中西医硕博导师简介

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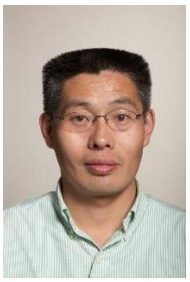
<tr><td>学院</td><td>中西医结合学院</td><td>姓名</td><td>吴英杰</td><td>性别</td><td>男</td><td rowspan="3">  </td></tr>
<tr><td>出生年月</td><td>1962.02</td><td>民族</td><td>汉</td><td>籍贯</td><td>吉林长春</td></tr>
<tr><td>硕博导师</td><td>硕博导师</td><td>职称</td><td>教授</td><td>最高学历</td><td>博士研究生</td></tr>
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工作简历:

2013.01——至今 大连医科大学重大疾病基因工程模式动物研究所 教授，所长

2012.09— 至今 美国纽约大学口腔医学院额面生物学系 兼职研究员

2011.09— 至今 美国西奈山医学院内分泌、糖尿病及骨疾病系 兼职副教授

2011.09—2012.12 纽约大学口腔医学院额面生物学系 研究员

2005.09—2011.08 美国西奈山医学院内分泌、糖尿病及骨疾病系 研究副教授

2002.02—2005.03 美国国立健康卫生研究院心肺血液研究所 资深研究员

1999.01—2002.02 美国宾夕法尼亚大学生物系 研究助理

1989.07—1992.02 辽宁师范大学食品生化所 讲师

学校及社会兼职:

1、国家重大人才工程“创新人才推进计划”领军人才和创新团队评议专家

2、国家国际科技合作专项项目评审专家

3、国家国际科技合作基地评审专家

4、中国博士后科学基金评审专家

5、国际华人骨研学会教育委员会委员

6、美国内分泌学会会员

7、内分泌学会会员（英国）

8、《中国实验动物学报》编委

9、《Endocrinology》、《Molecular Endocrinology》、《Journal of Endocrinology》、《Journal of Molecular Endocrinology》等杂志审稿人

主要研究方向:

1、人类重大疾病基因工程模式动物的研发、应用与产业化。

2、内分泌代谢性疾病中西医结合基础研究

教学工作：

讲授本科生《生物化学》

全校实验动物操作实践培训理论授课

主要科研成果：

1、首次利用转基因小鼠与基因敲除小鼠相结合战略建立了只有内分泌形式的 IGF1 小鼠模型，从而解决了三十年来悬而未决的内分泌 IGF1 与旁分泌、自分泌 IGF1 的功能之分。相关研究论文已在 Endocrinology 连续发表。

2、建立生长激素受体基因 Flox 小鼠并在此基础上建立了系列组织特异性基因敲除小鼠，如肝、肌肉、脂肪、胰岛、骨、神经组织生长激素受体基因敲除小鼠模型，进而研究生长激素受体在生长发育、衰老及病理状态下的功能，开展生长激素受体功能的系统研究。为相关疾病治疗及药物研发奠定理论基础。相关研究论文已在 The Journal of Clinical Investigation 和 Diabetes 发表。

3、建立的小鼠基因编码框优化的 FLPo 重组酶工具鼠，100%高效性删除 FRT 两侧修饰的选择标记基因 NEO。已被美国、英国、德国和加拿大及等二十多个实验室索取并使用。相关研究论文于 2009 年底发表在 PLoS ONE，下载或阅读 11320 余次。

4、建立类胰岛素生长因子 IGF1 点突变（R3）和缺失（DES）Knock-In 小鼠，相关研究论文于 2011 年底发表在 Disease Models & Mechanisms。

5、建立新的 Laron 综合征的小鼠动物模型——即利用肝脏特异表达 IGF1 转基因小鼠与生长激素受体基因缺失（在人类上既为 Laron 综合征患者）杂交产生。

6、利用先进的基因编辑技术构建中医病症结合动物模型，把模式动物引入到中医药的研究中，围绕 IGF-1 轴开展中医治疗糖尿病、中医肾本质的研究，拓展了中西医结合研究的思路，开创了中西医结研究的新领域。

