**Neuroscience**

The Thrive Approach is based on trying to understand recent scientific developments in Neuroscience. Neuroscience is the study of the nervous system and the brain. The field of neuroscience has undergone rapid advances in recent years, prompted by significant innovations in brain imaging. These have yielded important insights about how the brain and nervous system function and develop.

Scientists have discovered that the neural pathways of the brain and wider nervous system are relatively unformed at birth, undergoing much of their development during the first three years of life in response to relational experiences with primary care-givers. A key development during this period is the establishment of the body’s stress-response system. This lays the foundation for our social and emotional development throughout life, affecting our capacity to relate, love, learn and manage stress in healthy ways.

However, research has also revealed the inherent ‘plasticity’ of the brain – its capacity to forge new neural connections in response to experience. The fact that the brain retains this property to a greater or lesser degree throughout life means that where brain development has been less than optimal, it remains possible to intervene at a later stage to fill the gaps.

