

Curriculum vitae (简历)

Changmin Chen, Ph.D. (陈昌岷, 博士)

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Education: (学历)

- 1991-1995 Ph.D. of Physiology -- Department of Physiology and Pharmacology, University of Queensland, Australia
生理学博士---昆士兰大学, 生理和药理系, 澳大利亚
- 1985-1988 Master of Infectious Disease and Preventive Medicine—Graduate School of Chinese Academy of Agricultural Sciences, Beijing, China
传染病及预防医学---中国农科院, 北京
- 1978-1982 Bachelor of Veterinary Medicine--Sichuan Agricultural University, China
兽医学士---四川农大(77级), 雅安

Postdoctoral Training: (博士后)

- 1996-1999 Postdoctoral Research Fellow, Harvard Medical School, Boston, USA
哈佛医学院, 波士顿, 美国

Faculty Academic Appointments: (学术职称)

- 2013--2018 Director---Basic Cancer Research Department, Vice president of Sichuan Cancer Institute, Chengdu, Sichuan, China,
研究员/主任/副所长---四川省肿瘤医院/研究所 基础部
- 2008-2013 Research Scientist/Instructor (faculty position), Dana-Farber Cancer Institute, Harvard Medical School, Boston, USA
研究科学家---哈佛医学院, Dana-Farber 肿瘤研究所, 波士顿, 美国
- 2006 -2006 Research Assistant Professor, Department of Biochemistry and Molecular Biology, Hollings Cancer Center, Medical University of South Carolina, Charleston, SC, USA
研究助理教授---南卡医科大学, 生化和分子生物学系, Hollings 肿瘤中心, Charleston 市, 南卡州, 美国

- 1999-2005 Research Scientist /Instructor, Division of Hematology and Oncology, Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, USA
研究科学家---哈佛医学院, **Beth Israel Deaconess** 医学中心, 血液学和肿瘤科, 波士顿, 美国
- 1988-1990 Lecturer in Immunology, Sichuan Agricultural University, China
免疫学讲师---四川农大
- 1982-1985 Assistant Professor in Animal Pathology, Sichuan Agricultural University, China
病理学助教---四川农大

Other Professional Position: (其他职称)

- 2006-2008 Senior Scientist, Resolvix Pharmaceuticals, Boston, MA, USA
高级科学家—**Resolvix** 制药公司, 波士顿, 美国

- Award: (经费)** NIH K01 grant, 2002-2005
美国国家卫生院 **K01** 基金, **2002-2005**

Experience: (经历)

Research: (研究)

- 2014-now (1): Identification of therapeutic targets in cancer cells and drug discovery
鉴定肿瘤细胞的分子靶标和靶向药物研发
- (2): Cross talk between cytokine signaling and tyrosine receptor signaling
细胞介素受体和络氨酸激酶受体信号的相互作用
- 2008-2013 (1): Development of both cellular and biochemical High Through Put screening assay to identify therapeutic compounds that specifically disrupt the binding of EWS-FLI1 to its target promoters. These assays has led to a NIH RO3 grant (1.5 million US dollars) recently and was used to screen around 400,000 compounds in MIT broad Institute currently
开发特异性抑制 EWS-FLI 转录因子结合到 DNA 的药物以便治疗 Ewing 肉瘤。建立了高通量筛选抗癌药物的生化和细胞学方法, 这些方法最近帮助获得了一百五十万美元的美国国家卫生院的资金 (RO3)。这些方法被麻省理工学院用于从四十万小分子化合物中筛选抗癌药物
- (2): Study of Raf kinase pathway feed back regulation and identification of molecules that control cancer cell proliferation and survival
研究肿瘤细胞中 **Raf** 激酶的负反馈调控机理和鉴定肿瘤细胞内的药物靶标

(3): Establishment of in vivo tumor image models for drug validation of anti-mixed-lineage leukemia (MLL) and Ewing Sarcoma

建立鉴定抗白血病和 **Ewing Sarcoma** 药物的体内肿瘤造影方法

2006-2008

Mechanisms of action---determine the effect of a new anti-inflammatory drug on Toll-like receptor, chemokine and cytokine receptor signaling and chemotaxis.

作用机理--鉴定一种新抗炎药对似 **Toll** 受体, 化学介质和细胞介素受体的信号传导的影响

2006-2006

Identification of the target protein (biomarker) and roles of Pim kinases in the pathways of mTor and PI3K/Akt and their effects in cancer induction and maintenance using prostate stem cell and bone marrow stem cell models.

用前列腺干细胞和骨髓干细胞模型鉴定 **Pim** 激酶在 **mTor** 和 **PI3K/Akt** 信号转导中的作用以及在诱发和维持肿瘤中的作用

1998-2005

(1): Identification of Raf-1 kinase target proteins (biomarker) and the role of Raf-1 kinase in anti-apoptotic signaling in cancer cells.

