

Dr. Haobo Jiang

Selected Publications:

1. Zhang, S., Zhang, X., Gunaratna, R., Najar, F., Wang, Y., Roe, B., and Jiang, H. Pyrosequencing-based expression profiling and identification of differentially regulated genes from *Manduca sexta*, a lepidopteran model insect that lacks genome sequence. *Insect Biochem. Mol. Biol.* **41**, 733-746.
2. Zhao, P., Lu, Z., Strand, M., and Jiang, H. (2011) Antiviral, antiparasitic, and cytotoxic effects of 5,6-dihydroxyindole (DHI), a reactive compound generated by phenoloxidase during insect immune response. *Insect Biochem. Mol. Biol.* **41**, 645-652.
3. Wang, Y., Sumathipala, N., Rayaprolu, S., and Jiang, H. (2011) Recognition of microbial molecular patterns and stimulation of prophenoloxidase activation by a β -1,3-glucanase-related protein in *Manduca sexta* larval plasma. *Insect Biochem. Mol. Biol.* **41**, 322-331.
4. Sumathipala, N. and Jiang, H. (2010) Involvement of *Manduca sexta* peptidoglycan recognition protein-1 in the recognition of bacteria and activation of prophenoloxidase system. *Insect Biochem. Mol. Biol.* **40**, 485-495.
5. Rayaprolu, S., Kanost, M.R., Wang, Y., and Jiang, H. (2010) Functional analysis of four processing products from multiple precursors encoded by a lebecin-related gene from *Manduca sexta*. *Dev. Com. Immunol.* **34**, 638-647.
6. Wang, Y. and Jiang H. (2010) Binding properties of the regulatory domains in *Manduca sexta* hemolymph proteinase-14, an initiation enzyme of the prophenoloxidase activation system" *Dev. Com. Immunol.* **34**, 316-322.
7. An, C., Jiang, H. and Kanost, M.R. (2010) Proteolytic activation and function of the cytokine Spätzle in innate immune response of a lepidopteran insect, *Manduca sexta*. *FEBS J.* **277**, 148-162.
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13. Wang, Y. and Jiang, H. (2007) Reconstitution of a branch of *Manduca sexta* prophenoloxi- dase activation cascade *in vitro*: Snake-like hemolymph proteinase

- 21 cleaved by HP14 activates prophenoloxidase-activating proteinase-2 precursor. *Insect Biochem. Mol. Biol.* **37**, 1015-1025.
14. Gorman, M.J., Wang, Y., Jiang, H., and Kanost, M.R. (2007) *Manduca sexta* hemolymph proteinase 21 activates prophenoloxidase activating proteinase 3 in an insect innate immune response proteinase cascade. *J. Biol. Chem.* **282**, 11742-11749.
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 19. Wang, Y., Chen, T., Rayaprolu, S., Zou, Z., Xia, Q., Xiang, Z., and Jiang, H. (2007) Proteolytic activation of pro-spätzle is required for the induced transcription of antimicrobial peptide genes in lepidopteran insects. *Dev. Com. Immunol.* **31**, 1002-1012.
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1. Sun, Y., Gu, D., Wu, A., Zhang, W., Xu, A., Jiang, H., Zhong, Y., and Zhang, Z. (1990) Technology of divalent engineered diarrhea vaccine production by high cell density fermentation and the antigen overproduction. *Chinese J. Biotechnol.* **6**, 96-101.
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5. Jiang, H., Wang, Y., and Kanost, M.R. (1996) Primary structure of ribosomal proteins S3 and S7 from *Manduca sexta*. *Insect Mol. Biol.* **5**, 31-38.
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