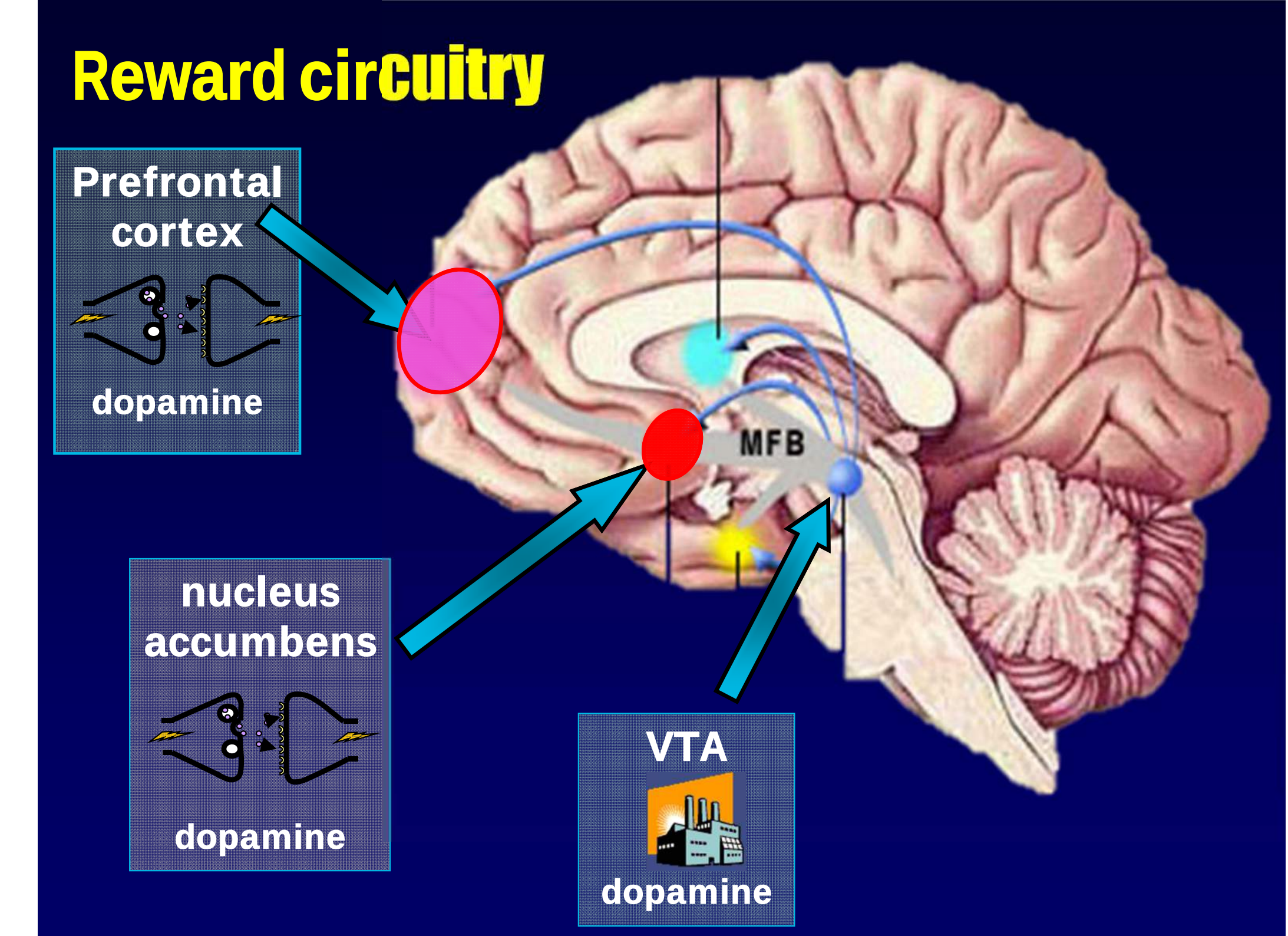
