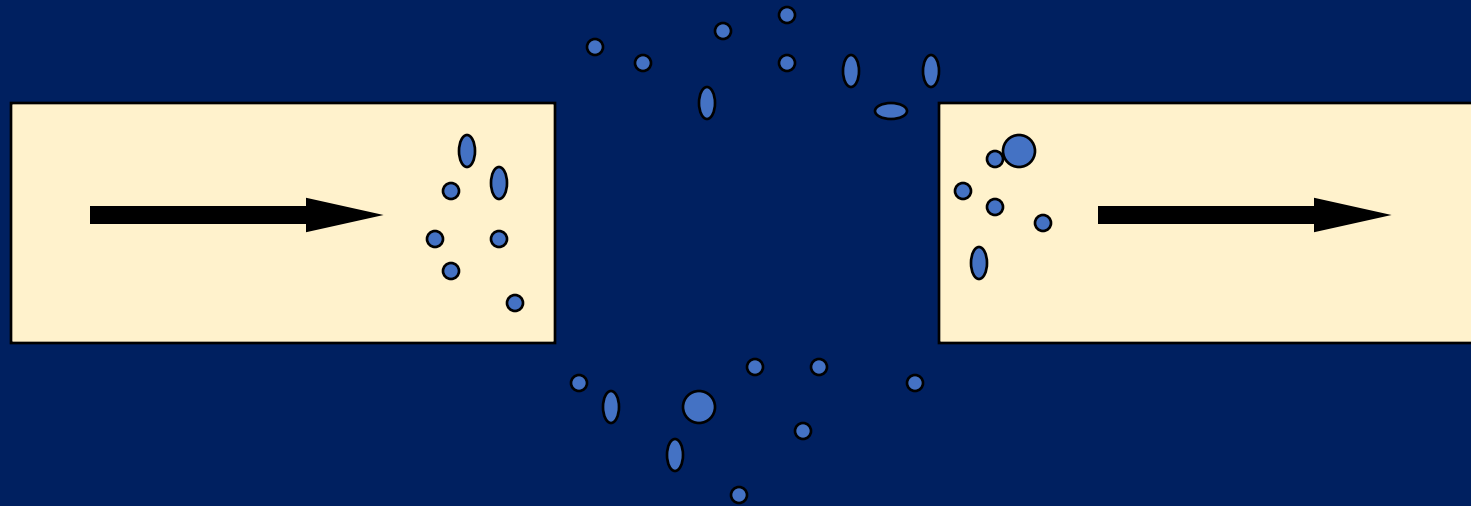


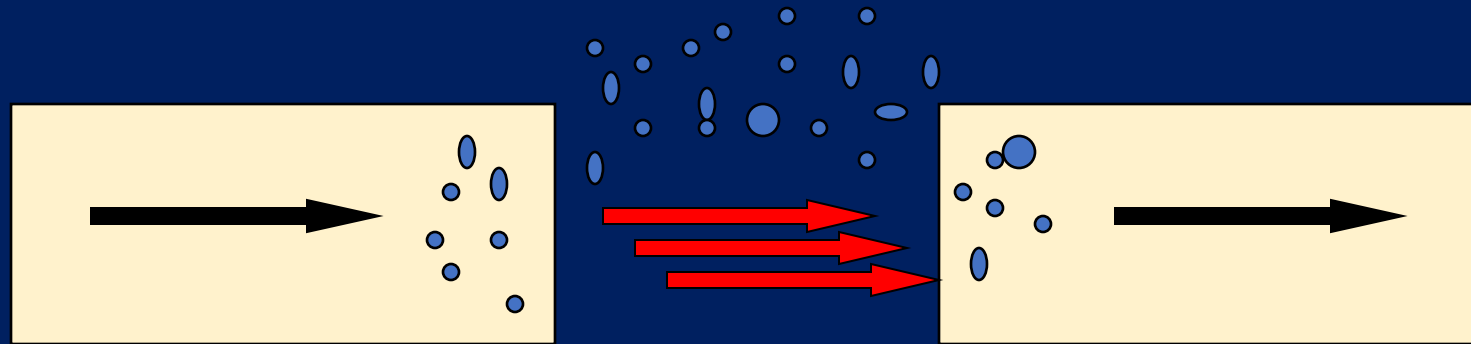
Biological Basis of the Effects of Prenatal Drug Use: The Catecholamine System

