

# Author's Accepted Manuscript

Integrated structural and expression analysis  
implicate specific synaptic pathway in major  
depressive disorder

Xiaochu Gu, Mingzhi Pan, Xiaowen Xu  
Kezhi Liu, Xuemei Liang, Wei Lei, Bo Xiang  
Xi Chen  
Xiangdong Du, Zhenkang Qian  
Zhenxing Yang  
Minglan Yu



PII: S0165-1781(17)30865-X  
DOI: <http://dx.doi.org/10.1016/j.psychres.2017.09.065>  
Reference: PSY10876

To appear in: *Psychiatry Research*  
Revised date: 25 September 2017  
Accepted date: 25

Cite this article as: Xiaochu Gu, Mingzhi Pan, Xiaowen Xu, Kezhi Liu, Xuemei Liang, Wei Lei, Bo Xiang, Xi Chen, Xiangdong Du, Zhenkang Qian, Zhenxing Yang and Minglan Yu, Integrated structural and expression analysis implicate specific synaptic pathway in major depressive disorder, *Psychiatry Research*, <http://dx.doi.org/10.1016/j.psychres.2017.09.065>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting galley proof before it is published in its final citable form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

## **Integrated structural and expression analysis implicate specific synaptic pathway in major depressive disorder**

Xiaochu Gu<sup>a</sup>, Zhenxing Yang<sup>e</sup>, Xiangdong Du<sup>d</sup>, Kezhi Liu<sup>b</sup>, Minglan Yu<sup>f</sup>, Xuemei Liang<sup>b</sup>, Wei Lei<sup>b</sup>, Zhenkang Qian<sup>d</sup>, Xi Chen<sup>c</sup>, Mingzhi Pan<sup>a</sup>, Xiaowen Xu<sup>a</sup>, Bo Xiang<sup>b1</sup>

<sup>a</sup>Clinical Laboratory, Institute of Mental Health, Suzhou Psychiatric Hospital, The Affiliated Guangji Hospital of Soochow University, Suzhou, Jiangsu, P.R. China

<sup>b</sup>Department of Psychiatry, Affiliated Hospital of Southwest Medical University, Luzhou, Sichuan Province, P.R. China

<sup>c</sup>Department of Clinical Pharmacy and Pharmacy Administration, West China School of Pharmacy, Sichuan University, Chengdu, P.R. China

<sup>d</sup>Department of Psychiatry, Suzhou Psychiatric Hospital, The Affiliated Guangji Hospital of Soochow University, Suzhou, Jiangsu, P.R. China

<sup>e</sup>Department of urology, Xinqiao hospital, the third military university, Chongqing, P.R. China

<sup>f</sup>Medical Laboratory Center, Affiliated Hospital of Southwest Medical University, Luzhou, Sichuan Province, China

xiangbo@swmu.edu.cn (Bo Xiang)

Numerous robust and replicable genetic and imaging studies have implicated structural and functional networks in the development of psychiatric disorders. Genetic studies have identified dozens of psychiatric susceptibility genes that raise a critical question: do genes enrich in specific brain regions and specific pathways influence phenotype? Using shared data from a large body of psychiatric research and advanced statistical analysis tools, available data was analyzed to identify possible gene networks involved in neural development of psychiatric disorders. According to the large-scale, genome-wide association study (GWAS) meta-analysis of 30,717 persons from 50 cohorts (Hibar et al. 2015) from the Enhancing Neuroimaging Genetics Through Meta-Analysis (ENIGMA), common variants influence human

---

<sup>1</sup> Department of Psychiatry, Affiliated Hospital of Southwest Medical University, Luzhou, Sichuan Province, China.

Download English Version:

<https://daneshyari.com/en/article/6811907>

Download Persian Version:

<https://daneshyari.com/article/6811907>

[Daneshyari.com](https://daneshyari.com)