Questions for discussion – week 2/23/05

Please read the next series of papers (papers 31, 32, 33, 34). For this week, I have not assigned questions, thus students are responsible for all questions.

1. Based on the paper by Carrasco and Van De Kar, 2003 –
   a) Describe the neuroendocrine components that are activated by stressors. Regardless of the stressor type, would all stressors activate the same neuroendocrine components?
   
   b) Describe the brain circuits and the primary neuropeptide(s)/neurotransmitter(s) that mediate those particular brain circuits.
   
   c) Summarize the potential roles of Substance P and neuropeptide Y in the stress response.

2. In the Lehnert et al. (1998) paper –
   a) What is the neuroanatomical basis for the interaction between the CRF-neurons and locus coeruleus (LC)?
   
   b) What evidence supports the role of LC-CRF in the integration of stress responses?

3. Based on the paper by Contarino and Gold (2002) – (Cognition and feeding)
   a) What is the role of CRF in cognition? Provide evidence that supports or refutes the idea that CRF pathways are essential for normal cognitive function.
   
   b) Based on the data provided in this paper, what definitive information about ingestive behavior can be derived?

4. Based on the evidence provided in the paper by Francis et al. (1999) –
   a) What impact does early life experiences play in behavioral and endocrine responses to stress later in life?
   
   b) What evidence is provided to support the importance of the CRF-Norepinephrine Systems in mediating these responses?