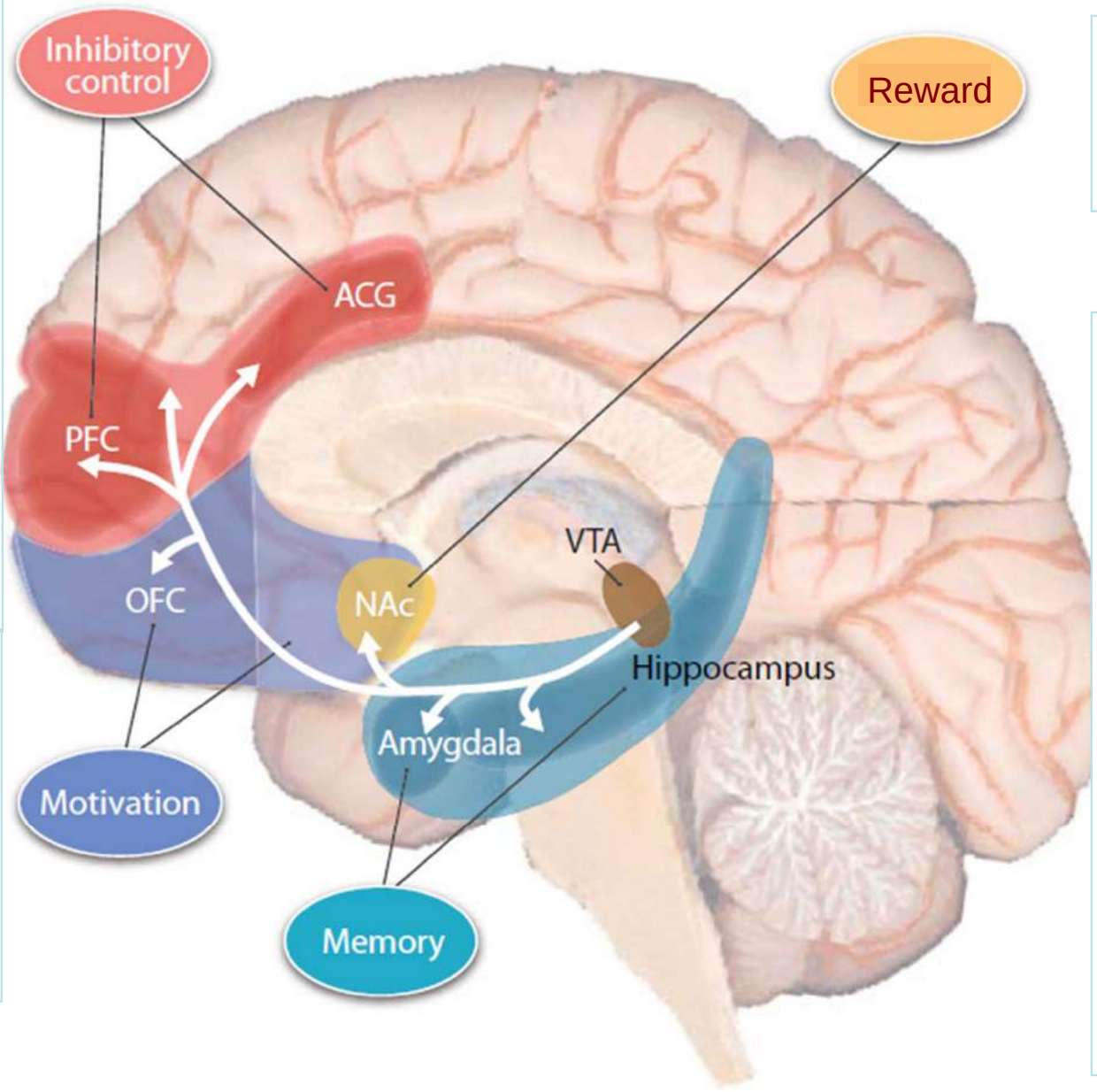
Reward circuitry