Catecholamines

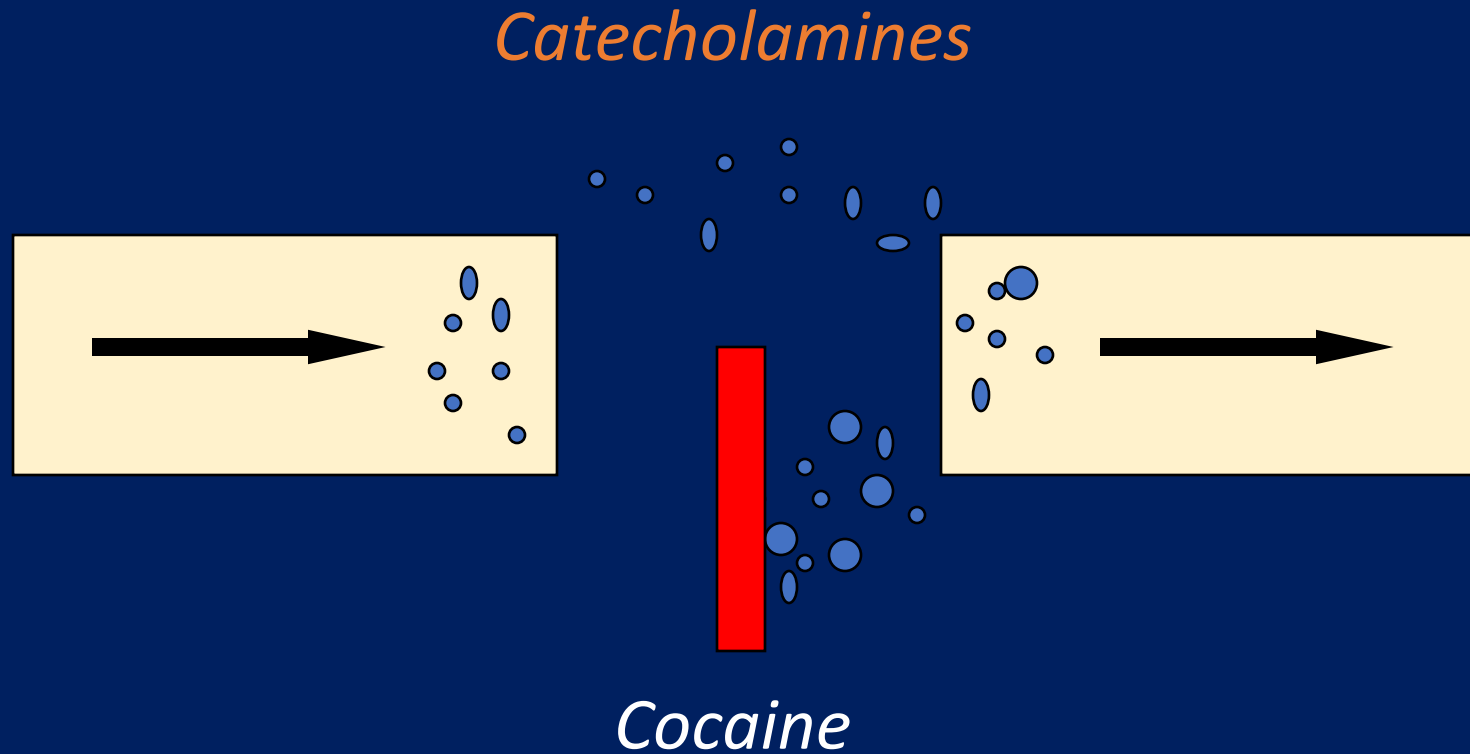


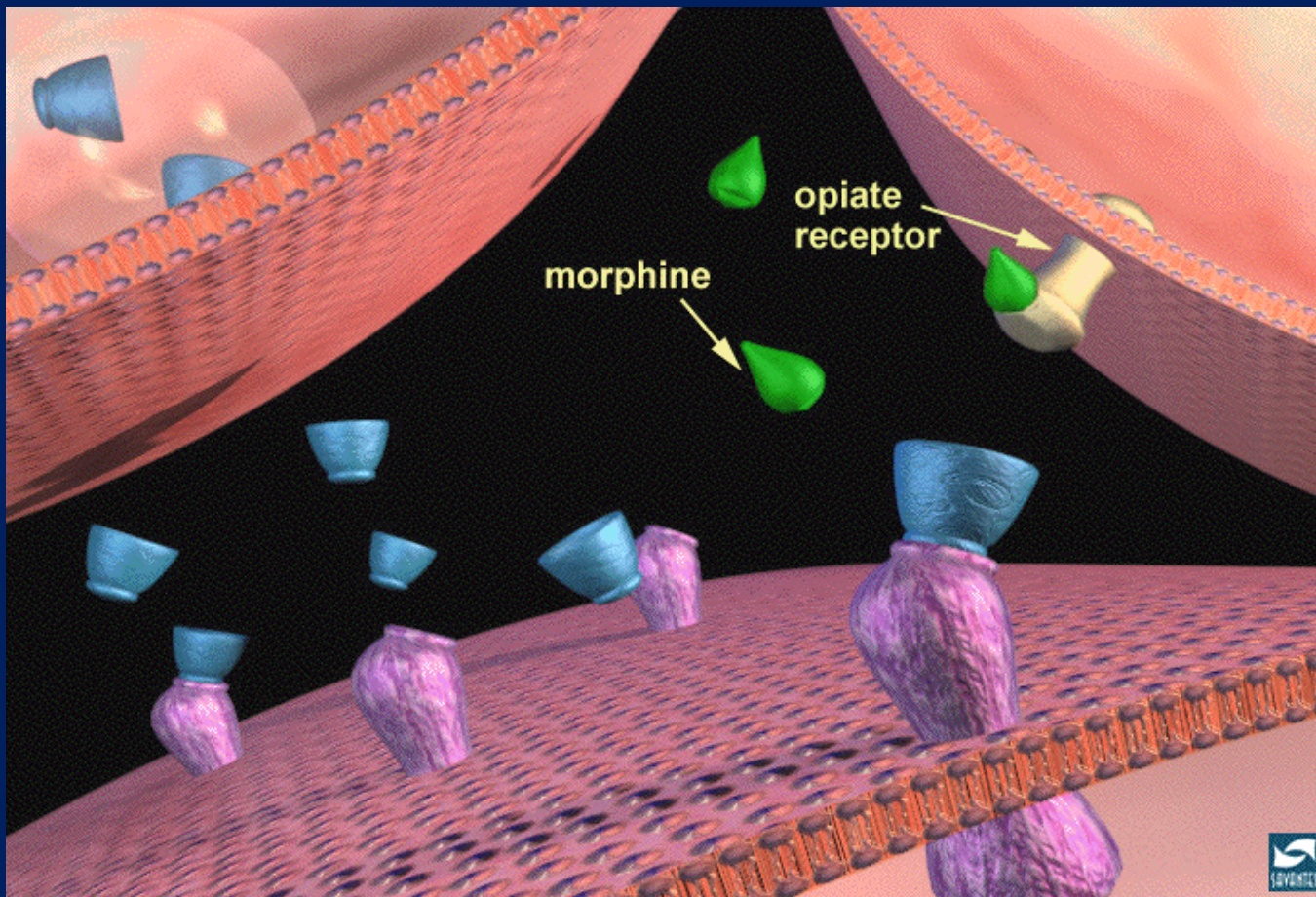
Biological Basis of the Effects of Prenatal Drug Use: Methamphetamine

Catecholamines



Biological Basis of the Effects of Prenatal Drug Use: Cocaine





The Action of Opiates

The nucleus accumbens

Three types of neurons participate in opiate action:

