

Stellingen

behorend bij het proefschrift

Sculpting the Brain: the role of FMRP in synaptic plasticity

- I. Knowing the mRNAs at the synapses will shed light onto the molecular pathways involved in synaptic plasticity. (*this thesis*)
- II. *BCI*-mediated target recruitment and translational control of FMRP may not be restricted to neuronal cells. (*this thesis*)
- III. Although FMRP is generally quoted in literature as being responsible for mRNA transport into dendrites, no direct proof has been forwarded yet to corroborate this notion. (*this thesis*)
- IV. Treatment of fragile X syndrome has to be limited to treatment of individual symptoms. (*this thesis*)
- V. Quantum physics and chaos theory are usually not considered when interpreting experimental data, although any biological system is highly complex. (*this thesis*)
- VI. Emotions and the mind are not stark polar opposites, but rather the ends of a continuum.
Susan Greenfield; The private life of the brain
- VII. Partner preference formation in the socially promiscuous meadow vole is substantially increased by viral vector *V1aR* gene transfer into the ventral forebrain.
M. Lim, A. Wang, D. Olazabal, X. Ren, E. Terwilliger, and L. Young; Enhanced partner preference in a promiscuous species by manipulating the expression of a single gene; Nature 2004, Vol 429(6993):754-7
- VIII. Multifactorial disorders, instead of resulting from variations in many genes of small effects, may result from variations in fewer genes whose effects are conditional on exposure to environmental risks.
A. Caspi, K. Sudgen, T. Moffitt, A. Taylor, I. Craig, H. Harrington, J. McClay, J. Mill, J. Martin, A. Braithwaite, R. Poulton; Influence of life stress on depression: moderation by a polymorphism in the 5-HTT gene; Science 2003, Vol 301(5631):386-9
- IX. Science cannot solve the ultimate mystery of nature. And it is because in the last analysis we ourselves are part of the mystery we are trying to solve.
Max Planck
- X. Within any rigidly, logical system there are propositions (or questions) that cannot be proved or disproved on the basis of the axioms within that system.
Kurt Goedel; Ueber formal unentscheidbare Saetze der Principia Mathematica und verwandter Systeme; Monatshefte fuer Mathematik und Physik, 1931, Vol 38:173-198.
- XI. Mathematics, rightly viewed, posses not only truth, but supreme beauty – a beauty cold and austere, like that of sculpture.
Bertrand Russell

Surya Reis
Rotterdam, 19 October 2005