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Title: Minocycline ameliorates depressive behaviors and neuro-immune dysfunction induced by chronic unpredictable mild stress in the rat

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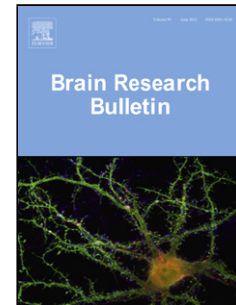
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## **Minocycline ameliorates depressive behaviors and neuro-immune dysfunction induced by chronic unpredictable mild stress in the rat**

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### **Highlights**

- CUMS-induced depressive behaviors via COTR-microglia M1/M2-astrocytes/BDNF pathway.
- CUMS elevated IL-17 and TGF- $\beta$ 1 concentrations in the hippocampus.
- Minocycline improved depressive behaviors via anti-inflammation.

### **Abstract**

Activated microglia-induced neuroinflammation can stimulate the hypothalamic-pituitary-adrenal (HPA) axis to release glucocorticoids and suppress astrocyte function, such as reducing neurotrophin production, which occur in depression. However, the balance between M1 (pro-inflammation) and M2 (anti-inflammation) of microglial phenotypes and the interaction between two glial cells in the depression are unclear. Hence, the chronic unpredictable mild stress

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