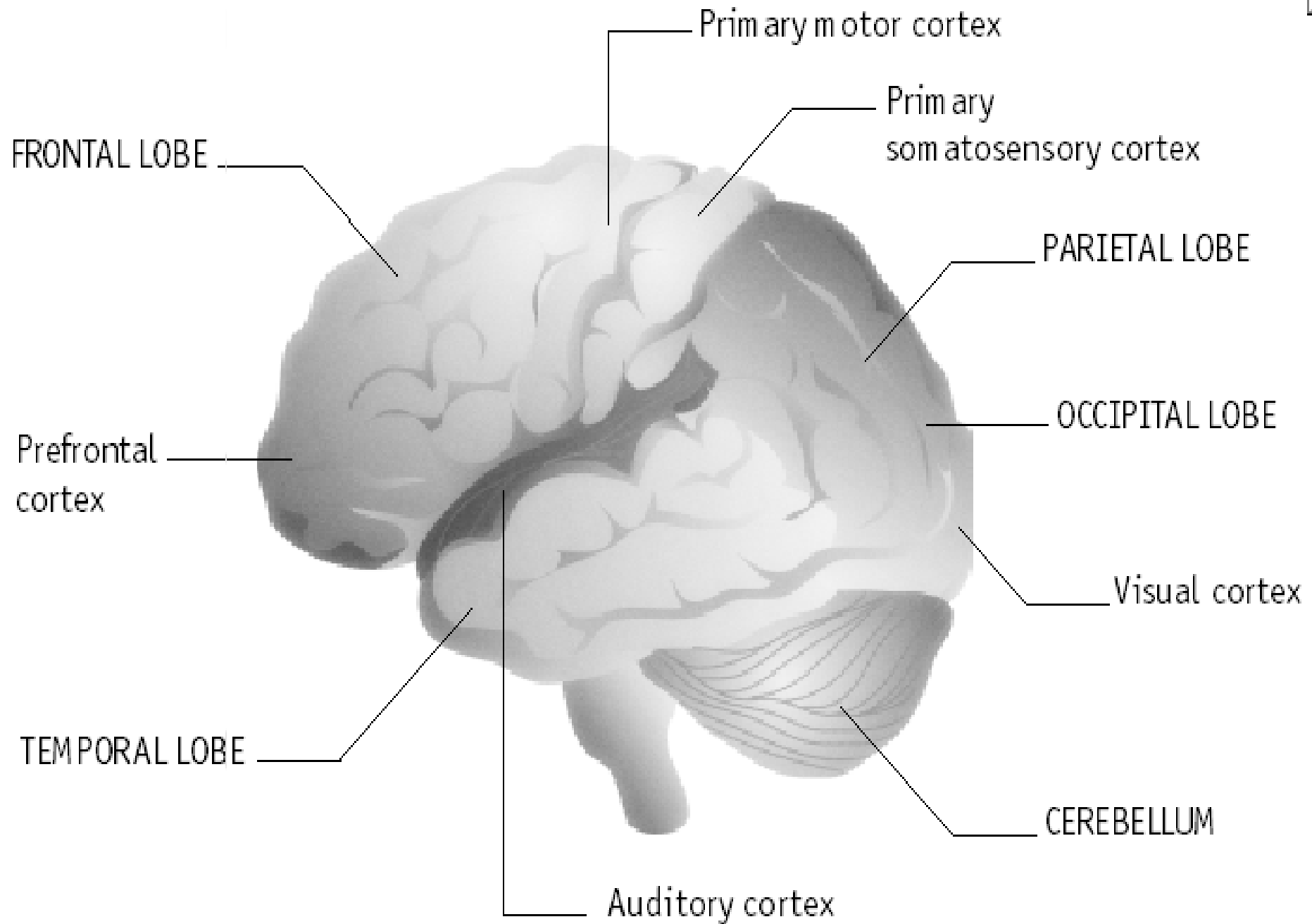
1. opiates (green) bind to opiate receptors (yellow)
2. this decreases GABA release (inhibits dopamine release)
3. this sends a signal to the dopamine terminal to release more dopamine.

