

Markers of Major Depression Disorder

-- Genetic vulnerability exacerbated by stress leads to negativity bias, automatic sensitivity to negative emotion, loss of thinking functions and feelings of depression.

	Disposition	Emotion	Feeling	Thinking	Self Regulation
MDD / Depression	<p>5-HTTLPR Short Allele with ↑ Stress ^{1,5}</p> <p>COMT Met with ↑ stress ^{1,6}</p> <p>BDNF Met66 Polymorphism with ↑ Stress ^{1,2,3}</p> <p>↓ Hippocampal Grey Matter ²</p>	<p>↑ Negative Emotion Bias ¹</p> <p>↑ Amygdala Activation to Negative Emotions¹</p>	<p>↑ Prolonged Depressed Mood ¹</p> <p>↑ EEG Alpha Asymmetry ³</p> <p>Altered Ventral-dorsal-prefrontal Activity</p>	<p>Slow Response Speed ¹</p> <p>↓ Executive Function ¹</p> <p>↓ Attention Concentration ¹</p> <p>↓ Impulsivity ¹</p> <p>↓ Memory ¹</p> <p>↓ ERP P300 ⁷</p>	<p>↑ Negativity Bias ^{5,6}</p> <p>Altered HPA Activity ¹</p> <p>↓ Heart Rate Variability ¹</p>

ERP P300 for Attention tasks

HPA: hypothalamic- pituatuitary-adrenal axis

MDD References

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