Author's response to reviews

Title: ADHD and Disruptive behavior scores are associated with MAO-A and 5-HTT genes and with platelet MAO-B activity in adolescents

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Version: 2 Date: 23 May 2007

Author's response to reviews: see over
Dear Editor,

The enclosed manuscript, "ADHD and Disruptive behavior scores are associated with MAO-A and 5-HTT genes and with platelet MAO-B activity in adolescents", is submitted for publication in BMC Psychiatry.

We here report on associations between markers of central serotonergic function and dimensions of the ADHD phenotype in a normal population. We believe that psychiatric disorders and personality disturbances are extremes of the normal variation in personality traits. Hence, working with a population-based sample is very informative in order to capture the whole spectra of ADHD traits, including sub threshold diagnoses.

In the present study we use both genetic data and data at the protein level as markers for serotonergic function in the subjects.

The results presented here are in line with the hypothesis that a weak serotonin system is implicated in behavioral disorders. To our surprise, subjects heterozygote for the 5-HTT LPR, deviate from other genotypes with regard to ADHD phenotype. Such results have been reported before but there is to date no good explanation for this phenomenon.
This manuscript has not been published elsewhere, however, parts of the results in the present study have been presented at the 53rd Annual meeting of the American Academy of Child and Adolescent Psychiatry Congress 2006 in San Diego and at the 17th International Association for Child and Adolescent Psychiatry Congress 2006 in Melbourne, Australia.

Yours sincerely,

Kerstin Malmberg and Hanna-Linn Wargelius