Il sistema motivazionale

Controllo inibitorio: controllo volontario dei comportamenti, processa la decisione di agire o non agire per procurare la sostanza

Motivazione: rilevanza dello stimolo (contesto e esperienze precedenti)

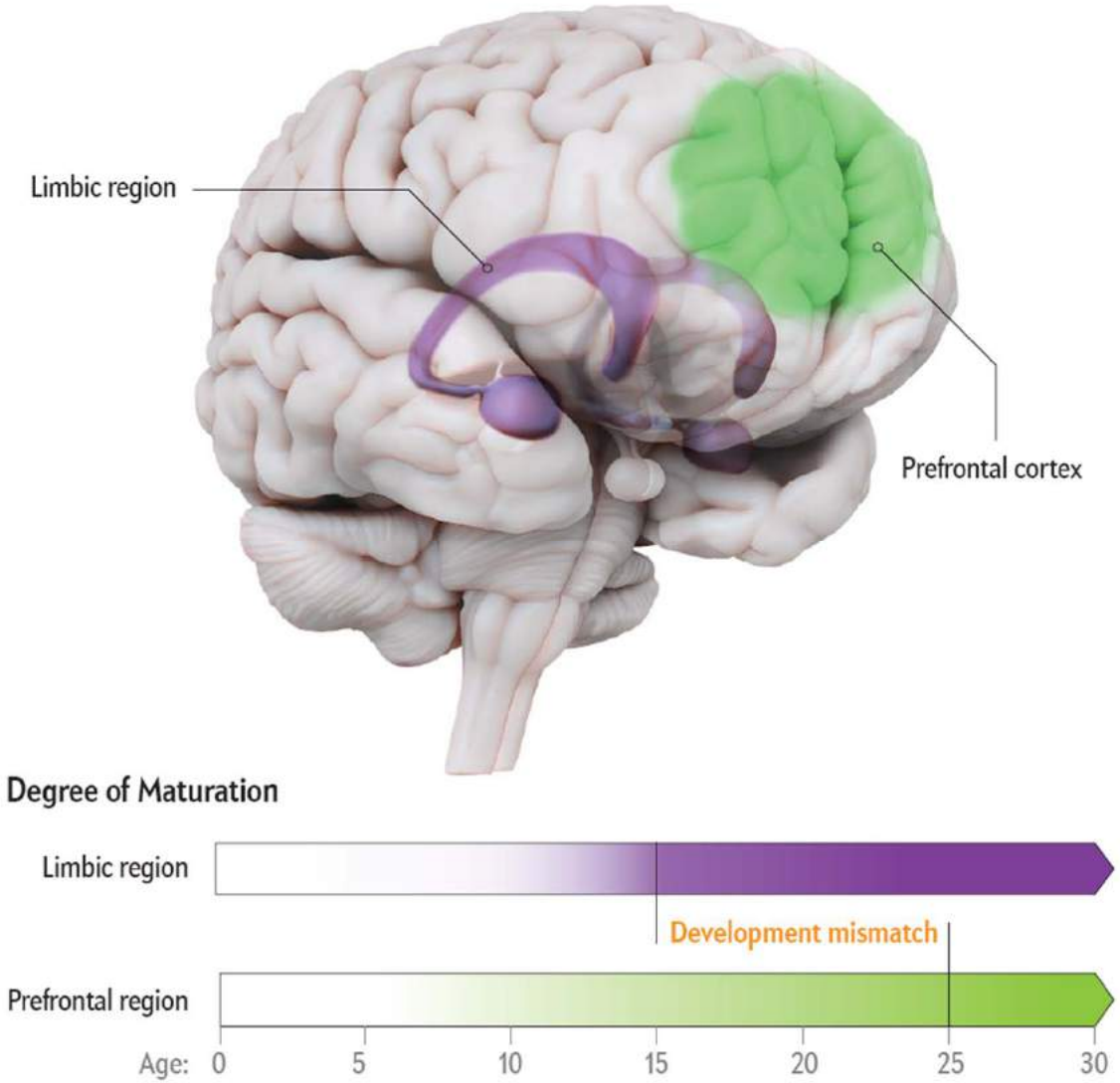


Reward: proprietà gratificanti

Memoria: il cervello impara ad associare uno stimolo ad un'esperienza piacevole o avversiva; in presenza dello stimolo lo «ricorda» e anticipa la gratificazione (cue)

