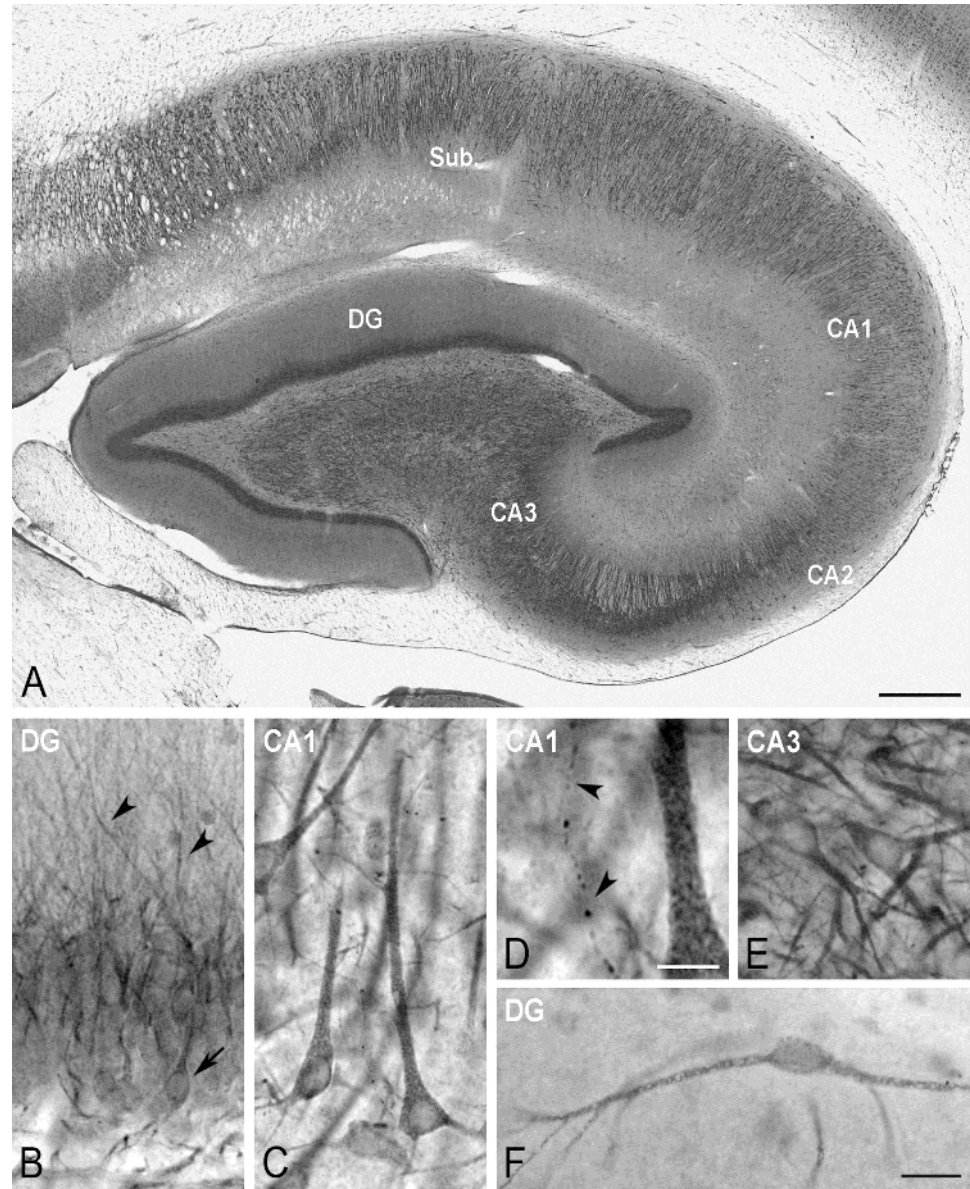
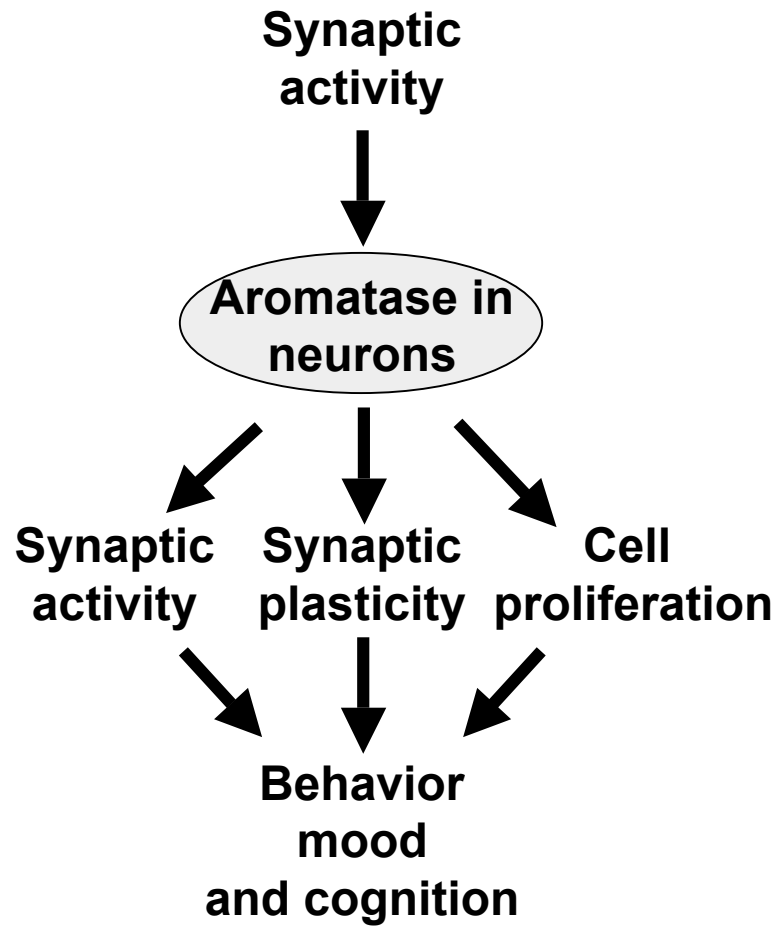
