

A New Genome-Wide Association Study of Antisocial Behavior: Expanding the BroadABC

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Behavior Consortium

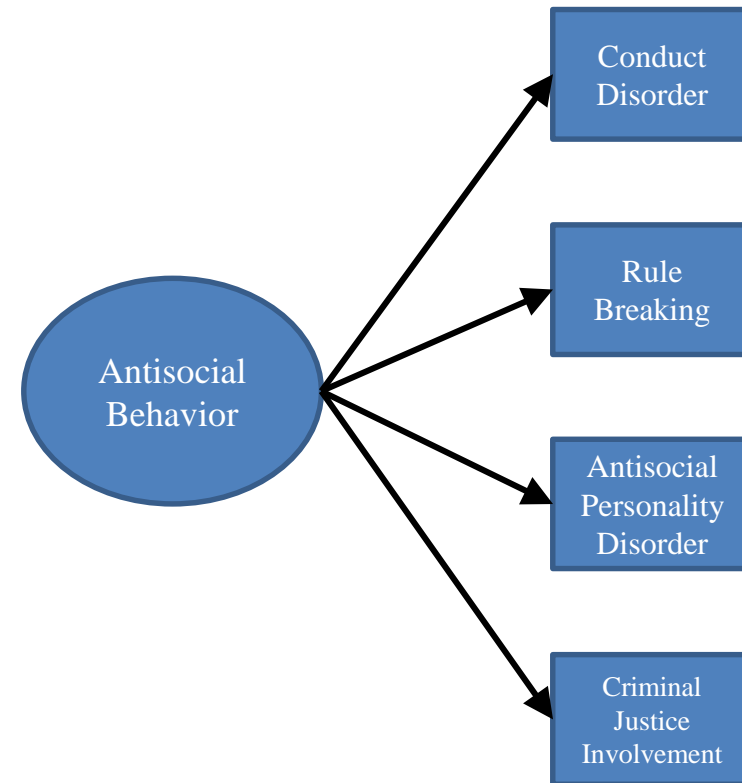
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Broad Antisocial Behavior Consortium (BroadABC)

About the BroadABC

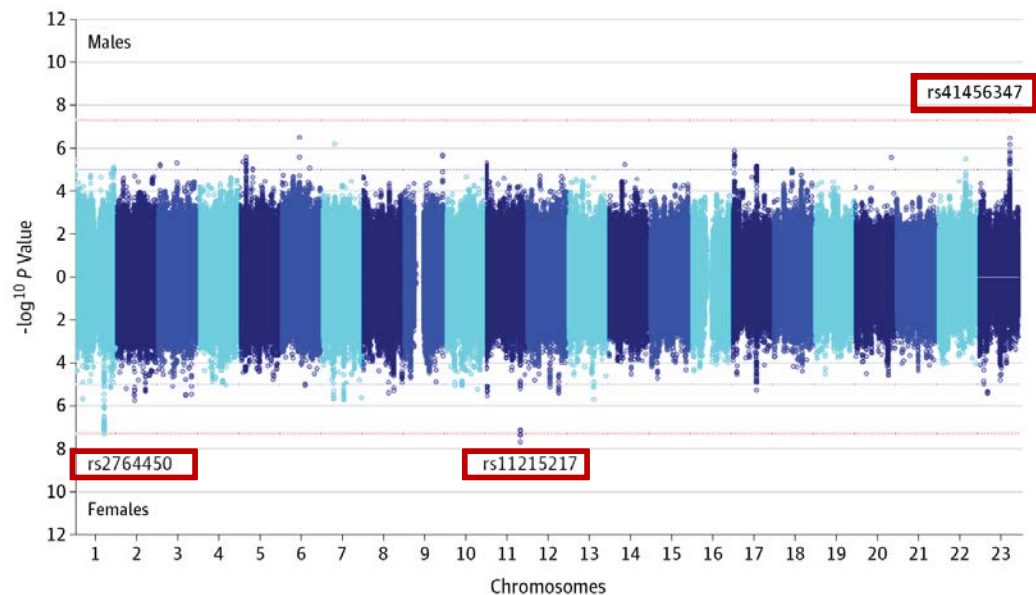
- The largest genome data consortium focused on antisocial behavior in the world ($N=25,781$)
- Takes a broad operationalization of antisocial behavior in order to increase sample size
- Published previous results in JAMA Psychiatry (2017)
- Currently collecting new samples for another round of analysis



The BroadABC in JAMA Psychiatry (2017)

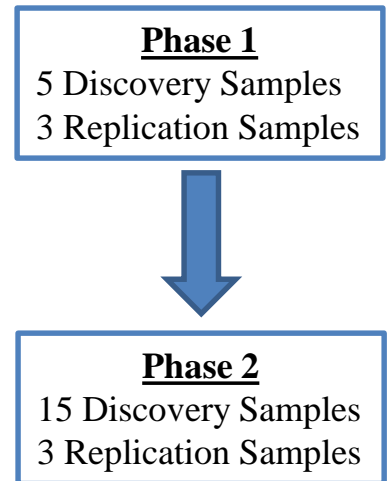
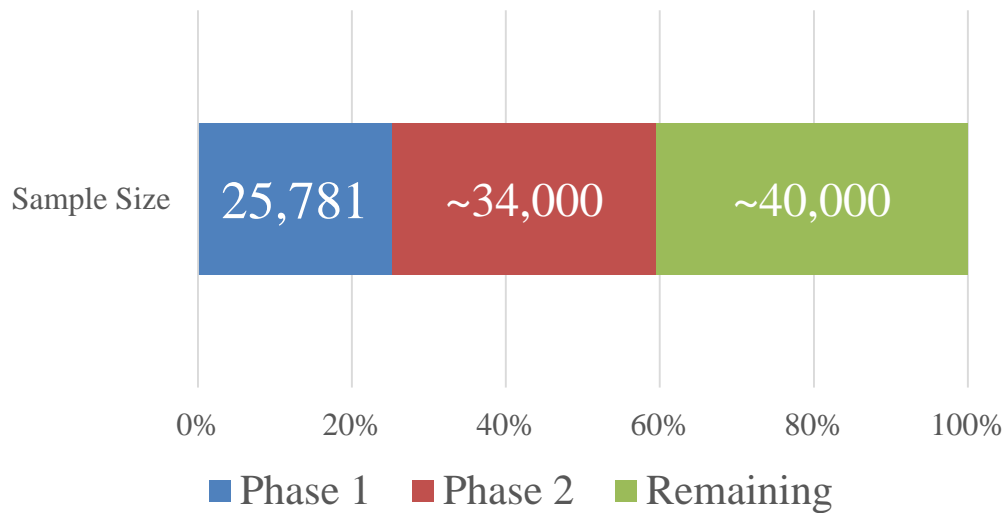
Analysis

- 5 Discovery Samples
($N=16,400$)
- 3 Replication Samples
($N=9,381$)
- Identified 167 promising SNPs ($P < 1.0 \times 10^{-5}$)
- Identified 3 sex-discordant SNPs approaching genome-wide significance



Expanding the BroadABC

New Sample Size Goal: 100,000 Individuals
Current Phase 2 sample: ~60,000



Join the BroadABC!

Examples from Phase 2

- **Add Health Study**
 - Role: Discovery Sample
 - Phenotype: Violent/nonviolent behavior
- **Dunedin Study**
 - Role: Replication Sample
 - Phenotype: Violent/nonviolent behavior, criminal justice involvement



Lead Analysts



Jorim Tielbeek



Ada Johansson

Thank You