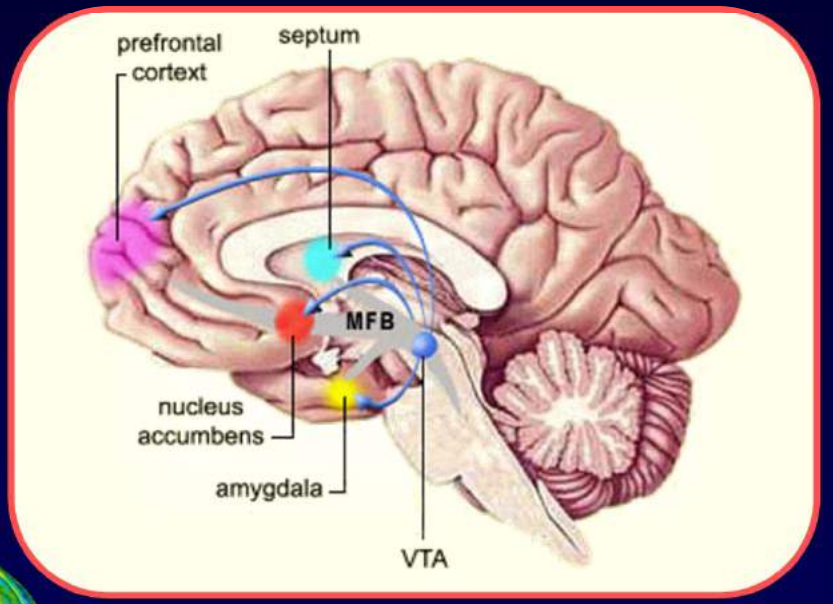
The Amazing Teen Brain

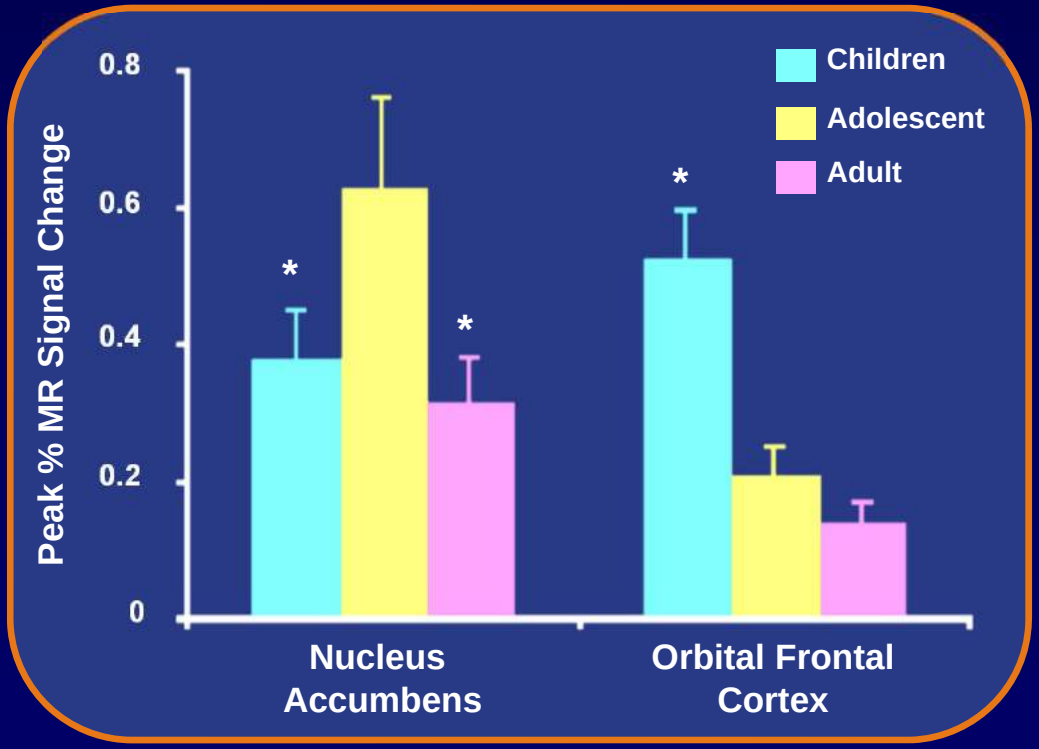
Scientific American, 2015

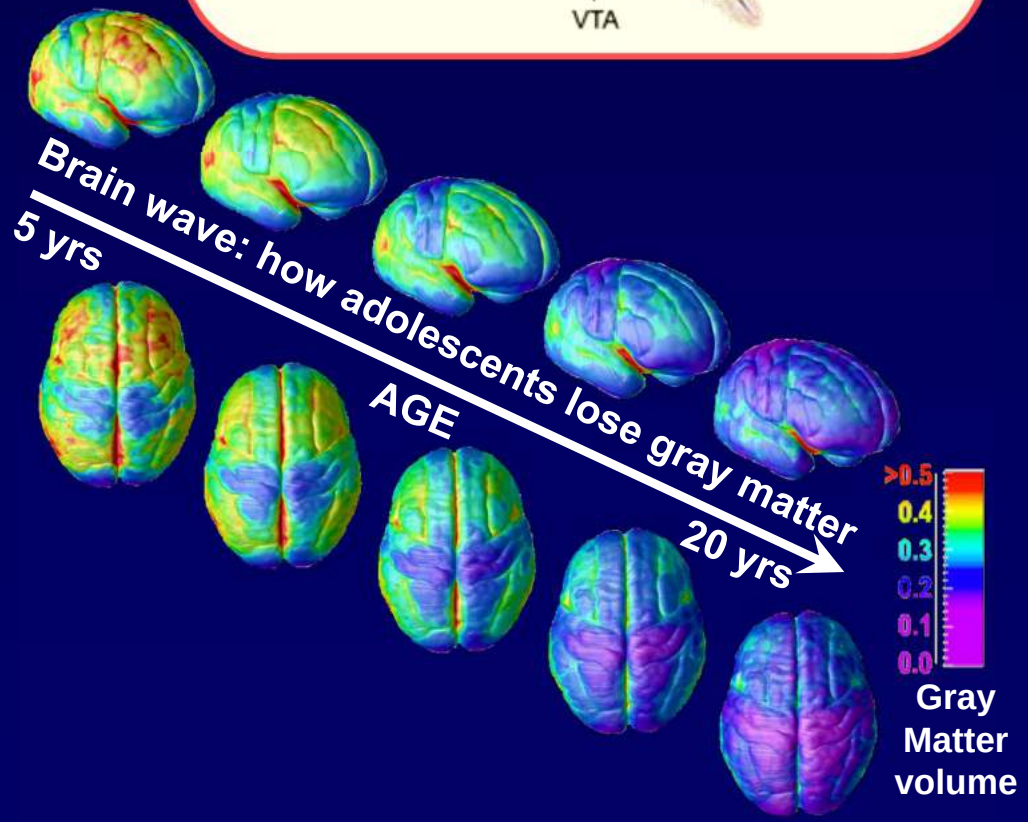


Earlier Development of the Accumbens Relative to Orbitofrontal