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Abstract

The consolidation of newly acquired memories on a cellular level is thought to take place in the first few hours following learning. This process is dependent on *de novo* protein synthesis during this time, which ultimately leads to long-term structural and functional neuronal changes and the stabilisation of a memory trace. Immediate early genes (IEGs) are rapidly expressed in neurons following learning, and previous research has suggested more than one wave of IEG expression facilitates consolidation in the hours following learning. We analysed the expression of of Zif268, c-Fos and Arc protein in a number of brain regions involved in spatial learning either 90 minutes, four hours or eight hours