

Title: Pharmacogenetics of Opioids

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There is now a growing body of evidence indicating that genetic variance in a number of genes can affect the way a person responds to an opioid drug whether used for pain treatment or for substitution programs. This project will involve an examination of such variation at the genetic, regulatory and functional level in pain patients and methadone-maintenance patients. It involves collecting of blood samples and genotyping for multiple variants of the opioid receptor and signal transduction genes and determining the relationship to drug efficacy and safety. In addition, cloning and expression studies will be conducted to evaluate the in vitro functional effects of these gene variants.