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: 12 December 2006

Reviewer: Raffaella Buzzetti

Reviewer's report:

Dear Authors,

I found the paper entitled “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” mostly confirms previous data. The finding that that UCP1 is expressed in pancreatic islets is interesting but the paper is unclear. For this reason I suggest that this paper should be reconsidered after major revisions.

-----------------------------------------------

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

1) Figure 2 is unclear. The results of RT-PCR gel should be confirm with real time experiment.
2) Authors in the results section and in tables should describe all findings (also not statistically significant results).
3) For example in table 3 is omitted the analysis conducted in Saint Luis Valley Population
4) Authors should explain to the Reviewer in a more extensive way the statistical method (GEE approach) used to study the association between polymorphisms and the traits related to glucose homeostasis, lipid and obesity

-----------------------------------------------

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

1) Authors should specify the number of subjects analysed for each polymorphism described in Table 2.
2) The genotypes and the number of subjects analysed should be specified in table 2 and in table 3: the authors should add the genotypes, deleting 1/1,1/2 and 2/2.
3) Authors should specify the family components in the “Material and Methods” section
4) Authors should explain to the Reviewer in a more extensive way the statistical method (GEE approach) used to study the association between polymorphisms and the traits related to glucose homeostasis, lipid and obesity.
5) The Authors should repeat the genotypic analysis excluding diabetes patients.
6) Table 1 can be deleted.

-----------------------------------------------

Discretionary Revisions (which the author can choose to ignore)

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No