Reviewer’s report

Title: The uncoupling protein 1 gene, UCP1, is expressed in mammalian islet cells and associated with acute insulin response to glucose in African American families from the IRAS Family Study

Version: 1 Date: 14 December 2006

Reviewer: serrano-rios manuel

Reviewer’s report:

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

It is a very interesting paper with two clearly different parts: a) Associations of UCP1 variants with HDL-C levels and AIRg; b) Expression pattern of UCP1 gene in mammalian pancreas.

The paper is consistently appropriate in hypothesis, methods (outstanding the genetic analysis and interpretation of results) and Discussion.

Discretionary Revision:
1) The real novel finding is that the UCP1 gene is expressed in human pancreas, which will likely deserved a separate research (report) paper since that expression of the UCP1 gene in human pancreas likely will high biological relevance in wider scoper than insulin secretion (eg. substrate-energy-utilization by the endocrine pancreas) and impact of glucose (intermediary) homeostasis.

2. Authors should explain in more detail why the UCP1 A-3826G SNP was not consistent with HWE in the San Antonio Hispanic population. Also comments on differences in anthropometric parameters and prevalence of diabetes between the three populations from Table 1 should be discussed.

3. The A-3826G SNP has been associated with obesity in women from Spain. However, authors did not find such association in the Hispanic San Antonio families. This issue should be discussed in the manuscript.

What next?: Accept after discretionary revisions

Level of interest: An article of outstanding merit and interest in its field

Quality of written English: Acceptable

Statistical review: No