## UMDNJ Regional Brain Bee Competition Sample Questions

Below you will find the only local brain bee questions that have been officially released as samples. These questions are intended to help you understand the degree of difficulty of our questions, not to focus your studies on one area of neuroscience or another.

- 1. Approximately how many neurons does the brain contain? (100 billion)
- 2. Name the device that measures brain waves. (Electroencephalograph)
- 3. Stargazer mice are experimental models for which type of epilepsy? (Petit mal epilepsy)
- 4. Prozac relieves symptoms of depression by affecting which neurotransmitter? (Serotonin)
- 5. The Greek word for the branches of a tree give us the name of what part of a neuron? (Dendrites)
- 6. Name the surgical procedure that destroys part of the basal ganglia and helps Parkinson's patients. (Pallidotomy)
- 7. The biologic clock is located in what part of the brain? (Hypothalamus)
- 8. Name a brain disorder named after a famous baseball player. (Lou Gehrig's disease)
- What is the most common type of inherited mental retardation? (Fragile X Syndrome)
- 10. Name the peptide that accumulates in the senile plaques of brains of Alzheimer's patients? (Beta Amyloid)
- 11. What chromosome is altered to cause Huntington's disease? (Four)
- 12. What is the leading preventable cause of mental retardation? (Fetal Alcohol Syndrome)
- 13. The abbreviation PET stands for what brain imaging technique? (Positron emission topography)
- 14. What kind of molecules are netrins and semaphorins? (Guidance molecules)
- 15. Name a cognitive disorder associated with chronic alcoholism. (Korsakoff's Syndrome)