THE BASICS OF THE FEELING BRAIN
By Marlene and Bob Neufeld

Our nervous system has been evolving for 600 million years. Our current brain structure was developed in response to survival problems faced by ancient reptiles, mammals, and primates. To survive and pass on their genes, our ancestors needed to be especially aware of dangers, losses, and conflicts. Therefore, the brain evolved a negativity bias that looks for threats, reacts intensely to them and quickly stores these experiences in neural structure. A key aspect of the negativity bias is the crucial importance of fear. We routinely overestimate threats and underestimate opportunities and resources. At the same time, negative experiences sensitize the brain to the negative, making it easier to have even more negative experiences in a vicious circle. While the negativity bias is good for survival in harsh conditions, it’s not useful for quality of life, fulfilling relationships, personal growth and long-term health. It makes us over-learn from bad experiences and under-learn from good ones. (many of these ideas come from “Hardwiring Happiness: The New Brain Science of Contentment, Calm, and Confidence” by Rick Hanson)

The brain is a complex structure with numerous parts. The two main parts are the limbic system and the cortex. Various structures make up the limbic system (often called the Mammalian brain) and they are located in the center of the brain. The cortex is the thick covering that surrounds the limbic system.

Let's take a closer look at the parts of the LIMBIC SYSTEM:

Thalamus- The thalamus receives information outside of your body through your senses and then passes that information onto different parts of the brain, such as your cortex or your amygdala so that they can take action on it.

Hypothalamus- The hypothalamus receives information inside of your body to and from your organs. It starts your stress response by telling your adrenal glands that you are under stress so your glands can get you the energy you need. If your hypothalamus has too many neurons that respond to stress, you may be the type of person that overreacts emotionally and physically to normal, not so big stresses.

Hippocampus- The hippocampus records details, but just facts and data. No emotion is involved. It sends this data to your cortex to be processed.

Amygdala- The amygdala, part of what is often called the Reptilian brain, registers tone and intensity of emotions and notifies your brain, specifically the hypothalamus, immediately if it should prepare for problems. It registers all emotions, but prefers to notice the scary threatening ones. It's like a smoke detector for your body and brain. It doesn't respond to the yummy lasagna baking in the oven, but if the lasagna starts to burn - it will sound the alarm! You don't have to be alert to joys in order to survive, but if you are threatened, you want your amygdala working to keep you alive. Once your amygdala learns
what is dangerous, it tries to protect you from whatever scared you. This is how triggers are born. Anytime you avoid your fears, it lets your amygdala know that your fear is accurate and there is danger, which makes the trigger worse.

THE CORTEX - The thinking part of the brain deals with social information: thinking about facts and emotions, as well as thinking about what others are thinking and feeling. The **prefrontal cortex** (PFC), is the CEO where all information is ultimately received, analyzed, and responded to.

In terms of our emotions, we simplify this and focus on three main parts. We use the analogy of a rider trying to control a wild elephant.

- The prefrontal cortex can be compared to the rider who “thinks” he controls the wild elephant.
- The limbic system can be compared to a wild elephant who is prone to being out of control.
- The amygdala is the red hot prod that pokes the wild elephant into overreaction when it seems that survival is at stake.

When the amygdala perceives danger or threat it “triggers” the elephant. The elephant begins to rampage. The rider tries to control the elephant but it is out of control.

Many people try to solve problems or have conversations when their wild elephant is rampaging. We recommend that you learn to calm your wild elephant down before you try to solve the problem.

The elephant can be calmed down by using breath, specific movements that address the physiology of fear. Love can loosen the grip of fear! You can tame your wild elephant.

TIP: Know your fear signature and use the fear melters to tame your rampaging elephant!