**gamma-Aminobutyric acid* acid

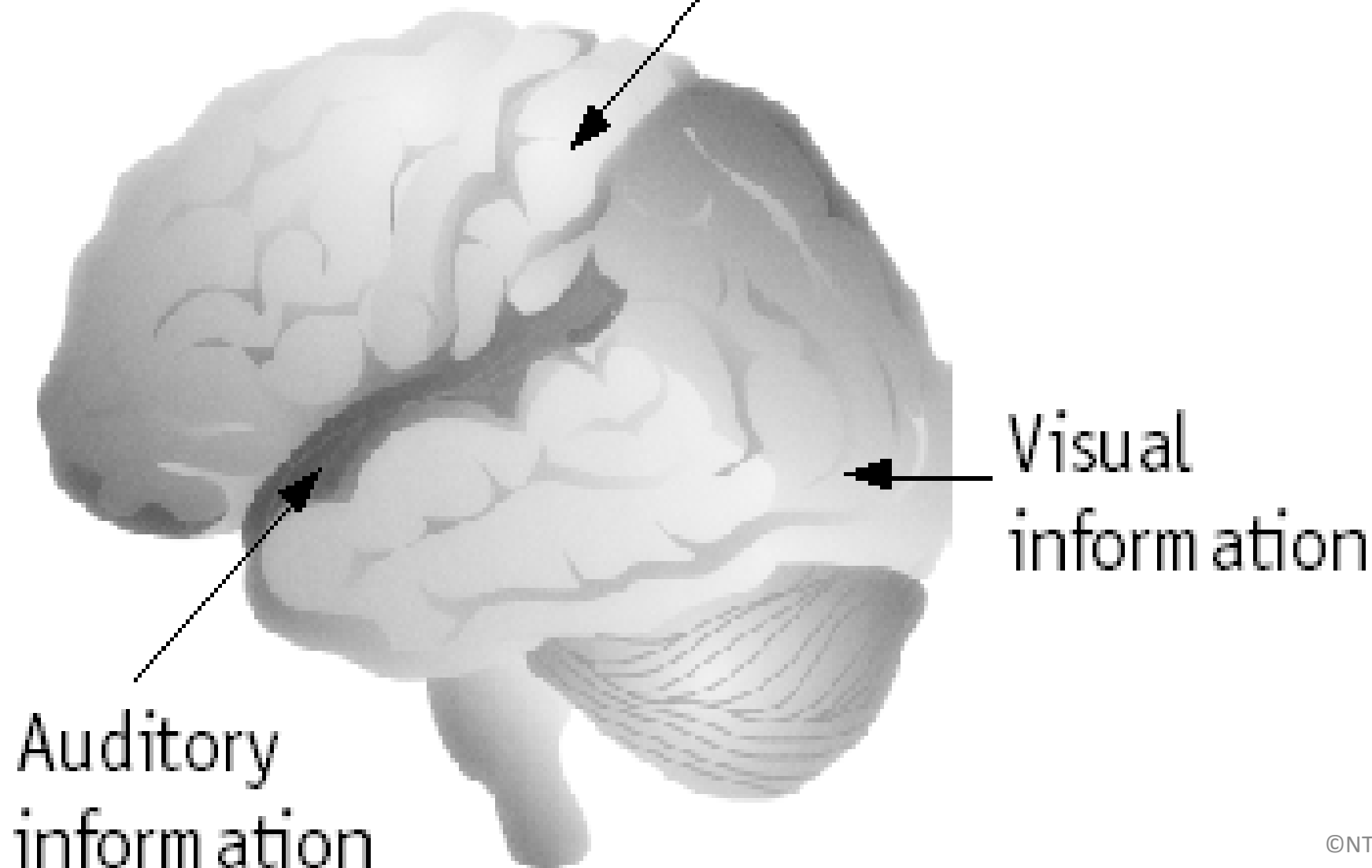
Information Processing Model

Four domains of information processing

- Input (recording information)
- Integration (interpreting input)
- Memory (storing input for later use)
- Output (appropriate use of language and motor skills)