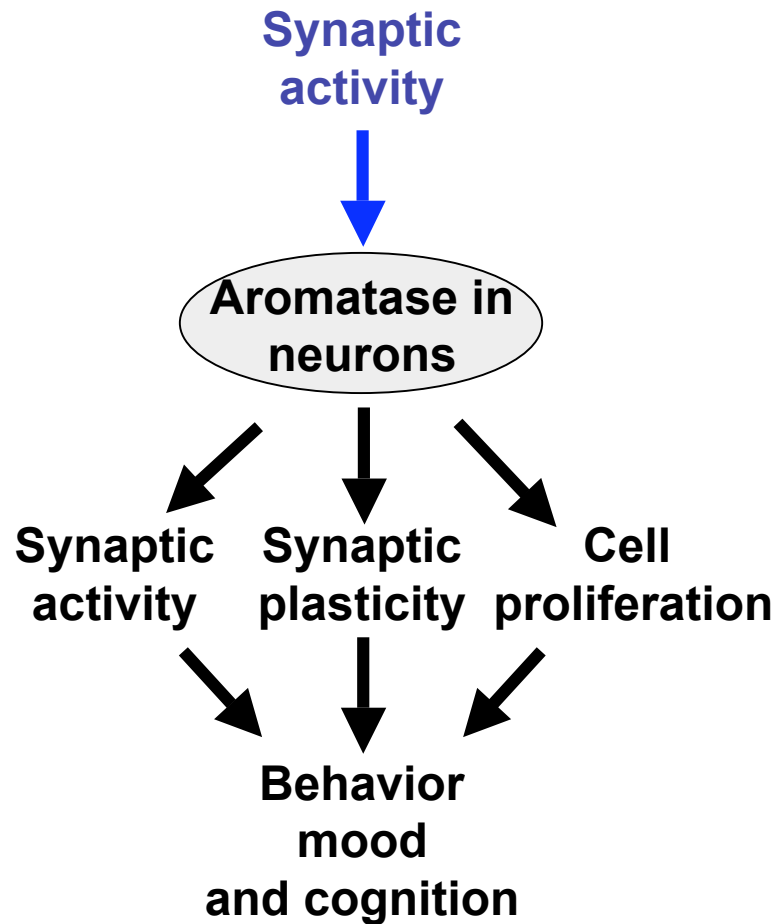
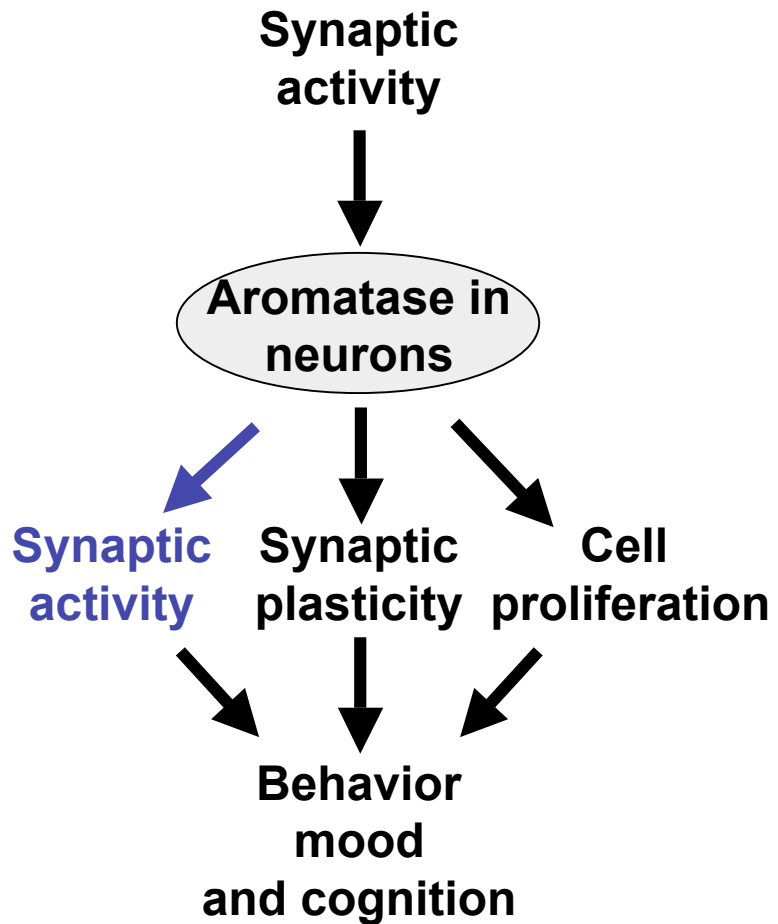


