FAQ Brain Damage

What is brain damage?

Classically, we think of brain damage as an impact that has occurred to the brain through the skull. That is damage. Neurological reorganization may be deficient as the brain tries to compensate for grey matter damage or white matter disconnects or damage or twisting or turning or shearing. The white matter connects the different regions of the brain and passes information between those different regions. Those bundles are very susceptible to twisting and turning, which makes the brain lose its neuro-efficiency. This then makes the transmission either slower or faster, but either way the transmission is out of phase or out of timing.

What types of repairs does NTL technology look at?

The type of repair we feel works best for brain damage is a theoretical model called Cognitive Remediation Theory (CRT). That model is based upon head injuries that are very severe and include everything from the shearing effect to bruising in major head injuries. Our technology and processes address the brain from a brain function point of view to determine what areas need to be reconnected, repaired and/or remediated.

We have added other methods on top of that theory. We also look at the brain from a development perspective. As children mature, the brain must also mature in a very particular hierarchy. If milestones are missed or skipped over or are incomplete, it will impact the development of brain function. The same is true if the brain has been injured in a specific region. To that end, another model we include comes from our work with NASA proposals, in which we look at what turns off and turns on neuro-circuits. During our NeuroEval® we look at what areas of the brain are functioning optimally vs what areas of the brain are not functioning as optimally they should and then discover, why.

Does the brain know the difference between types of traumas?

No, the brain does not know the difference between types of traumas. To the brain, trauma is trauma. So, whether it is an emotional trauma like PTSD or food or allergy trauma or addiction trauma or head injury trauma, the brain registers it as disorganized neuroprocessing capabilities. It reduces neuro-efficiency, resiliency, and cognitive function regardless of the type of trauma.

Can these various traumas manifest as behavioral issues?

Yes, traumas to the brain can and do manifest as behavioral challenges and issues. The behavior can be anything from anger to lack of concentration to emotional crying, depression, and anxiety. If we conduct a proper evaluation and analysis and then assign proper training based on that analysis, we have a good chance of restoring appropriate brain balance and optimization.