7、利用特有的基因修饰小鼠模型研究中草药天然产物及新型高分子生物材料对前列腺癌和肝癌以及代谢疾病如肥胖，脂肪肝，糖尿病的发病机理及治疗。

代表性论文：

[1] Shuang Wang, Ning Wang, Bin Yu, Mingxing Cao, Yanlong Wang, Yuqi Guo, Yanli Zhang, Ping Zhang, Xiao Yu, Shujing Wang, Li Zeng, Bin Liang, Xin Li, and **Yingjie Wu**. Circulating IGF-1 Promotes Prostate Adenocarcinoma via FOXO3A/BIM Signaling in a Double Transgenic Mouse Model. ***Oncogene***. 2019, 38: 6338–6353.

[2] Liyuan Ran*, Xiaoshuang Wang*, Ai Mi, Yanshuang Liu, Jin Wu, Haoan Wang, Meihua Guo, Jie Sun, Bo Liu, Youwei Li, Dan Wang, Rujiao Jiang, Ning Wang, Wenting Gao, Li Zeng, Lin Huang, Xiaoli Chen, Derek LeRoith, Bin Liang, Xin Li and **Yingjie Wu**. Loss of Adipose Growth Hormone Receptor in Mice

Enhances Local Fatty Acid Trapping and Impairs Brown Adipose Tissue Thermogenesis. ***iScience***, 2019, Jun, 16:106-121.

[3] Jie Sun, Yan Liu, Jinhui Yu, Jin Wu, Wenting Gao, Liyuan Ran, Rujiao Jiang, Meihua Guo, Dongyu Han, Bo Liu, Ning Wang, Youwei Li, He Huang, Li Zeng, Ying Gao6, Xin Li and **Yingjie Wu**. APS could potentially activate hepatic insulin signaling in HFD-induced IR mice. ***Journal of Molecular Endocrinology***. 2019, 63 (1): 77-91.

[4] Zhang Y, Zou X, Qian W, Weng X, Zhang L, Zhang L, Wang S, Cao X, Ma L, Wei G, **Yingjie Wu** [#], Zhaoyuan Hou[#]. Enhanced PAPSS2/VCAN sulfation axis is essential for Snail-mediated breast cancer cell migration and metastasis. ***Cell Death Differ.*** (2019) 26(3): 565-579.

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[6] Tao Yu, Chunxin Wang, Jian Yang, Yuqi Guo, **Yingjie Wu**[#] and Xin Li[#]. Metformin inhibits SUV39H1-mediated migration of prostate cancer cells. ***Oncogenesis***， (2017) e324; doi:10.1038.

[7] Yuqi Guo, Chengzhi Xie, Xiyan Li, Jian Yang, Yu Tao, Tianqing Zhang, Michael Snyder, **Yingjie Wu** and Xin Li[#]. Succinate and its G-protein-coupled receptor stimulates osteoclastogenesis. ***Nature Communications***, 2017 May 31;8:15621.

[8] Shuang Wang, Jin Wu, Ning Wang, Li Zeng and **Yingjie Wu**, The Role of Growth Hormone Receptor on β Cell Function. ***Growth Hormone & IGF Research***, 2017, 36:30-35.

[9] Jinhui Yu, Yong Ma, Jie Sun, Liyuan Ran, Youwei Li, Ning Wang, Tao Yu, Wenting Gao, Wenbin Jia, Rujiao Jiang, Meihua Guo, Yuping Bi[#] and **Yingjie Wu**[#] Microalgal oil from Schizochytrium sp. prevents HFD-induced abdominal fat accumulation in mice. ***Journal of the American College of Nutrition***, 2017 May 26:1-10.

[10] Yiwen Qin, Yuanzhen Peng, Wei Zhao, Jianping Pan, Hanna Ksiezak-Reding, Christopher Cardozo, **Yingjie Wu**, Paola Divieti Pajevic, Lynda F. Bonewald, William A Bauman and Weiping Qin. Myostatin Inhibits Osteoblastic Differentiation by Suppressing Osteocyte-derived Exosomal microRNA-218: A Novel Mechanism in Muscle-Bone Communication. ***J Biol Chem***, 2017;292(26):11021-11033.