Physiological effects of AROMATASE

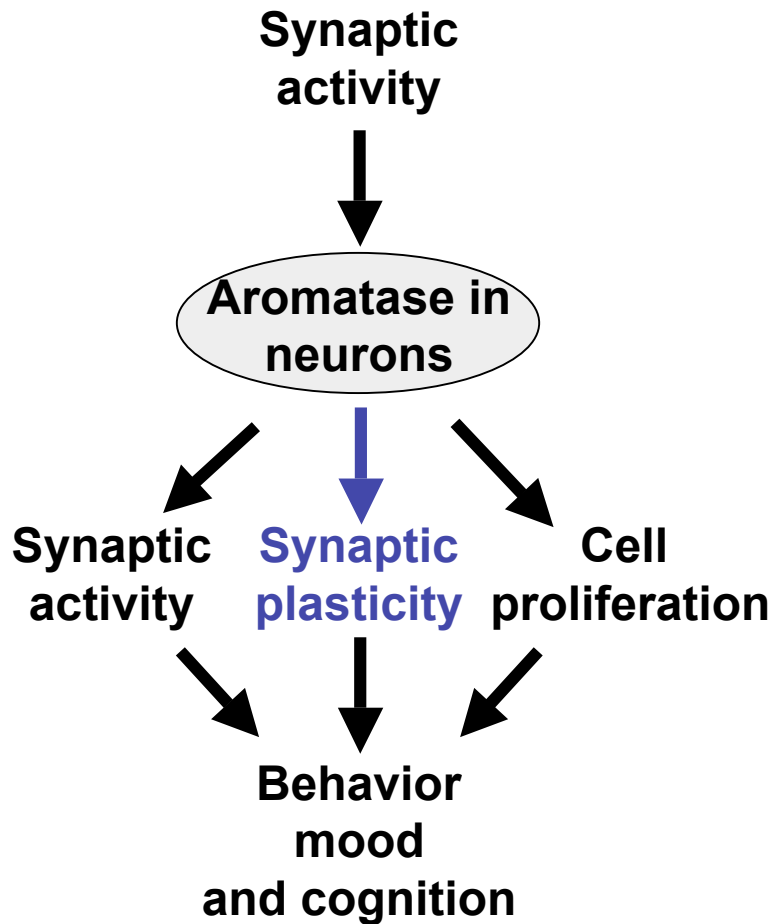




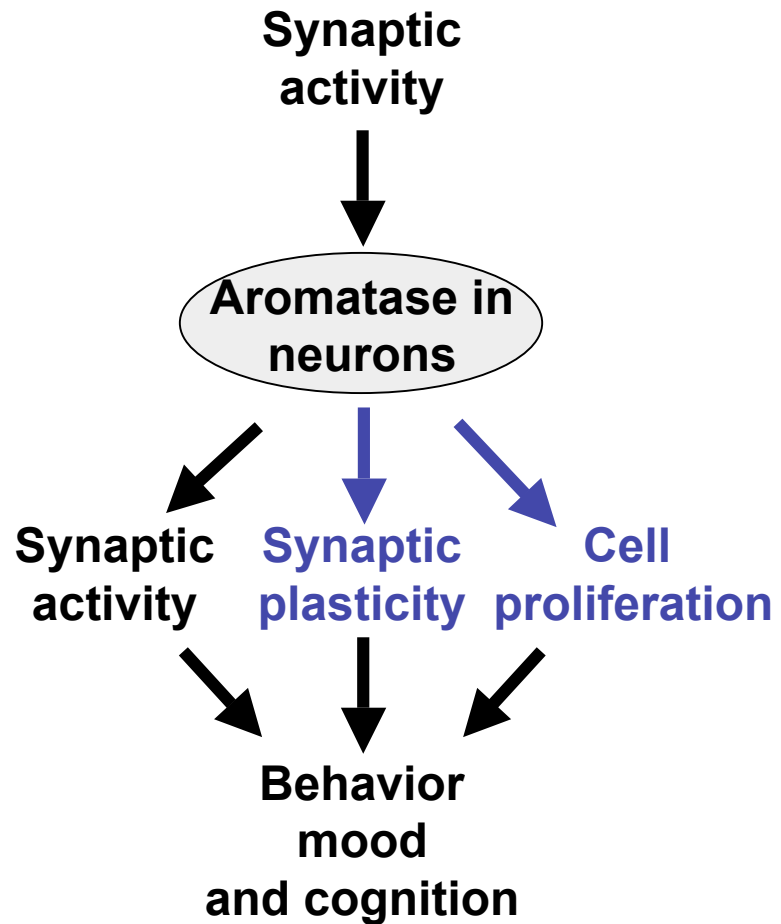
Rapid control of brain aromatase activity by synaptic inputs (Balthazart J et al 2004-2007),
