## Finding correlation for acmPRS

## November 9, 2016

## Goals:

- Find Var(acmPRS)
- Find Cov(Y, acmPRS)

## **0.1** Finding Var(acmPRS):

Define

$$\hat{S}_i = \sum_{j=1}^{m_i} \hat{\beta} \mathbf{G_j}$$
 
$$\hat{S}_{acm} = \sum_{i=1}^{c} n_i r_i \sqrt{\frac{h_i}{h_1}} \hat{S}_i$$
 
$$\hat{S}_{acm} t = 0$$