

**ALPHABETICAL BRAIN™ VOCABULARY
HUMANIST FAMILY BRAIN STUDY**

**DETAILS ABOUT YOUR LIMBIC SYSTEM
Brain Flash Card #13 - September 12, 2018**

**WHAT IS YOUR LIMBIC SYSTEM?
AND WHY IS IT SO IMPORTANT?**

The purpose of your *limbic system* is to produce all of the motivational energy and emotional feelings that both your brain and mind need to survive and thrive in a complicated and potentially dangerous environment.

To achieve this serious life saving goal, your *limbic system* also assists in the preservation of the your most salient memories of the most consequential experiences and decisions that have saved you or worked well for you in the past.

Your *limbic system* consists of *eight structures*, which provide more than eight important functions. They are directly involved in your survival or pleasure seeking activities. And they are involved in all of your other thoughts and feelings, no matter what the content or associations:

DEFINITION OF LIMBIC SYSTEM = The set of brain structures situated along the inner borders of *both temporal lobes* of *both hemispheres of your cerebrum* at the most protected lower part of your brain. It's emotional functions are crucial for you to be able to express your feelings, to organize your memories, to mediate or coordinate your conscious self-awareness, and to interpret the behavior of others, which is known as "**psychology of mind**".

The following *eight crucial structures* of your *limbic system* are:

- [1] OLFACTORY BULBS
- [2] HYPOTHALAMUS
- [3] PITUITARY GLAND
- [4] AMYGDALA GLANDS
- [5] PINEAL GLANDS
- [6] THALAMUS
- [7] HIPPOCAMPUS
- [8] BASAL GANGLIA

In addition, since your *hippocampus*, which is a major component of your limbic system, has the triggers for several types of declarative *long-term memory* resources, its healthy functioning is essential for your perception of having a unique *persistent authentic self*.

You have special *semantic* memory, *episodic* memory, *autobiographic* memory, and *procedural* memory (muscle memory), modules in your brain that all have "**triggers**" in the hippocampus part of your limbic system.

The location of your hippocampus is at the bottom of your limbic system in the most protected part of your three pounds of brain tissue. The reason for that location is that your memory systems are the source of your personal identity or secular self.

Therefore, your hippocampus must be protected and kept as safe as possible throughout your life.

Along with *brain concussions* from accidents or contact sports, *dementias*, and especially *Alzheimer's disease*, are the most predictable enemies of your *self-identity* as you plan for the future. The latest brain research has demonstrated that your brain's *prefrontal cortex*, is the source of your ability to plan and decide.

However, the total executive control function of your prefrontal cortex does not develop fully until your mid-20s and early 30s, unless you actively read and write as a child and learn how to strengthen your prefrontal cortex by creating an organized mind based upon science and secular humanism in your youth.

Since there is competition within your brain structure between your prefrontal cortex (ability to reason) and your limbic system (ability to express emotions), your ability to reason cannot as easily and fully control strong emotions until the third decade of your life.

In other words, the strong bonding feelings that are evoked by the social peer groups in the second decade of life (think, teenagers) are hard for individuals to overcome until the *prefrontal cortex* part of their *cerebrum's two hemispheres* are fully developed sometime between their mid-20s to early-30s.

When you understand your authentic secular self from this new perspective of humanistic and scientific reasoning, your self-identity, which you construct from your life experiences, is the real deal. It is not some fanciful illusion or twisted delusion or exotic hallucination, but genuine reality.

Unfortunately, your limbic system can also preserve a lot of useless, dysfunctional memories of social habits and mindsets, including a variety of addictions. You may have learned many useless behaviors in your childhood and youth before you were prepared through proper education to establish complete adult control over your feelings.

Nevertheless, the eight vital brain structures of your limbic system produce many kinds of neurotransmitters, which can stimulate your **100-200 billion neurons**. In addition, neurotransmitters cause dozens of hormones to flow through your circulation system (blood veins and vessels), or send biochemical current flowing through your brain and nervous system (connectome). Your connectome consists of all the neuronal pathways in your brain and nervous system.

RECOMMENDATION: Print this summary and read it. Underline or highlight the most important brain ideas to save them in your long-term memory. Then re-read these ideas in a few hours and a few times during the next few days and write notes to take advantage of the **spaced-repetition** method of memory consolidation. You will be able to use them in your serious introspective thinking about your **self-identity** and feel them with pride and dignity in your **self-awareness**.