Cortex Might Underlie Risk-Taking Behavior in Adolescents

A. Galvan et al., J. Neurosci, 2006

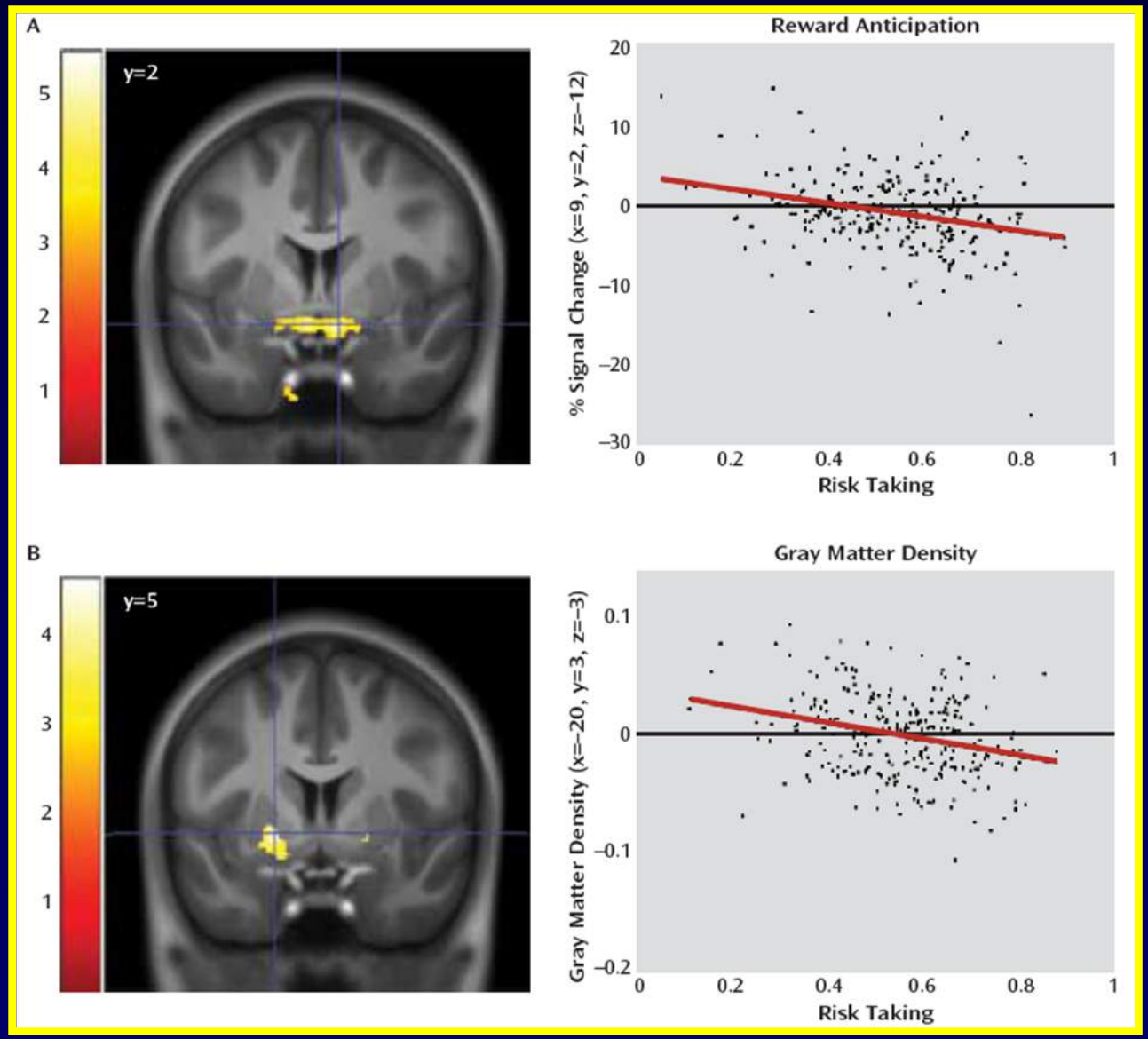






Risk Taking and the Adolescent Reward System : A Potential Common Link to Substance Abuse

