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## Association between Testosterone, Androgen Receptor Polymorphisms, and Mood

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## **Association between Testosterone, Androgen Receptor Polymorphisms, and Mood**

The hormone testosterone (T) plays many important roles in the male nervous system; however little is known about its role in mood. Recent findings suggest that insufficient T activity in the brain may contribute to negative affect in men. Furthermore, some evidence indicates that structural variations in the Androgen Receptor (AR), the primary receptor to which T binds, may also contribute to mood regulation and potentially to an increased risk for depression. However, there has been little research on this topic. My proposed study will investigate the relationship between T levels, AR variants, and negative affect in healthy young men to explore whether low T and/or AR variants are associated with greater affective negativity. I will also investigate AR variants among demographically matched males who are receiving treatment for depression to determine whether AR may confer increased risk. This work will advance our understanding of testosterone's role in emotional regulation.