Introducing New Research Goals and Study Opportunities

A strong research initiative within the BRAIN Center is to work on dissociating cognitive and affective symptom and state-specific traits relevant to mood disorder patients. In particular, as our Center treats patients across the mood disorder spectrum, from pediatric bipolar disorder (PBD) to major depressive disorder (MDD) and attention-deficit/hyperactivity disorder (ADHD), we are always aiming to find ways to guide treatment plans in addressing dysfunction that may be shared across these disorders. As we know, cognitive problems related to organization, motivation, attention, impulse control and memory along with affective problems in domains of emotion recognition, regulation, empathy and emotional memory can affect all of these disorders and in a variety of ways. As a result, our Center has taken on a mission to pinpoint particular mechanisms within the brain that translate to these shared symptoms. In doing so, we aim to highlight these mechanistic differences that can help practitioners and families find specific and targeted treatment options. Preliminary research from our Center suggests that, in particular, shared impulse control dysfunction between PBD and ADHD may actually be caused by distinct routes of motor control function in either patient group (Passaroit, in press). In order to expand on findings like these, the BRAIN Center is now gathering data on functioning within cognitive and affective domains by way of clinical, neurocognitive and neuroimaging methodology. Academic difficulties, that are often the consequence of both cognitive and emotional problems, are also being evaluated.

Mindfulness Intervention to Study the Neurobiology of Depression (MIND)

Dr. Rachel Jacobs at the BRAIN Center has just launched a study that will examine how mindfulness might target rumination among mood disorder patients. The objective of this investigation is to examine how rumination, a maladaptive thought pattern, serves as a mechanism in the maintenance of depression (particularly in the relapse of depression among adolescents). Dr. Jacobs is recruiting adolescents who have already experienced Major Depressive Disorder (MDD) and will study whether Ruminating-focused Emotion Regulation can prevent relapse among youth. Dr. Jacobs will also be using neuroimaging methodology to probe how rumination impacts activation and deactivation of brain regions implicated in self-referential thought and self-regulatory control. The Center is excited to announce that this investigation will be the first to examine whether modulating the neural circuits involved in rumination can increase emotion regulation and self-regulatory control among adolescents.

New Publications Announcements