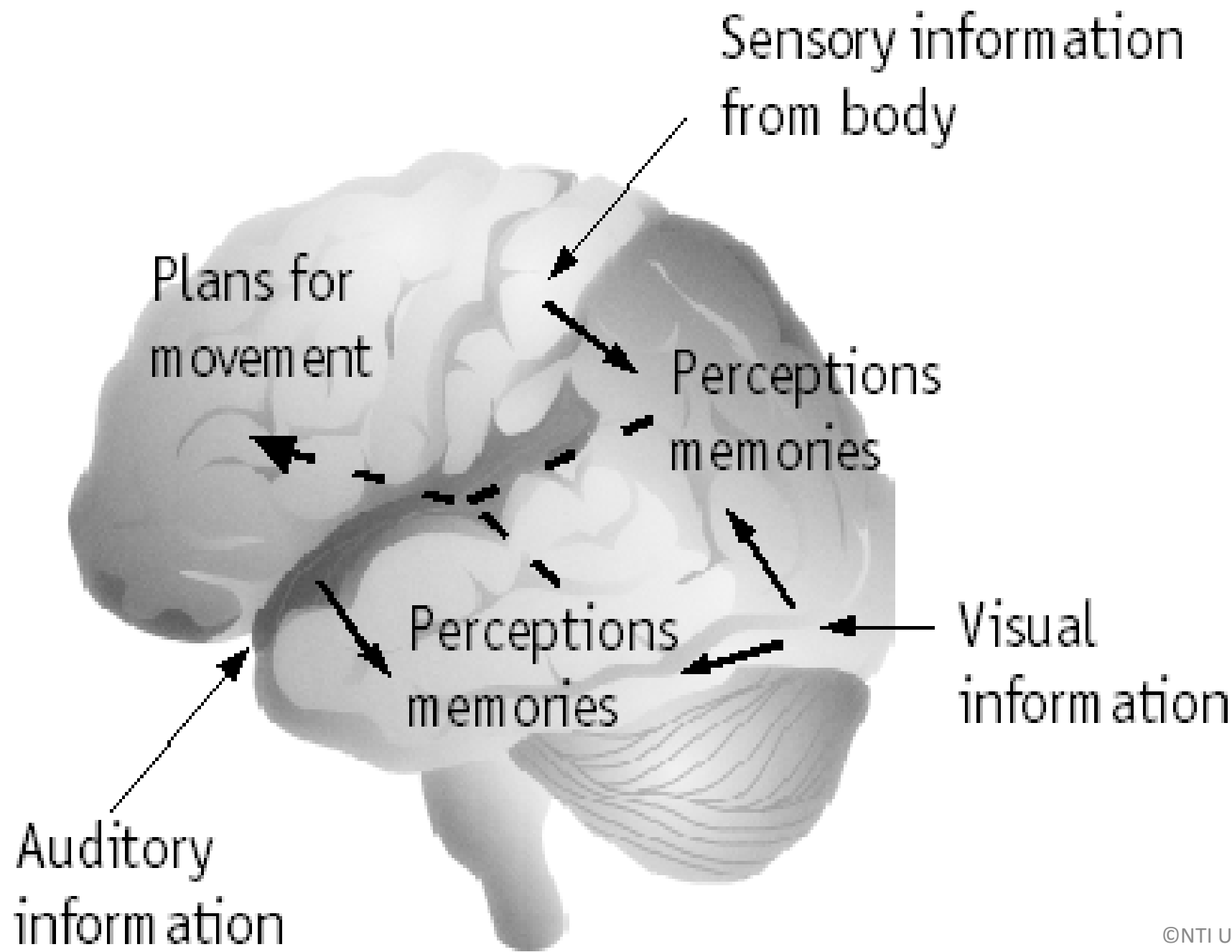


Sensory information
from body

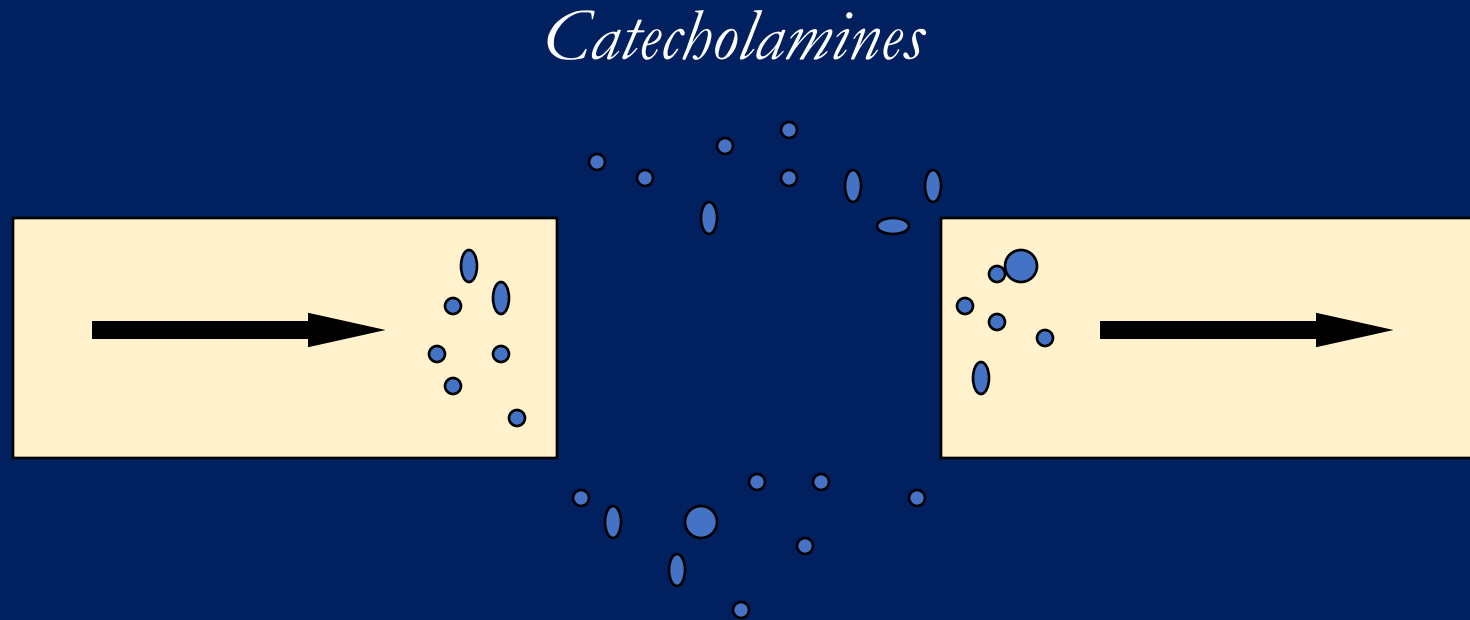


