

BDR SEMINAR (Kobe & online hybrid)

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Thursday, Aug 29, 2024

16:00-17:00

2F Seminar room (E206), DB Building D, Kobe / Broadcast online via Zoom
Zoom meeting URL will be announced on the event day by e-mail.

※Non-BDR members: Please register from the following link.

<https://krs2.riken.jp/m/bdrseminarregistration> (Registration deadline: Aug 26)

Social valence dictates sex differences in identity recognition

Summary

Social valence is the directional emotional significance affiliated with social experiences. Maladaptive processing of negative social valence (NSV) has been linked to mood disorder susceptibility, which is more prevalent in women. To determine whether there are sex differences in NSV processing, we developed social valence paradigms where the identity recognition of conspecifics with distinct valences served as the readout. Male mice demonstrated identity recognition regardless of social valence. Conversely, female mice did not show identity recognition following the NSV paradigm. In vivo calcium imaging of the dorsal CA1 further revealed sex differences in NSV processing with reduced hippocampal representation of social information in female mice. These results suggest the imprecise encoding of NSV may contribute to the heightened vulnerability to social stress-related mood disorders in women.