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Project Proposal

*Introduction*

Schizophrenia is a mental disorder that affects roughly 1% of the population (RIPKE BIO). It is characterized by two or more of the following: delusions, hallucinations, disorganized speech, and catatonia (DSM 5). Schizophrenia usually manifests in a patient’s late adolescence or young adulthood (TRUBETSKOY) and is currently incurable.

Unfortunately, the mechanisms surrounding the disorder are vastly unknown. The “original dopamine hypothesis” states that schizophrenia may be caused by an overabundance of dopamine in the cerebral fluid; however, it is now widely accepted that this, if true, can not possibly be the entire story (INSERT SOURCE). Unfortunately, the first-line treatment for schizophrenia are antipsychotics, all of which target the type-ii-dopaminergic receptor (RIPKE). While these treatments do appear to work well for some patients, there are a significant number that respond only slightly or not at all. For these patients, it is overwhelmingly important that other causes for this disorder are discovered and published so that other treatments may be introduced.

Many researchers are looking into identifying the loci associated with schizophrenia. Currently, there are around 100 identified loci (INSERT SOURCE); however, there are disagreements among the research community about which of these are specific to schizophrenia or significant to treatment at all. These loci are important because they may be able to pinpoint the specific location of singular nucleotide polymorphisms (SNPs) in schizophrenia patients, and this information can be used in further research to identify the implications and genetic transmissibility of those particular mutations. This could lead to both preventative treatments and management treatments for those suffering from this disorder.

*Proposed Project*