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Analysis of extended amygdala circuitry following acute SSRI administration

Selective Serotonin Reuptake Inhibitors (SSRIs) are frequently used to treat depression and anxiety disorders, but when initially administered, they are known to cause a short-term enhancement of anxiety. SSRIs initially impair fear extinction and enhance Arc expression in cells of the bed nucleus of the stria terminalis (BNST). Arc is an immediate-early gene transcription factor, and this enhanced expression of Arc indicates activation of these cells in the oval nucleus of the BNST. In this study, we further investigated the activated cells in the oval nucleus. Using an antibody against the 5-HT_{2C} receptor, we showed that many of these Arc-positive cells express this receptor for serotonin.