Visual
information

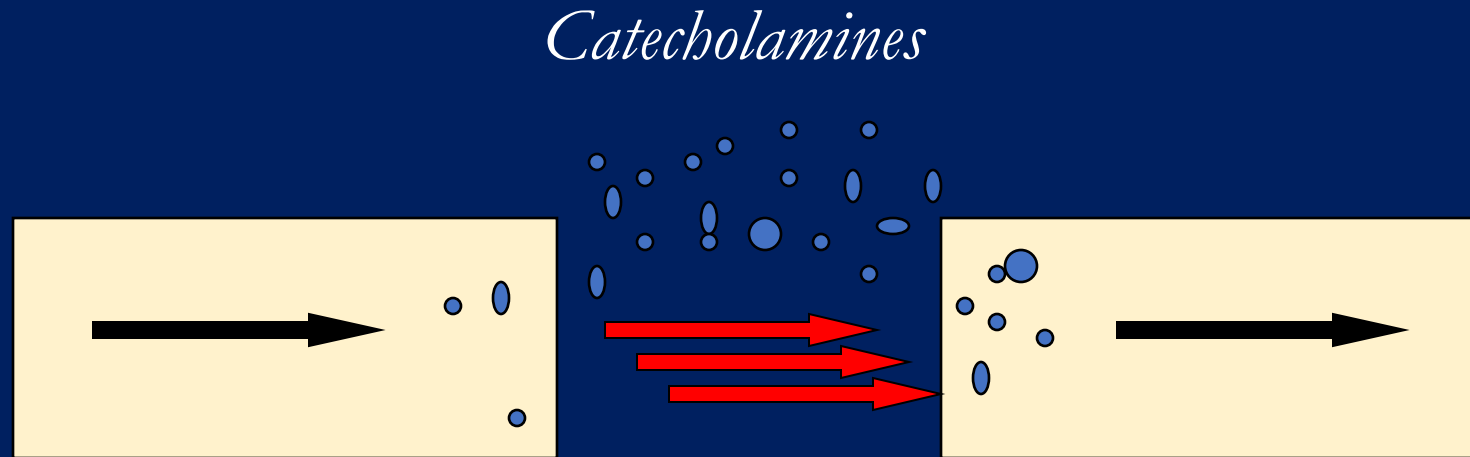
Auditory
information



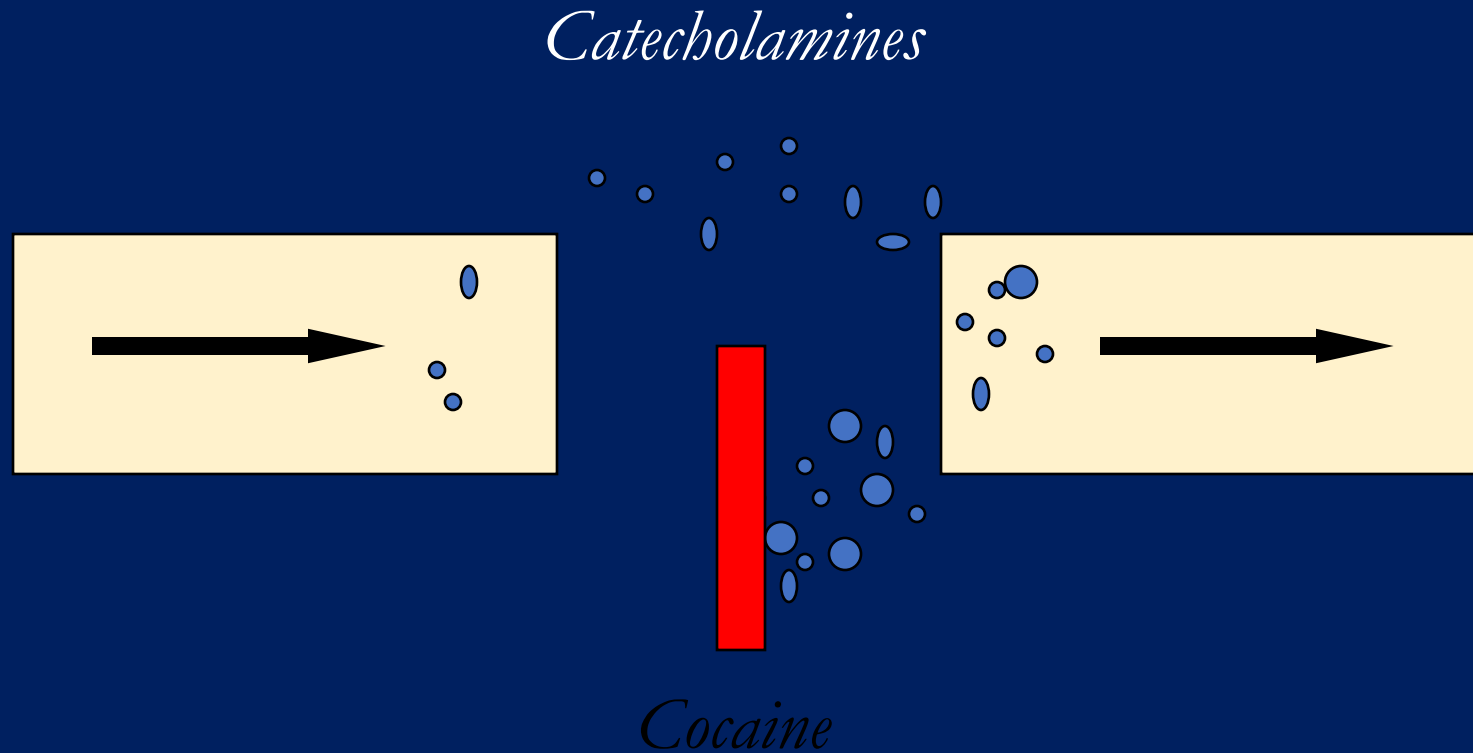
Biological Basis of the Effects of Prenatal Drug Use: The Catecholamine System



