Regulation of Infant Social Behavior by the Hypothalamic Preoptic Region

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Public-facing abstract

Infant mammals survive through social behavior: huddling, calling to caregivers, and responding to littermates are not extras, they are life-support systems. This project studies how the hypothalamic preoptic area represents those early social interactions. The team uses calcium imaging in galanin-expressing neurons while infant mice encounter their mother, littermates, unfamiliar pups, and unfamiliar adult males. The work helps explain how developing brains detect social context before adult circuits are fully mature, giving neuroscience a clearer view of social behavior at the beginning of life.