MODIFIED SWIM TEST AS A MOUSE DEPRESSION PARADIGM OF ENHANCED COGNITIVE PROCESSING: THE ROLE OF GSK3β

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Postulations

1. Enhanced learning of adverse context is an important pathophysiological factor of a depressive syndrome (this thesis);

2. Its mechanisms can be mediated by over-expression of GSK3β in the prefrontal cortex in susceptible individuals (this thesis);

3. The hippocampus and prefrontal cortex play differential roles in GSK3β-mediated contextual conditioning associated with depressive state (this thesis);

4. The modified swim test based on delayed testing can serve as a paradigm for abnormal acquisition of adverse memories during depression (this thesis);

5. Treatment with imipramine or thiamine (vitamin B1) prevents enhanced contextual conditioning of adversities and over-expression of brain GSK3β (this thesis);

6. Thyroid hormone T2 and thiamine (vitamin B1) can be exploited as new supplementary antidepressant therapies (this thesis);

7. “You must acquire the best knowledge first, and without delay; it is the height of madness to learn what you will later have to unlearn” (Erasmus; 1497);

8. “Learn the ABC of science before you try to ascend to its summit” (Ivan Pavlov; 1936);
9. “Who reminds of past insults, is to lose an eye” / “Let sleeping dogs lie” (Russian proverb);

10. “To study, to study and once again, to study!” (Vladimir Lenin; 1924).