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Glutamate released in the preoptic area during sexual behavior controls local estrogen synthesis in male quail

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Highlights

- Performance of sexual behavior inhibits preoptic aromatase activity
- Glutamate is released in the medial preoptic nucleus (POM) of copulating males
- Kainic acid infusion in POM decreases aromatase activity within 20 min
- Glutamate release presumably activates NMDA receptors to facilitate sexual behavior
- Behaviorally –induced glutamate release presumably inhibits aromatase activity