

# A Joseph Bloom PhD Postdoc, A Goate lab

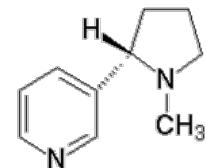


**COGEND** (Collaborative Study of the Genetics of Nicotine Dependence) PI: Laura Bierut MD  
>40,000 SNPs genotyped in >2,000 smokers defined as Dependent Cases (FTND=1-4) and Controls (FTND=0)

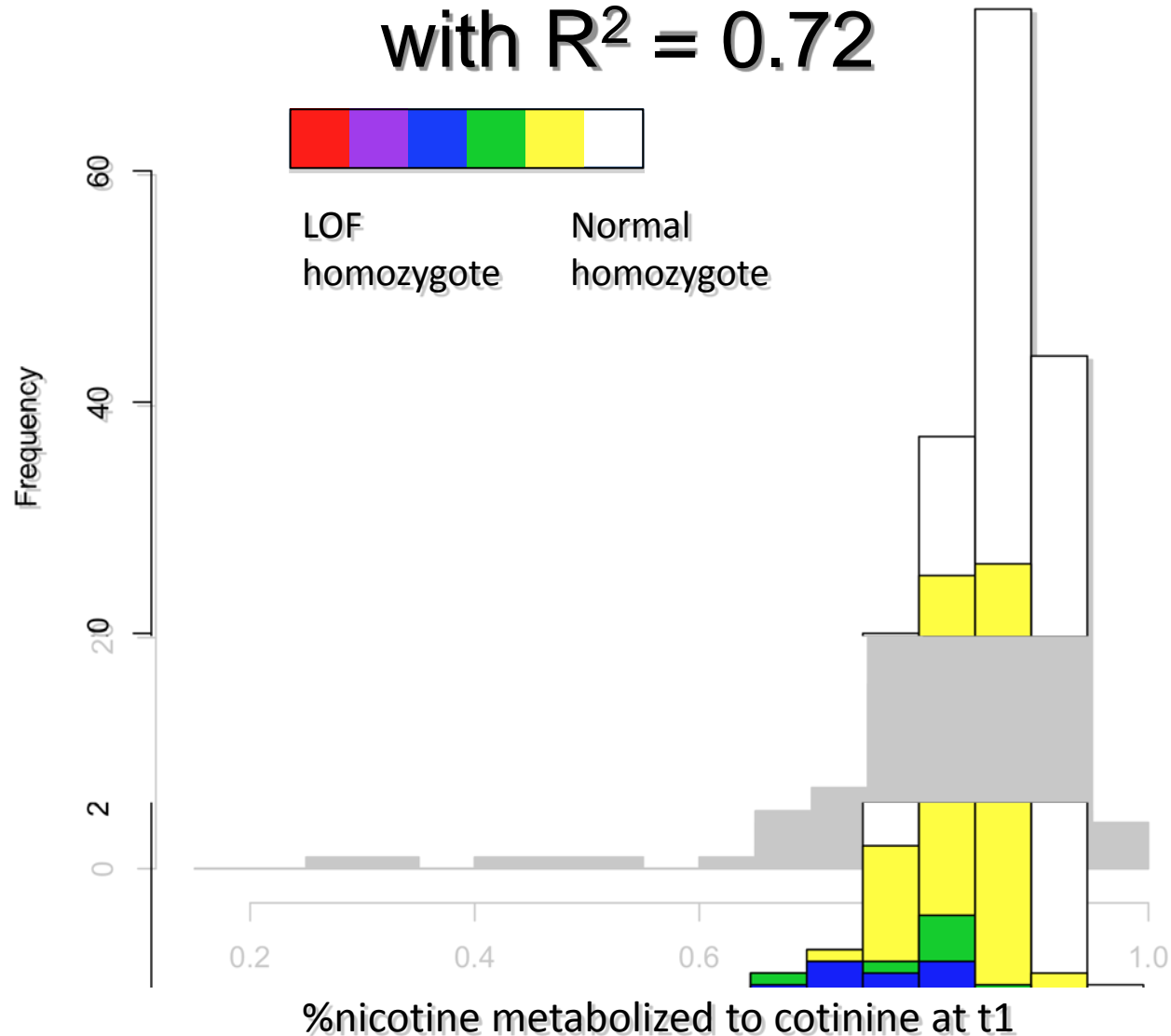
## **COGEND Metabolism Project**

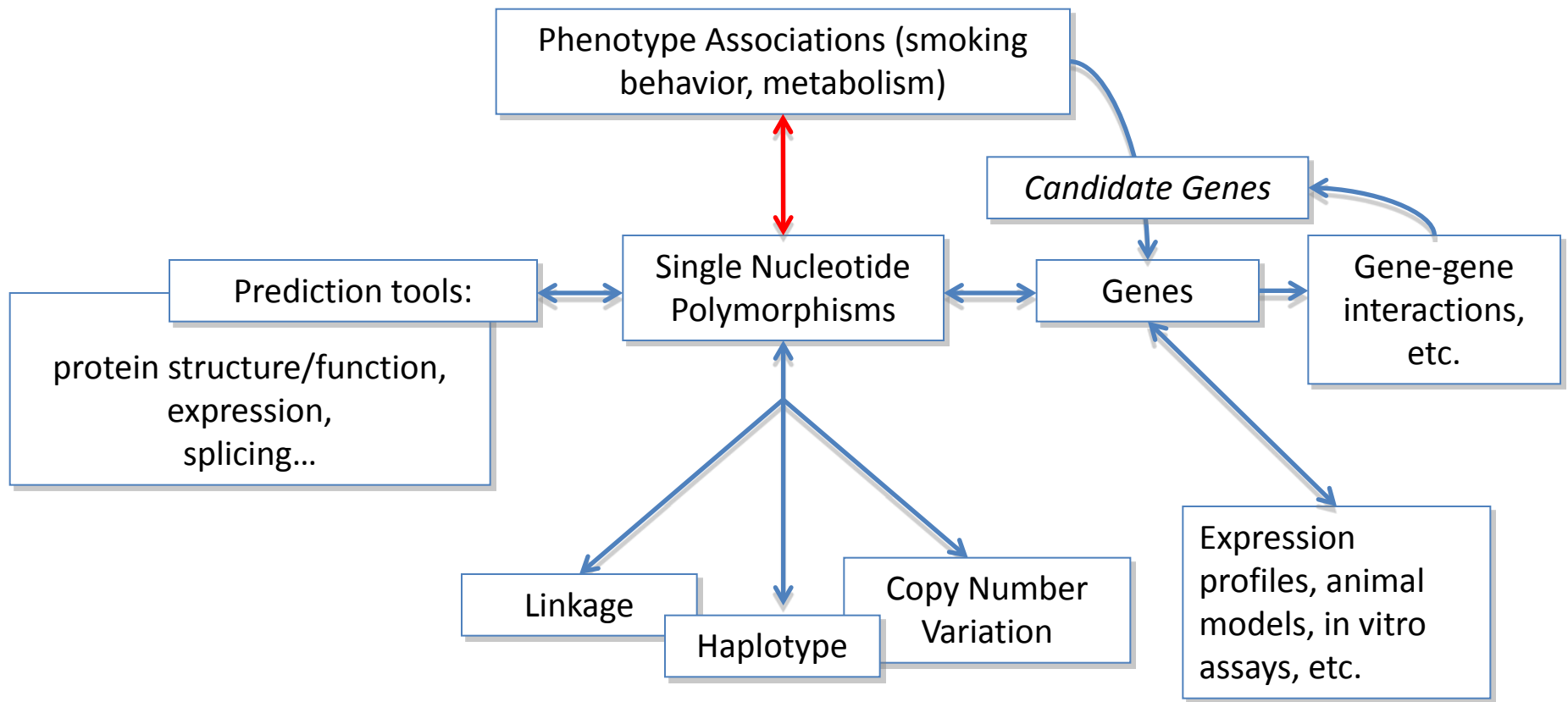
First-pass nicotine metabolism measured in ~190 current and former smokers within COGEND

Additional genotyping in candidate genes



# Genetic model including key CYP2A6 polymorphisms & gender predicts phenotype with $R^2 = 0.72$





*Civilization advances by extending the number of important operations which we can perform without thinking*  
 -Alfred North Whitehead