chem.* 2010;285:12159-68.
- 20 Yang Z, Zhang B, Li D, Lv M, Huang C, Shen GX, **Huang B**. Mast cells mobilize myeloid-derived suppressor cells and Treg cells in tumor microenvironment via IL-17 pathway in murine hepatocarcinoma model. *PLoS One.* 2010;5:e8922.
- 21 Li B, Lei Z, Lichty BD, Li D, Zhang GM, Feng ZH, Wan Y, **Huang B**. Autophagy facilitates major histocompatibility complex class I expression induced by IFN-gamma in B16 melanoma cells. *Cancer Immunol Immunother.* 2010;59:313-21.
- 22 Yang Z, Lei Z, Li B, Zhou Y, Zhang GM, Feng ZH, Zhang B, Shen GX, **Huang B**. Rapamycin inhibits lung metastasis of B16 melanoma cells through down-regulating alphav integrin expression and up-regulating apoptosis signaling. *Cancer Sci.* 2010;101:494-500.
- 23 Lei Z, Li B, Yang Z, Fang H, Zhang GM, Feng ZH, **Huang B**. Regulation of HIF-1alpha and VEGF by miR-20b tunes tumor cells to adapt to the alteration of oxygen

- concentration. PLoS One. 2009;4:e7629.
- 24 Zhao J, Lei Z, Liu Y, Li B, Zhang L, Fang H, Song C, Wang X, Zhang GM, Feng ZH, **Huang B**. Human Pregnancy Upregulates Tim-3 in Innate Immune Cells for Systemic Immunity. J Immunol. 2009;182:6618-24.
 - 25 **Huang B**, Zhao J, Lei Z, Shen S, Li D, Shen GX, Zhang GM, Feng ZH. miR-142-3p Regulates cAMP Production in T cells by Targeting Adenylyl Cyclase 9 mRNA. EMBO Rep. 2009;10:180-5.
 - 26 Lei Z, Zhang GM, Hong M, Feng ZH, **Huang B**. Fusion of dendritic cells and CD34+CD38- acute myeloid leukemia (AML) cells potentiates targeting AML-initiating cells by specific CTL induction. J Immunother. 2009;32:408-14.
 - 27 Song C, Luo L, Lei Z, Li B, Liang Z, Liu G, Li D, Zhang G, **Huang B**, Feng ZH. IL-17-producing alveolar macrophages mediate allergic lung inflammation related to asthma. J Immunol. 2008;181:6117-24.
 - 28 **Huang B**, Lei Z, Zhang GM, Li D, Song C, Li B, Liu Y, Yuan Y, Unkeless J, Xiong H, Feng ZH. SCF-mediated mast cell infiltration and activation exacerbate the inflammation and immunosuppression in tumor microenvironment. Blood. 2008;112:1269-79.
 - 29 Gong W, Zhang GM, Liu Y, Lei Z, Li D, Yuan Y, **Huang B**, Feng ZH. IFN- γ withdrawal after immunotherapy potentiates B16 melanoma invasion and metastasis by intensifying tumor integrin $\alpha\beta 3$ signaling. Int J Cancer. 2008;123:702-708.
 - 30 Cao Y, Zhao J, Lei Z, Shen S, Liu C, Li D, Liu J, Shen GX, Zhang GM, Feng ZH, **Huang B**. Local Accumulation of FOXP3+ Regulatory T Cells: Evidence for an Immune Evasion Mechanism in Patients with Large Condylomata Acuminata. J Immunol. 2008;180:7681-6.
 - 31 Lei Z, Liu G, Huang Q, Lv M, Zu R, Zhang GM, Feng ZH, **Huang B**. SCF and IL-31 rather than IL-17 and BAFF are potential indicators in patients with allergic asthma. Allergy. 2008;63:327-32.
 - 32 **Huang B**, Zhao J, Unkeless JC, Feng ZH, Xiong H. TLR signaling by tumor and

- immune cells: a double-edged sword. *Oncogene*. 2008;27:218-24.
- 33 Xiao H, Huang B(co-first author), Yuan Y, Li D, Han LF, Liu Y, Gong W, Wu FH, Zhang GM, Feng ZH. Soluble PD-1 facilitates 4-1BBL-triggered antitumor immunity against murine H22 hepatocarcinoma in vivo. *Clin Cancer Res*. 2007;13:1823-30.
- 34 Liu Y, **Huang B**, Yuan Y, Gong W, Xiao H, Li D, Yu ZR, Wu FH, Zhang GM, Feng ZH. Inhibition of hepatocarcinoma and tumor metastasis to liver by gene therapy with recombinant CBD-HepII polypeptide of fibronectin. *Int J Cancer*. 2007;121:184-92.
- 35 **Huang B**, Zhao J, Shen S, Li H, He KL, Shen GX, Mayer L, Unkeless J, Li D, Yuan Y, Zhang GM, Xiong H, Feng ZH. *Listeria monocytogenes* promotes tumor growth via tumor cell Toll-like receptor 2 signaling. *Cancer Res*. 2007;67:4346-52.
- 36 **Huang B**, Lei Z, Zhao J, Gong W, Liu J, Chen Z, Liu Y, Li D, Yuan Y, Zhang GM, Feng ZH. CCL2/CCR2 pathway mediates recruitment of myeloid suppressor cells to cancers. *Cancer Lett*. 2007;252:86-92.
- 37 **Huang B**, Pan PY, Li Q, Sato AI, Levy DE, Bromberg J, Divino CM, Chen SH. Gr-1+CD115+ immature myeloid suppressor cells mediate the development of tumor specific T regulatory cell and T cell anergy. *Cancer Res*. 2006;66:1123-31.
- 38 **Huang B**, Zhao J, Li H, He KL, Chen Y, Chen SH, Mayer L, Unkeless JC, Xiong H. Toll like receptor(TLR) on tumor cells facilitate evasion of immune surveillance. *Cancer Res*. 2005;65:5009-14.