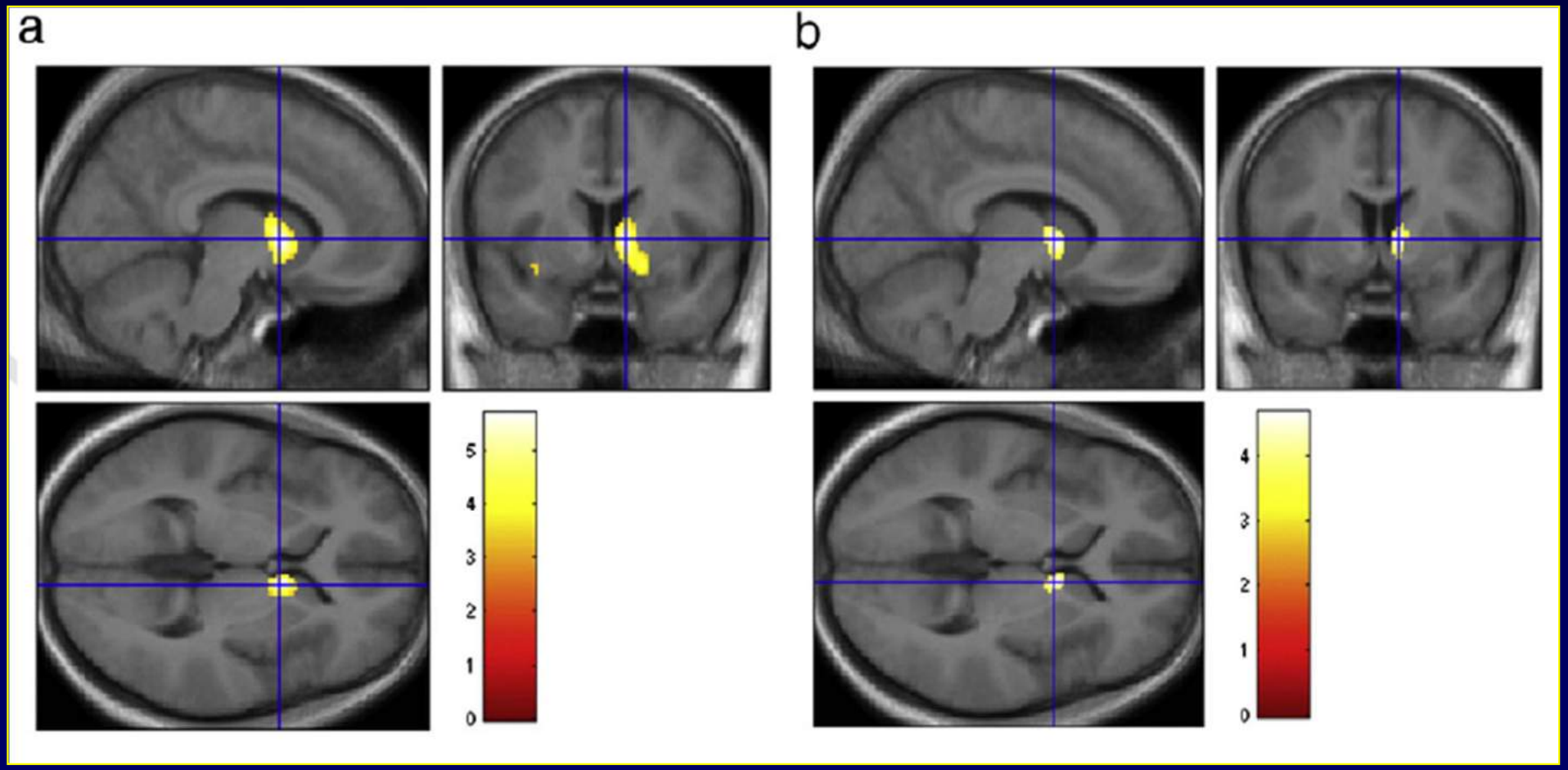
Am. J. Psychiatry, 2012



Le ricerche recenti indicano che gli adolescenti sono tre volte più sensibili degli adulti a sviluppare dipendenza inclusa quella dal gambling. Ciò si traduce in un incremento crescente di dipendenza al gambling nella popolazione