[11] Yuqi Guo, Tao Yu, Jian Yang, Tianqing Zhang, Yang Zhou, Fan He, Zoya Kurago, David Myssiorek, **Yingjie Wu**, Peng Lee, Xin Li Metformin inhibits salivary adenocarcinoma growth through cell cycle arrest and apoptosis. ***Am J Cancer Res,*** 2015, 5 (12):3600-3611

[12] Weiping Qin, Xiaodong Li, Yuanzhen Peng, Lauren M Harlow, Yinshi Ren, **Yingjie Wu**, Jiliang Li, Yiwen Qin, Jie Sun, Tom Brown, Jian Q. Feng, Hua Zhu Ke, William A Bauman, Christopher C Cardozo. Sclerostin Antibody Preserves the Morphology and Structure of Osteocytes and Blocks the Severe Skeletal Deterioration after Motor-Complete Spinal Cord Injury in Rats. ***Journal of Bone and Mineral Research.*** 2015, 30(11):1994–2004

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[14] Zhenwei Gong*, Oran Kennedy*, Hui Sun*, **Yingjie Wu***, Garry A Williams, Laura Klein, Luis Cardoso, Ronald W. Matheny Jr, Gene B. Hubbard, Yuji Ikeno, Roger P. Farrar, Mitchell B Schaffler, Martin L Adamo, Radhika H Muzumdar1 and Shoshana Yakar, Reductions in serum IGF-1 during aging impair health span. ***Aging Cell***, 2014, 13, 408–418.

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[16] **Yingjie Wu**, Hui Sun, JelenaBasta-Pljakic, Luis Cardoso, Oran D Kennedy, Hector Jasper, HoracioDomené, Liliana Karabatas, Clara Guida, Mitchell B Schaffler, Clifford J Rosen, Shoshana Yakar, Serum IGF-1 is insufficient to restore skeletal size in the total absence of the growth hormone receptor. ***Journal of Bone and Mineral Research***, 2013, 28(7),1575-1586.

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[19] ArchanaVijayakumar, **Yingjie Wu**, Buffin NJ, Li X, Sun H, Gordon RE, Shoshana Yakar, Derek LeRoith. Skeletal muscle growth hormone receptor signaling regulates Basal, but not fasting-induced, lipid oxidation. ***PLoS ONE***, 2012, 7(9):e44777.

[20] **Yingjie Wu**, ChengyuLiu,Hui Sun, ArchanaVijayakumar, PejmanRaeisiGiglou, Joshua Oppenheimer, Shoshana Yakar and Derek LeRoith.Growth hormone receptor regulates β cell hyperplasia and glucose-stimulated insulin secretion in obese mice. ***The Journal of Clinical Investigation***, 2011, 121(6):2422–2426.

[21] Sebastien Elis*, **Yingjie Wu***, Hayden-William Courtland, Dara Cannata, Hui Sun, Mordechay Beth-On, Hector Jasper, HoracioDomené, Liliana Karabatas, Clara Guida, JelenaBasta-Pljakic, Luis Cardoso, Clifford J Rosen, and Shoshana Yakar. Unbound (bioavailable) IGF1 enhances somatic growth. ***Disease Models & Mechanisms***, 2011 , 4(5): 649-658.

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主要学术论著：

1、 GENOME EDITING and ENGINEERING: From Talens, ZFNs and CRISPRs to Molecular Surgery. edited by Dr. Krishnarao Appasani, Cambridge University Press 2017 (One Chapter: Genome editing with desired mutations (knock-in) with CRISPR in model organisms, Chunxin Wang and Yingjie Wu).

2、 Biochemistry and Nutrition of Food. The Scientific Press, Beijing, China, 1994. Three Chapters.

主持的主要在研项目：

国家自然科学基金面上项目：内分泌 IGF-1 水平在非酒精性脂肪肝发生机制中的作用，项目编号 31871163，项目经费：60 万元，项目执行期：2019.01-2022.12