LTP (Grassi S et al 2009)



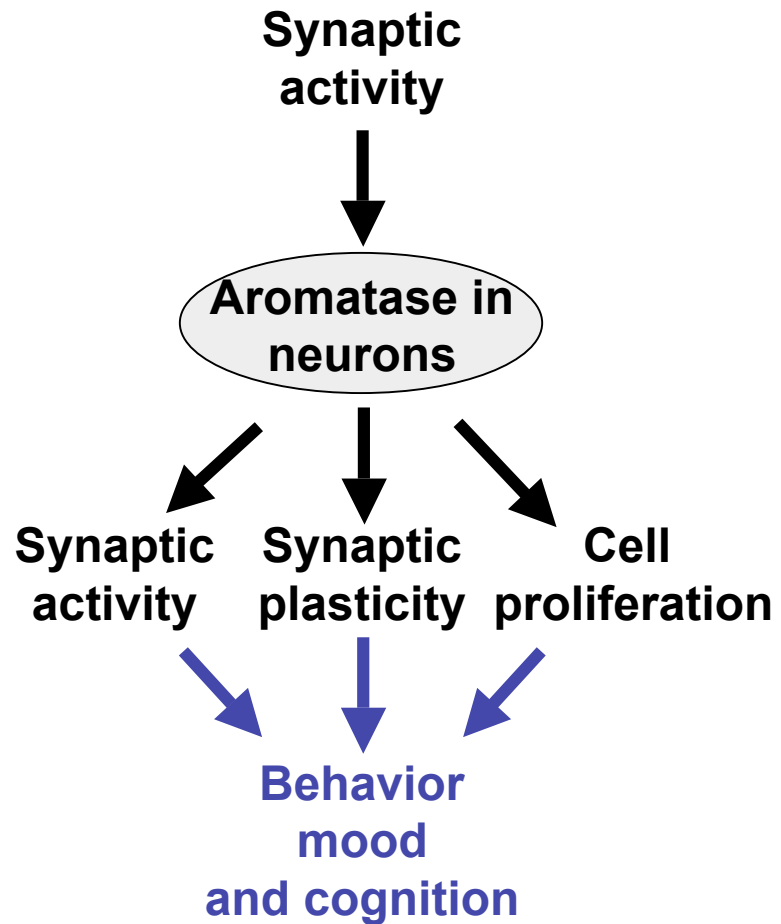
Rapid control of information processing by aromatase (pain regulation)
(Evrard HC, Balthazart J 2004,2006)