鉴定 **Raf-1** 激酶的底物以及在抗细胞凋亡的信号传导中的作用

(2): Signaling pathways responsible for the expression of c-myc and c-fos genes in erythroid cells in response to Epo stimulation.

研究红细胞生成素诱导的信号传导

(3): Generate more potent and long-acting form of the anemia drug Erythropoietin (Epo) dimer and multimer by stable expression in the CHO cells with serum-free media. Epo dimer and multimer have been licensed to DNAPrint Genomics, Inc. (<http://www.dnprint.com>).

开发用无血清培养基生产的长效红细胞生成素 (已申请专利)

(4): Role of transcriptional factor CHOP on erythroid cell differentiation.

研究 **CHOP** 转录因子在红细胞分化中的作用

1996-1998:

(1): The role of heat shock transcription factors in immune system.

研究热应激转录因子在免疫系统中的作用

(2): Study of transcription regulation of the IL-1 gene during early immune response.

研究早期免疫反应中白细胞介素-1 的调控

1991-1996:

Ph.D project (1): Aspects of the structure, function and signaling relationships of the growth hormone receptor with respect to growth hormone mechanisms of action.

博士论文课题: 生长激素受体结构和信号传导的关系

(2): Generation of engineered analogues of growth hormone with enhanced bioactivity in the baculovirus expression system in serum-free media.

开发用无血清培养基生产的高活力的生长激素

1988-1990: Research project: (1): Generation of monoclonal antibody to identify antigen difference between virulent virus and vaccine virus in Swine Fever.

研发诊断猪瘟的单克隆抗体

1985-1988: Master project: Generation of anti-T-cell monoclonal antibody to study of mechanism of equine infectious anemia viral vaccine.

硕士论文课题：开发抗 T 细胞的单克隆抗体

Teaching : (教学)

1988-1990: Two and half years in Immunology to postgraduate and undergraduate veterinary students. (sixty hours (forty hours of lecturing, twenty hours of Lab. practice) / year to third year undergraduate veterinary medicine students. Fifty hours / year of lecturing to postgraduate veterinary medicine students majoring in Infectious Diseases and Preventive Veterinary Medicine.)

给研究生和本科生讲授免疫学

1982-1985: Three and half years in Animal Pathology to undergraduate veterinary students. (One hundred twenty hours (eight hours of lecturing, forty hours of Lab. practice) / year to 2nd year undergraduate veterinary medicine students.)

给本科生讲授病理学

Membership to Professional Societies: (会员)

American Association of Cancer Research.美国肿瘤研究学会

American Society of Hematology.美国血液学学会

中国抗癌协会肿瘤转移专业委员会委员

中国抗癌协会肿瘤病因专业委员会委员

Publications:

Shiqi Ma, Shijun Jia, Yuan Ren, Bangrong Cao, Xiao Zha, Jintao He and **Changmin Chen (Corresponding author)**. Two Mechanisms that Drive Uncontrolled Proliferation of Lung Cancer Cells. **Submitted to PNAS**

Papers:

1. Cao BR, Luo LP, Zhang H, Ma SQ, Chen TQ, Ren Y, Zha X, Cheng SJ, Zhang KT, **Chen CM (Corresponding author)**. A network-based predictive gene-expression signature for adjuvant chemotherapy benefit in Stage II colorectal cancer. *BMC Cancer*. 2017 **17**:844
2. Ma SQ, Cao BR, Zhang H, Luo LP, Ren Y, Hu T, **Chen CM (Corresponding author)**. The Lack of Raf-1 Kinase Feedback Regulation Enhances Anti-apoptosis in Cancer Cells. *Oncogene*. 2017 Apr 6;36(14):2014-2022.
3. **Chen CM**, Wonsey DR, Lemieux ME, Kung AL. Differential disruption of EWS-FLI1 binding by DNA-binding agents. *PLoS One*. 2013 Jul 22;8(7):e69714.
4. **Chen CM**, Shanmugasundaram K, Rigby AC, Kung AL. Shikonin, a natural product from the root of *Lithospermum erythrorhizon*, is a cytotoxic DNA-binding agent. *European Journal of Pharmaceutical Sciences*. 2013; 49:18-26.
5. **Chen CM**, Sytkowski AJ ALG-2 (apoptosis linked gene-2) connects the Raf-1 and ASK1 Signaling. *Biochem Biophys Res Commun*. 2005; 333 : 51-57.
6. **Chen CM**, Sytkowski AJ Erythropoietin regulation of Raf-1 and Mek: evidence for a Ras-independent mechanism. *Blood*. 2004; 104: 73-80.
7. **Chen CM**, Sytkowski AJ. Erythropoietin activates two distinct signaling pathways required for the initiation and the elongation of c-myc *J. Biol. Chem*. 2001; 276:38528-38526.
8. **Chen CM**, Brinkworth R, Waters M J. The role of receptor dimerization domain residues in growth hormone signalling. *J. Biol. Chem*. 1997; 272:5133-5140.
9. **Chen CM**, Xie Y, Stevenson MA, Auron PE, Calderwood SK. Heat shock factor 1 represses Ras induced transcriptional activation of the c-fos gene *J. Biol. Chem*. 1997; 272: 26803-26806.
10. **Chen CM**, Clarkson R W E, Xie Y, Hume DA, Waters M J. Growth hormone and CSF-1 share multiple response elements in the c-fos promoter. *Endocrinology* 1995; 136: 4505-4516.
11. **Chen CM**, Lu JL. Development and characterization of hybridomas secreting monoclonal antibodies with specificity to equine T lymphocytes. *Chinese J Ani.Poul. Dis*. 1988; 3: 8-11.
12. Xie Y, **Chen CM**, Calderwood SK. Heat shock factor 1 contains two functional domains that mediate transcriptional repression of the c-fos and c-fms genes. *J Biol Chem*. 2003, 278: 4687-4698.

