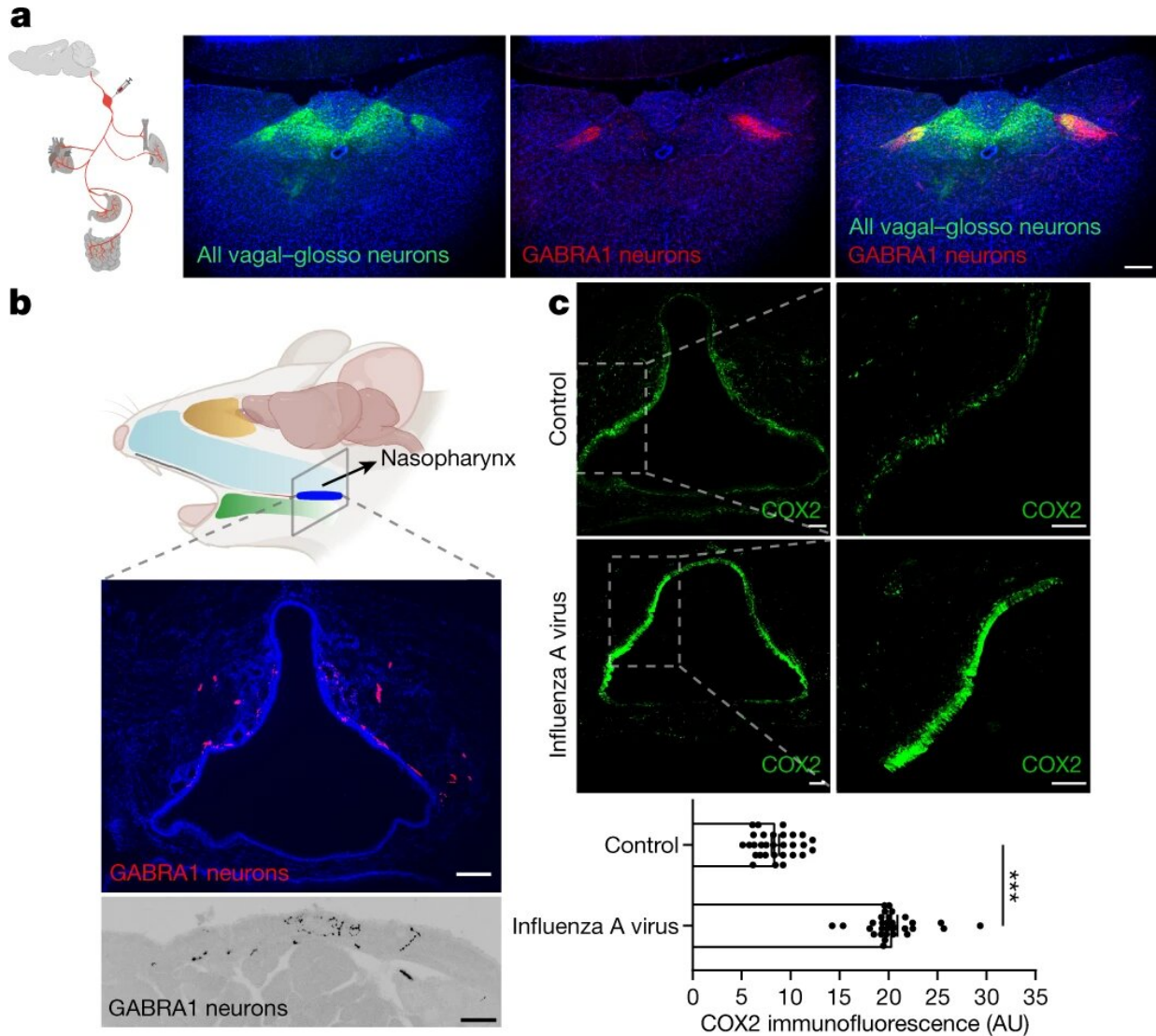


Exploring how the brain senses infection

March 8 2023



GABRA1 neurons provide an airway–brain communication route. **a**, NJP ganglia of *Gabra1-IRES-cre* mice were injected bilaterally with Cre-independent AAV-GFP and Cre-dependent AAV-flex-tdTomato, and fluorescent axons were visualized (green: all NJP sensory axons; red: GABRA1 NJP axons) by

immunohistochemistry for tdTomato and GFP in fixed coronal cryosections of mouse brainstem. Scale bar, 200 μm . **b**, NJP ganglia of *Gabra1-IRES-cre* mice were injected bilaterally with AAV-flex-tdTomato, and axons were visualized by immunostaining for tdTomato in fixed coronal cryosections of nasopharynx. Scale bars, 100 μm (top), 50 μm (bottom). **c**, Top, immunohistochemistry of COX2 in fixed cryosections of nasopharynx in uninfected mice (control) or mice infected for five days with influenza A virus. Scale bars, 100 μm . Bottom, quantification of COX2 immunofluorescence in the nasopharynx of indicated mice. Data are mean \pm s.e.m.; $n = 29$ sections from 5 mice per group over 3 independent experiments. Two-tailed unpaired t -test, P

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