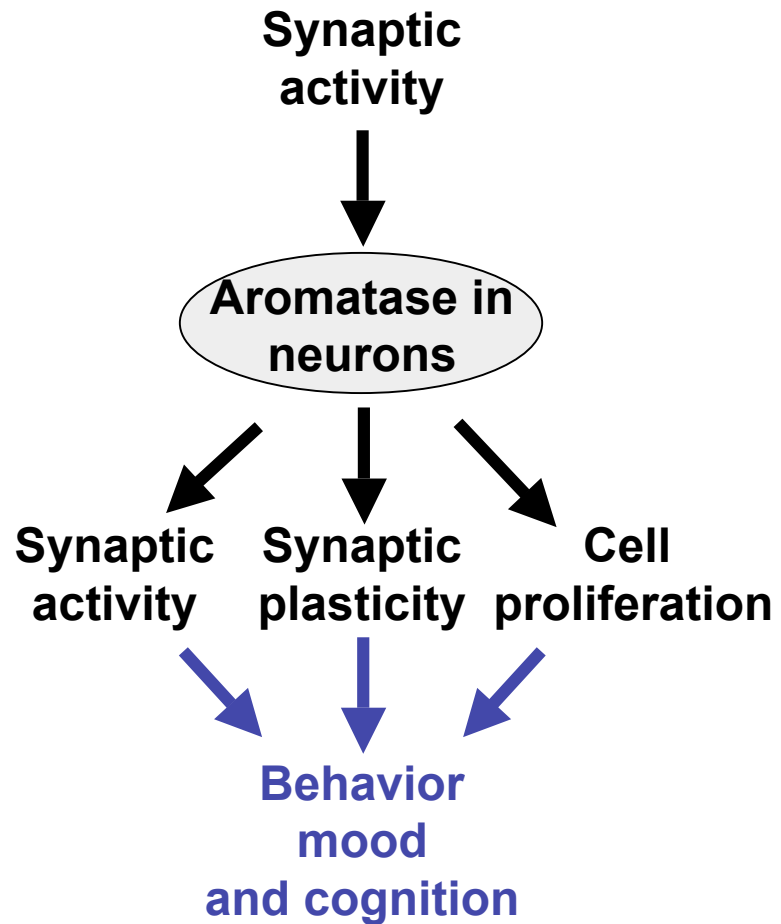
Inhibition of aromatase activity in the hippocampus in vivo blocks effects of androgens on synaptic plasticity (Leranth C, MacLusky NJ et al 2004-2006)



Inhibition of aromatase activity in hippocampal slices decreases the number of dendritic spines, the number of dendritic spine synapses and neurogenesis (Rune GM et al 2004-2006)