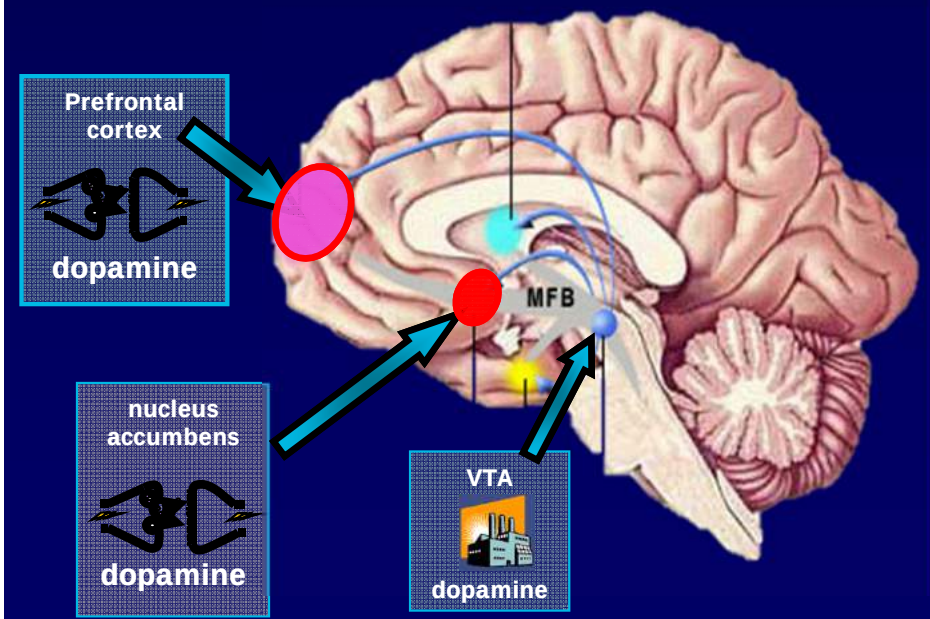
Mesolimbic dopamine release is linked to symptom severity in pathological gambling

