Stress-induced reinstatement of fix-c and esc-c cpp

Stress-induced reinstatement was assessed using the forced swim test (FST). TheFST is a common behavioral paradigm used to model stress-induced relapse to drug use(Kreibich & Blendy, 2004).

Twenty-four hours after a test for CPP extinction, mice wereexposed to FST. Thirty minutes prior to FST mice were injected with either a) MK-801(0. 3mg/kg), b) ifenprodil (10mg/kg), c) 7-NI (25mg/kg), d) antalarmin (10mg/kg) or e)vehicle. Doses for MK-801, ifenprodil and 7-NI were chosen based on their effectivenessat disrupting reconsolidation of Fix-C and Esc-C memory (Liddie & Itzhak, 2014, Chapter 2). A dose of 10mg/kg antalarmin was chosen because this dose was effective atattenuating swim-induced reinstatement of place preference developed using a fixed doseschedule of cocaine (McReynolds et al.

, 2014). For the FST, mice were placed in abeaker (15cm wide x 19 cm deep) filled to 11cm with water (26±1°C) for 6 min. Thebeaker was filled with enough water to avoid tails touching the bottom. After 4minrecovery and drying under a heat lamp in their home cage, CPP was measured for 20min. Because we found a significant effect of 7-NI on suppressing stress-inducedreinstatement, we also investigated the amount of time mice spent floating/immobile ineach of five separate FST trials during a period of one month following a singleadministration of 7-NI or vehicle. Immobility during FST is often interpreted asdepression-like behavior. Thus drugs that reduce immobility during FST are consideredto possess antidepressant properties (Petit-Demouliere et al., 2005).