Abstract:

In this talk, Dr. Ross will review recent research on trauma, neuroplasticity, apoptosis (cell death), and antidepressants. It is well established from human and animal research that psychological trauma activates cortisol, which in turn results in changes in hippocampal neuronal regulation and then damage to hippocampal neurons. It appears that antidepressants may antagonize or reverse this cell damage, thereby promoting integration and mental health. However, antidepressants are only slightly more effective than placebo, so other factors than medication must contribute to hippocampal repair. Dr. Ross will describe two testable scientific hypotheses: dissociation is neuro-protective; and psychotherapy for trauma results in brain self-repair.

Objectives:

1. To review the literature on the effectiveness of antidepressants.
2. To review the effects of stress on hippocampal neurons.
3. To describe recent evidence on the role of antidepressants in promoting neurogenesis and inhibiting neuronal apoptosis.
4. To describe why psychotherapy may have the same biological effects as antidepressants.
5. To propose a truly biopsychosocial model of trauma and depression based on the above literature.
References:


