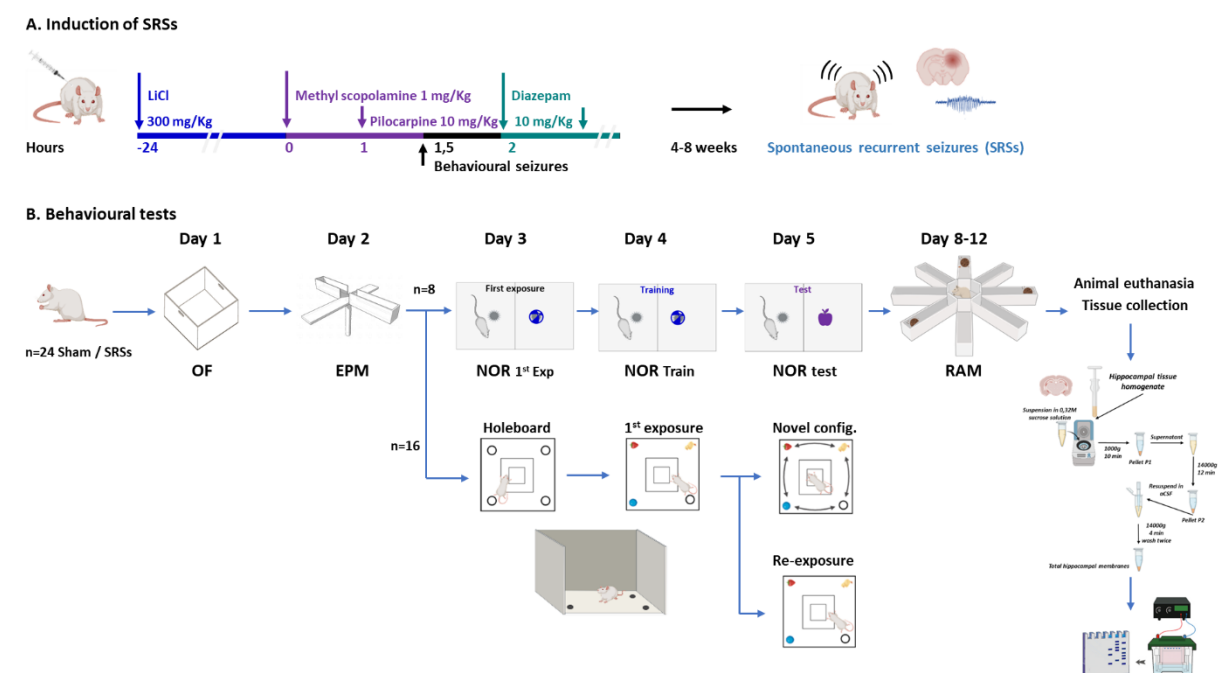


# **Impaired Response to Mismatch Novelty in the Li<sup>2+</sup>-Pilocarpine Rat Model of TLE: Correlation with Hippocampal Monoaminergic Inputs.**

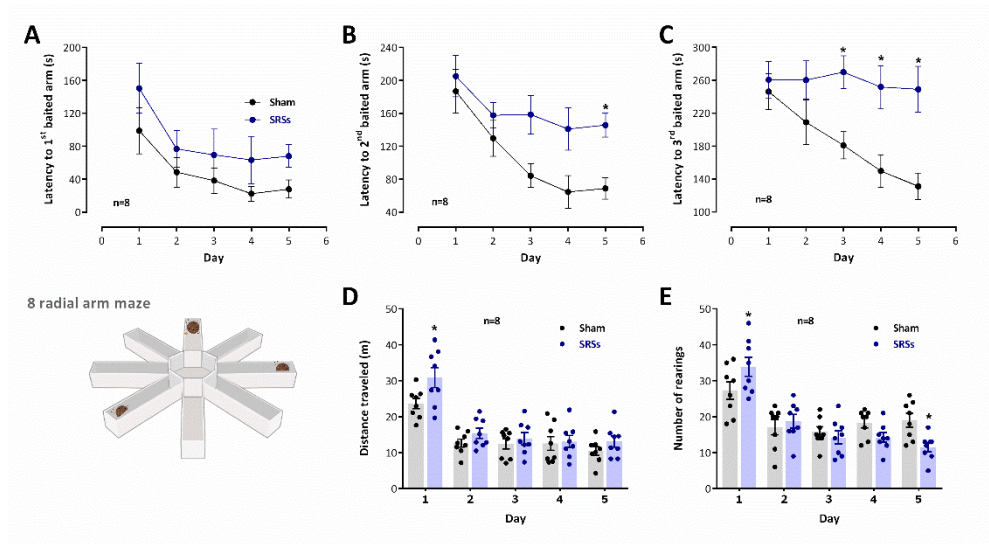
Carlos Nascimento, Vasco Guerreiro-Pinto, Seweryn Pawlak, Ana Caulino-Rocha, Laia Amat-Garcia and Diana Cunha-Reis \*

\*Correspondence: Departamento de Biologia Vegetal, Faculdade de Ciências, Universidade de Lisboa, Campo Grande, 1749-016 Lisboa, Portugal; dcreis@ciencias.ulisboa.pt

## **Supplementary Figures:**



**Supplementary Figure S1 – Experimental workflow for induction of SRSs with Li<sup>2+</sup>-pilocarpine in the rat (A.) and for behavioural evaluation (B.).** In A., the sequential drug treatments required to induce and terminate behavioural seizures are shown in the left and the development of spontaneous recurrent seizures (SRSs) within 4-8 weeks are shown on the right. In B., the sequence and division of animals to the different tests is shown sequentially. EPM – elevated plus maze test; NOR – Novel Object recognition test; OF- Open field test; RAM – radial arm maze test for spatial memory.



**Supplementary Figure S2 – Impaired learning in the radial arm maze in the Li<sup>2+</sup>-pilocarpine rat model of epilepsy.** Learning performance in the RAM was evaluated by the latencies to find the first (A.), second (B.) and third (C.), baited arms. Global exploratory activity in the RAM was evaluated by the total distance travelled (D.) and number of rearings (E.) during each trial. Total trial duration was of 5 min for each session. A schematic representation of the RAM apparatus is depicted (bottom, left) showing example of one possible configuration for the three baited arms. Values are the mean  $\pm$  S.E.M. \* $p < 0.05$  vs Sham controls (Two-way ANOVA).