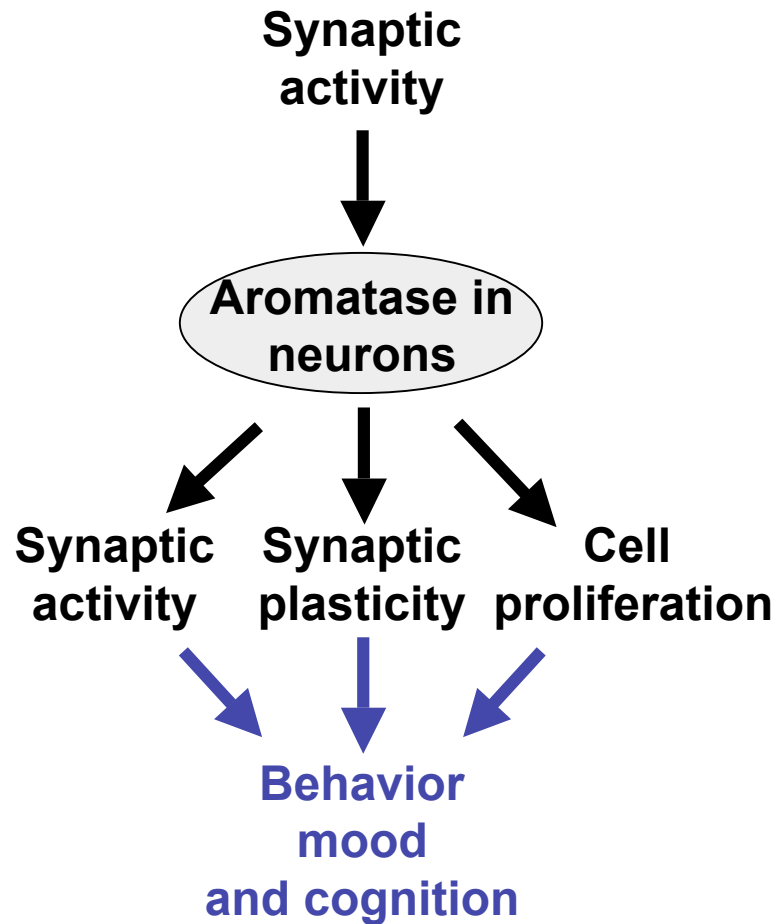


Aromatase inhibitors affect specific cognitive modalities in rats (Moradpour F et al 2006; Gonzalez-Burgos I et al 2007)

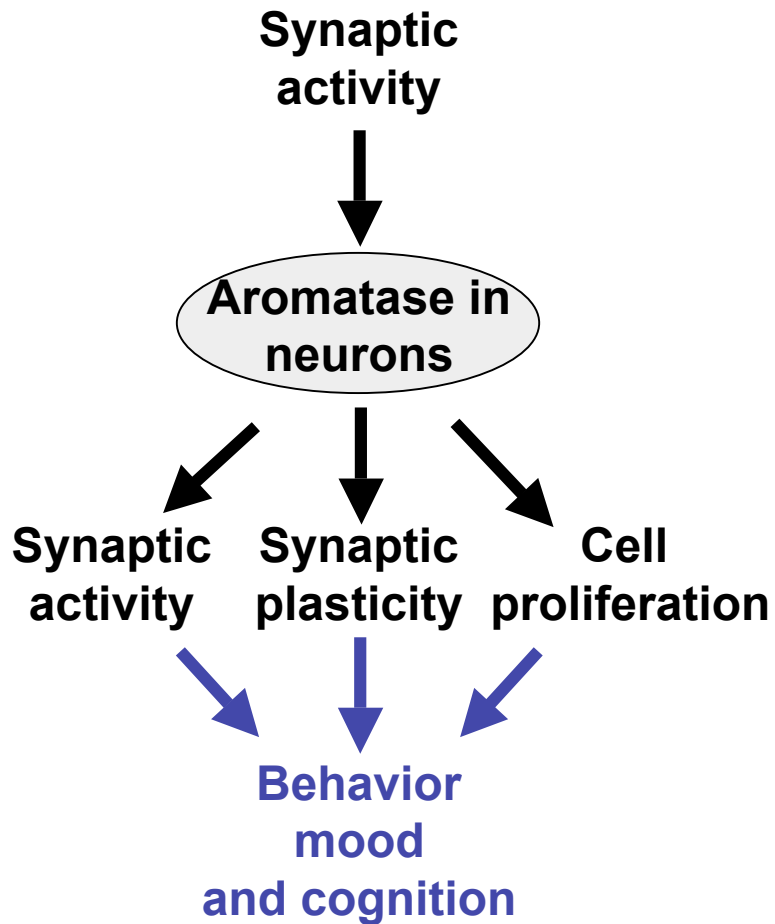


Aromatase knockout (ArKO) female mice, but not ArKO male mice, show increased depressive-like behaviors (Dalla et al 2004,2005)

ArKO male mice develop compulsive behaviors (Hill et al 2007)



Polymorphisms in the *cyp19* gene are associated to depressive symptoms in women (Kravitz HM et al 2006)



Aromatase inhibitors for breast cancer treatment may impair memory in women (Bender CM et al 2007)

Aromatase inhibitors may impair pro-cognitive effects of testosterone in older men (Cherrier MM et al 2005)