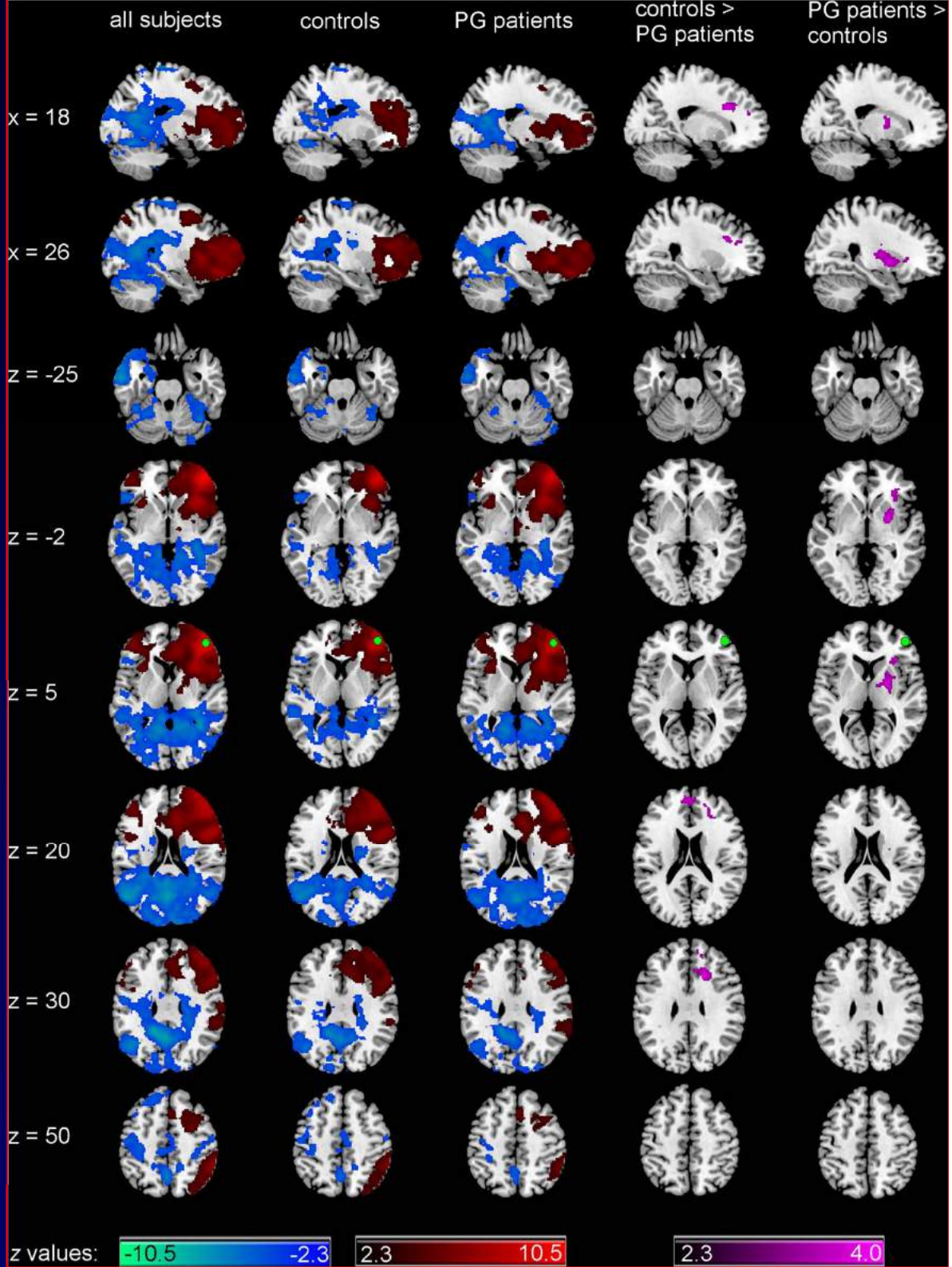
NeuroImage 2012



Increased Functional Connectivity between Prefrontal Cortex and Reward System in Pathological Gambling

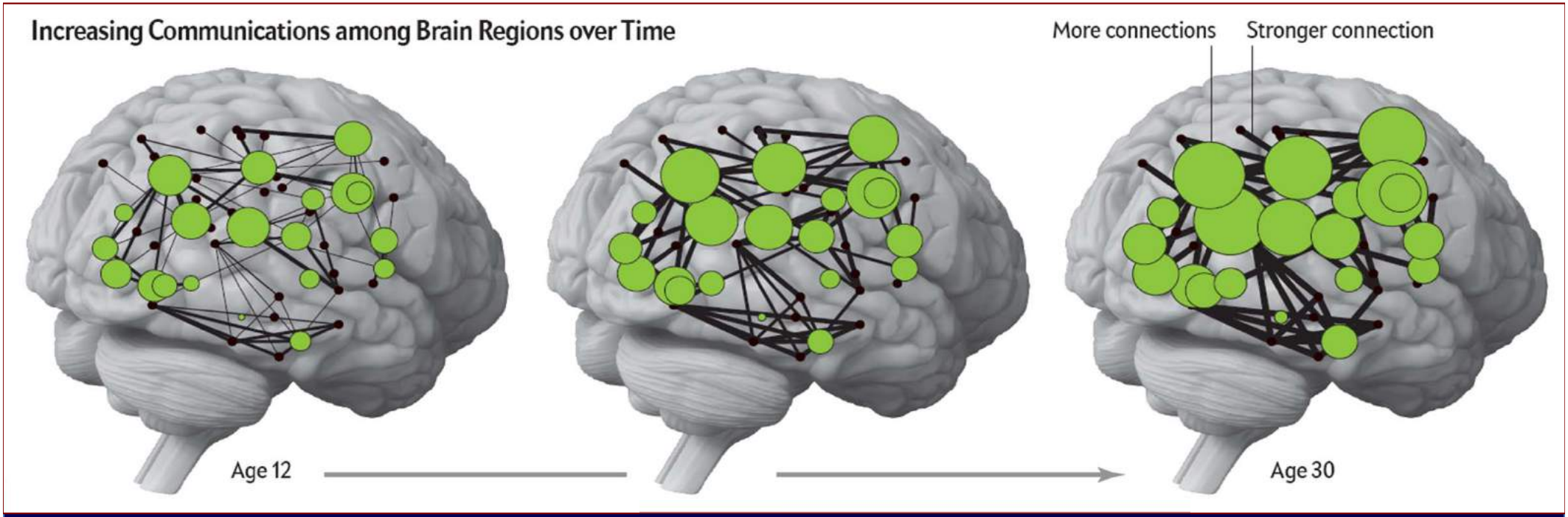
PLoS One, 2013





The Amazing Teen Brain

Scientific American, 2015



Reward circuitry