DEPRESSION AND ANIMAL RESEARCH

While depression is a complex human disorder, rodents exhibit some hallmark behaviors that mimic symptoms of depression in humans, including impaired cognitive function and anhedonia (a lack of motivation).

Rodent studies demonstrate that reductions in dopamine receptors within the nucleus accumbens, a brain region important for reward and motivation, are associated with anhedonia.

Antidepressants increase the creation of new neurons in the brain regions associated with memory and cognitive function, including the hippocampus and prefrontal cortex.