13. Xie Y, **Chen CM**, Stevenson MA, Auron PE, Calderwood SK. Heat shock factor-1 (HSF1) represses transcription of the interleukin 1 beta (IL-1 beta) gene through physical interaction with nuclear factor of interleukin-6 (NF-IL6). *J Biol Chem.* 2002; 277: 11802-11810.
14. Xie Y, **Chen CM**, Stevenson MA, Hume DA, Auron PE, Calderwood SK. NF-IL6 and HSF1 have mutually antagonistic effects on transcription in monocytic cells. *Biochem. Biophys. Res. Comm.* 2002; 291:1071-1080.
15. Xie Yue, **Chen CM**, Hume DA. Transcription regulation of c-fms gene expression. *Cell Biochem. Biophys.* 2001; 34: 1-16.
16. He H, **Chen CM**, Xie Y, Calderwood SK. HSP70 and heat shock factor 1 cooperate to repress Ras-induced transcriptional activation of the c-fos gene. *Cell Stress and Chaperones* 2000; 5:406-411.
17. Bruce JL, **Chen CM**, Xie Y, Zhong R, Wang Y, Stevenson M, Calderwood SK. Activation of heat shock transcription factor 1 to a DNA binding form during the G1 phase of the cell cycle. *Cell Stress and Chaperones* 1999; 4: 36-41.
18. Clarkson RW, **Chen CM**, Harrison S, Wells C, Muscat GEO, Waters MJ. Early responses of transactivating factors to GH in preadipocytes: differential regulation of CCAAT enhancer binding protein and C/EBP. *Mol. Endocrinol.* 1995; 9:108-120.
19. Baumgartner JM, **Chen CM**, Waters MJ. The role of the WSXWS equivalent motif in GH receptor function. *J. Biol. Chem* 1994; 269: 29094-290101.
20. Yang Z, Wara-Aswapati N, **Chen CM**, Tsukada J, Auron PE. NF-IL6 (C/EBPbeta) vigorously activates il1b gene expression via a Spi-1(PU.1) protein-protein tether. *J Biol Chem.* 2000; 275: 21272-21277.
21. Lobie PE, Wood TJ, **Chen CM**, Waters MJ, Norstedt G. Nuclear translocation and anchorage of the GH receptor. *J. Biol.Chem.* 1994; 269: 31735-31746.
22. Zhang CZ, Li H, Young WG, Bartold PM, **Chen CM**, Waters MJ. Evidence for a local action of growth hormone in embryonic tooth development in the rat. *Growth Factors.* 1997;14(2-3):131-43.
23. Jiang J, Wang X, He K, **Chen CM**, Sayeski PP, Waters MJ, Frank SJ. A Conformationally-sensitive Growth Hormone Receptor Antibody: Impact on GH Signaling and GHR Proteolysis. *Mol Endocrinol.* 2004; 18 (12): 2981-2996.
24. Chong W, Li Y, Liu B, Liu Z, Zhao T, Wonsey DR, **Chen CM**, Velmahos GC, deMoya MA, King DR, Kung AL, Alam HB. Anti-inflammatory properties of histone deacetylase inhibitors: a mechanistic study. *J Trauma Acute Care Surg.* 2012 Feb; 72(2):347-53;

Proceedings of Meetings:

1. **Chen CM**, Waters MJ Dimerization is necessary for signal transduction by the growth hormone receptor but not phosphorylation of membrane proximalcytoplasmic tyrosines. Proceedings of Endocrine Society of Australia 1994 37: 111 p110
2. **Chen CM**, Clarkson RWE, Xie Y, Hume DA, Waters MJ Growth hormone and CSF-1 share multiple response elements in the c-fos promoter. Proceedings of Endocrine Society of U. S. A. The 77th Annual Meeting 1995 p348
3. Clarkson RW, **Chen CM**, Harrison S, Wells C, Muscat GEO, Waters MJ Early responses of trans-activating factors to growth hormone in preadipocytes: differential regulation of CCAAT enhancer binding protein β and C/EBP γ . Proceedings of Endocrine Society of Australia 1994 37: 118 p111
4. Baumgartner JM, Wells CA, **Chen CM** Waters MJ The role of the “WS” motif in growth hormone receptor function. Proceedings of Endocrine Society of Australia 1994 37: 112 p114.
5. Waters MJ, Rowlinson SW, Clarkson RW, **Chen CM**, Lobie PE, Norstedt GS. Signal transduction by the GH receptor. Proceedings of Soc. Exp. Biol. Med. 1994; 206: 216-220
6. **Chen CM**, Xie Y, Weber L, Hickey E, Stevenson MA, Calderwood S K . Analysis of heat shock protein-27 promoter activation. Proceedings of 45th Annual Meeting of the Radiation Research Society and the 16th Annual Meeting of the North American Hyperthermia Society 1997 p 113
7. Xie Y, **Chen CM**, Auron PE, Calderwood SK Heat Shock Factor 1 Regulates Gene Expressed in macrophages Proceedings of 45th Annual Meeting of the Radiation Research Society and the 16th Annual Meeting of the North American Hyperthermia Society 1997 p 114
8. Xie Y, **Chen CM**, Stevenson MA, Auron PE, Calderwood SK Transcriptional repression of the c-fms gene Proceedings of the American Association for Cancer Research Special Conference on Transcriptional Control of Proliferation, Differentiation, and Development 1997 pB63
9. **Chen CM**, Xie Y, Stevenson MA, Auron PE, Calderwood SK HSF-1 Binds to NF-IL6 and Represses NF-IL-6 Mediated Transactivation. Cold Spring Harbor meeting on Molecular Chaperones & The Heat Shock Reponses. 1998 p269
10. Xie Y, **Chen CM**, Stevenson MA, Calderwood SK Inhibition of HIV Long Terminal Repeats by Heat Shock Factor-1. Cold Spring Harbor meeting on Molecular Chaperones & The Heat Shock Reponses. 1998 p268
11. **Chen CM**, Sytkowski AJ Analysis of the c-fos proto-oncogene regulation by Erythropoietin (Epo). The American society of hematology 41st Annual Meeting 1999 p257.
12. **Chen CM**, Sytkowski AJ Erythropoietin activates two distinct signaling pathways that selectively regulate the initiation or the elongation of c-myc. The American society of hematology 42nd Annual Meeting 2000 p137b.

13. **Chen CM**, Sytkowski AJ Two distinct signaling pathways activated by erythropoietin (Epo) are required for the initiation and the elongation of c-myc proto-oncogene respectively. *The FASEB J.* 2001 15: A206
14. Xie Y, **Chen CM**, Calderwood SK Transcription repression by HSF-1. *The FASEB J.* 2001 15 : A1224
15. **Chen CM**, Sytkowski AJ Novel regulation of erythropoietin's Raf-1-Mek signaling Pathway. *The American society of hematology 44th Annual Meeting 2002.* p521a.
16. **Chen CM**, Davis KL, Brugnara C, Toniatti C, Sytkowski AJ An erythropoietic defect in CHOP -/- Mice. *The American society of hematology 44th Annual Meeting 2003.* 328a.
17. Jeong JY, **Chen CM**, Davis KL, Breidbach A, Catlin, DH Sytkowski AJ Erythropoietin Fusion Proteins Comprised of Identical Head-to-Tail Repeats with Enhanced Biological Activity. *The American society of hematology 47th Annual Meeting 2006.*

Oral Presentation

1. **Chen CM**, Sytkowski AJ The Regulation of Raf-1-Map Kinase Signaling in Hematopoietic Cells: 31st Annual Meeting of the International Society for Experimental Hematology. 7/7/2002 Montreal, Canada

Book Chapter

1. **Chen CM**, Sytkowski AJ The erythropoietin receptor and its signal cascade. Book title "Erythropoietin: Molecular Biology and Clinical Use" FP Graham Publishing Co. p 165-194, (2003)