**Talk on 2011-10-21**

1. Finish the type I error for our method (both the epi test and the One Gene Test). In detail, for the Epi test, we need to consider 3 different cases: 1). G1=0, G2=0, G12=0; 2). ; 3). . The same to the One Gene Test: 2 different cases are needed to add: 1). ; 2).
2. For the Warfarin data, we need to add the result from PCA and PLS. (Hope they are not as good as our method).
3. About the Average similarity matrix, Jung-Ying shown me another way to prove that Saverage is positive definite: Suppose we need to compare the similarity between person i and person j on the *l*-allelic marker. According to my idea, just look at the matrix to get the similarity score of for i and j on the marker. But Jung-Ying’s idea is that transfer the person i’s genotype into and vector and the score would . From this view, the Saverage matrix should always be positive definite. I think the easiest way to check that is to calculate all the possible then compare to Saverage to see the difference.
4. For the simulation, rewrite the result part, and pay more attention to how to explain the result. Try to figure out the way. (Jung-Ying told me I should be passionate about my project, not working as her secretory)