

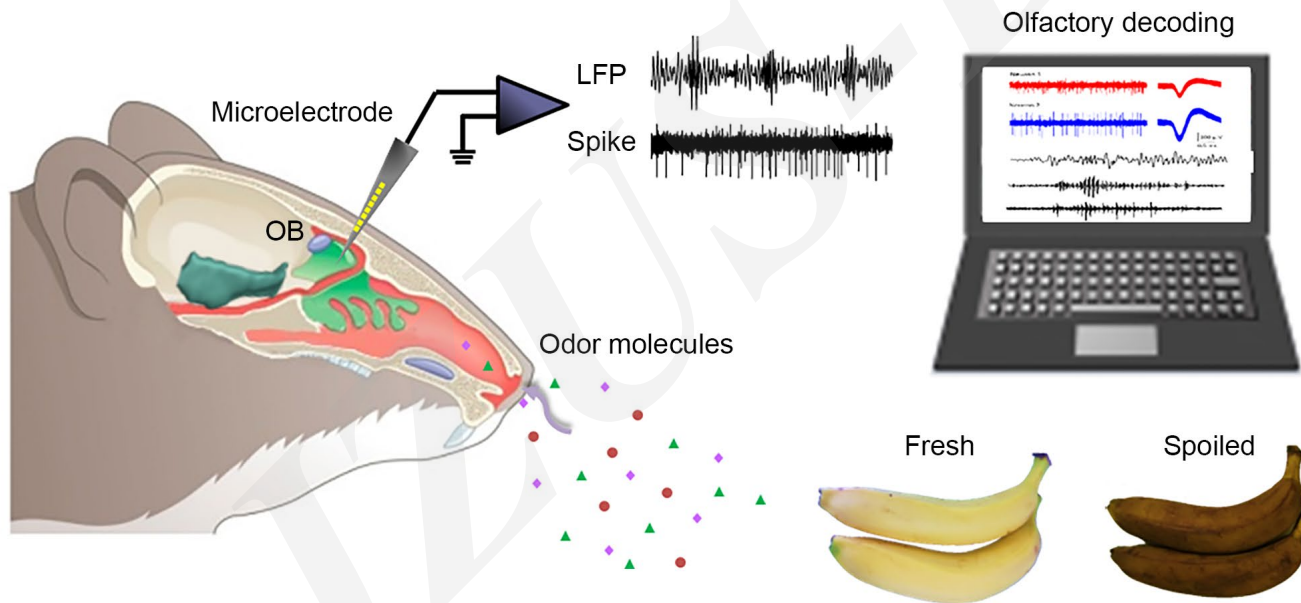
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# **Spatiotemporal coding of natural odors in the olfactory bulb**

**Key words:** Neural interface, Olfactory bulb, Spike activity, Neural oscillation

# Research Summary

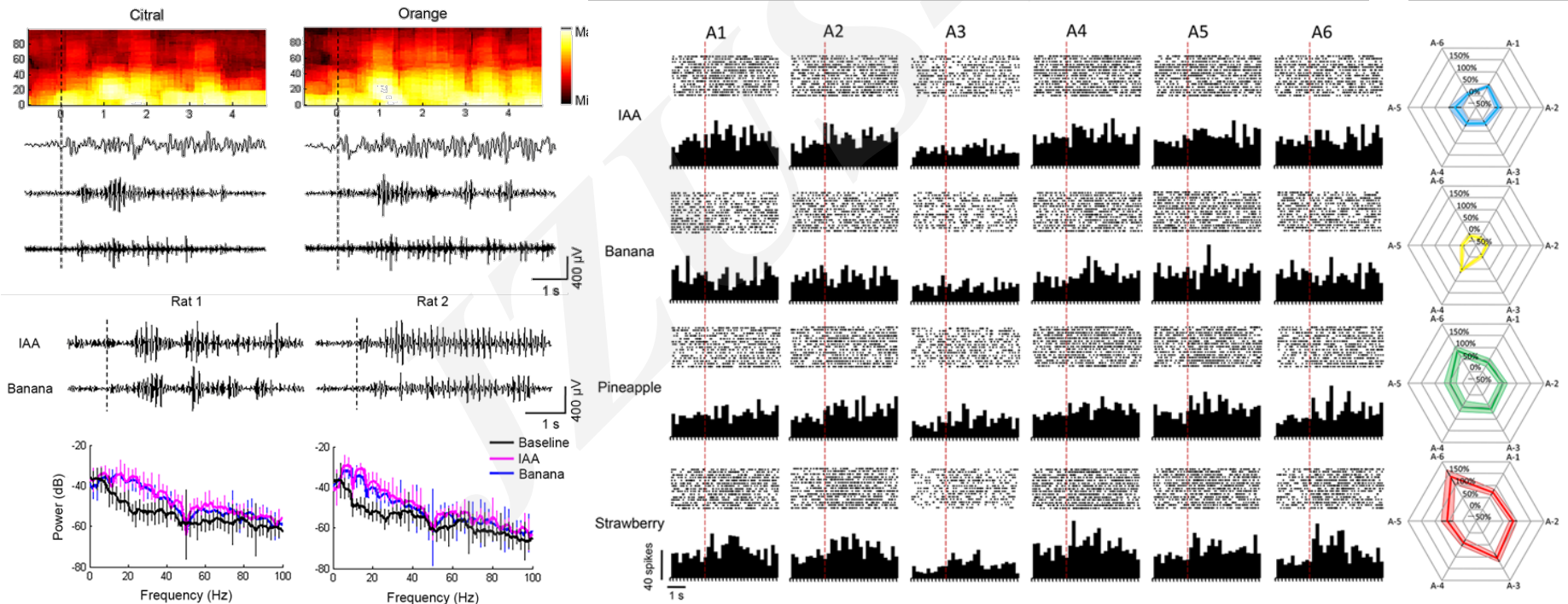
This research presents an *in vivo* biosensing system for food inspection through detecting the odorant generated from food providing a promising platform for assessing food freshness.



- Neural interface system
- Olfactory spatiotemporal coding
- Nature odors detection application

# Innovation points

- The different odors could evoke distinct oscillatory activities, with a notable enhancement in the power of LFP during odor stimulation.



# *Innovation points*

- The firing patterns of the neuron cells were influenced by the composition and concentration of volatile compounds emitted from the natural food.

