Childhood and Adolescent Depression.
The Role of Environmental Adversities, of the Serotonin Transporter Gene and of their Interaction, in a Developmental Perspective

Maria Nobile, 11th October 2012

1) A functional polymorphism in the promoter region of the serotonin transporter gene (5HTTLPR) plays an important role in the regulation of serotonin re-uptake from the intrasynaptic cleft both in adults and in children.

2) The 5-HTTLPR is a genetic substrate for youth internalizing behaviour: the less efficient allele yields greater risk concomitantly with exposure to chronic environmentally adversities during adolescence.

3) The 5-HTTLPR polymorphism plays also an important role in determining the continuity/discontinuity of depressive traits throughout a developmental period (i.e. adolescence) during which internalizing problems increase.

4) Primary prevention strategies, emphasizing social and educational intervention, may reduce the likelihood of persistence of behavioural problems from early- to late-adolescence and, perhaps, to early adult years.

5) In the context of the forthcoming publication of DSM V, the concept of depression as a spectrum holds potential for the inclusion of more children and teens as experiencing this condition.

6) Dedicated recommendations are needed to govern unique ethical, legal, and social issues surrounding pediatric biobanking.

7) Prosocial behaviour or altruism, are part of our genetic endowment and are modified by evolutionary pressures and cultural values, thus leading to human styles of moral behaviour (P. Churchland).

8) The regulatory agencies’ actions in North America and Europe bring about unexpected effects on the paediatric antidepressant prescription and on childhood suicide rate.

9) “Today the fact is that understanding life means changing life” (H. Nowotny & G. Testa)

10) “We’ve got no money, so we’ve got to think.”(E. Rutherford 1871-1937).