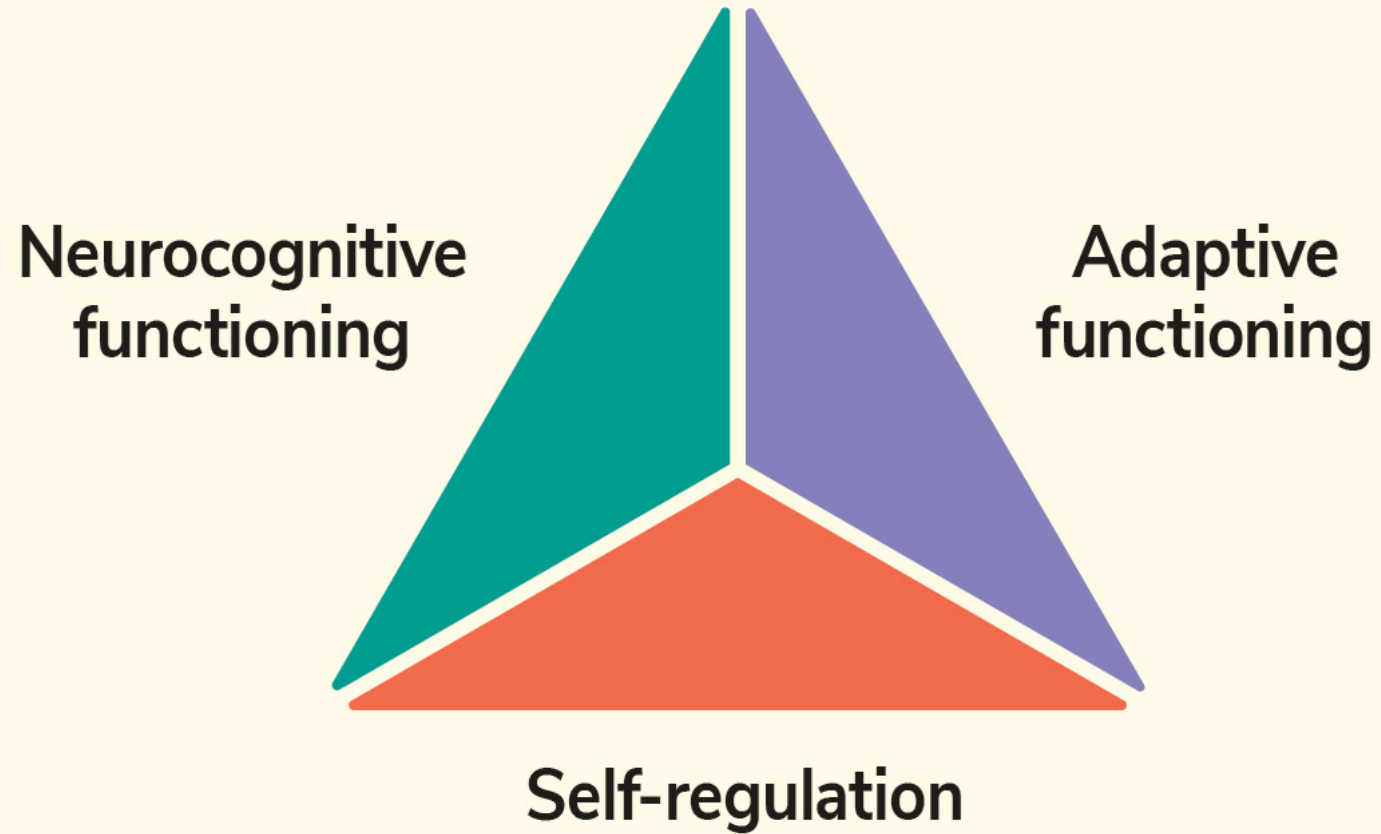
Biological Basis of the Effects of Prenatal Drug Use: Methamphetamines



Biological Basis of the Effects of Prenatal Drug Use: Cocaine



BEHAVIORAL DOMAINS



Some practical suggestions

- Provide multisensory behavioral guidance
- Repeat, repeat, repeat
- Ensure consistency and predictability as much as possible
- Use simple language, broken down into short steps
- Allow the child plenty of processing time



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